CAMO WORKSHOP

WINSPMBT

(Windows_Steel Panthers_Main Battle Tank)

Important links

Discussion Group

Shrapnel Games winSPMBT Website

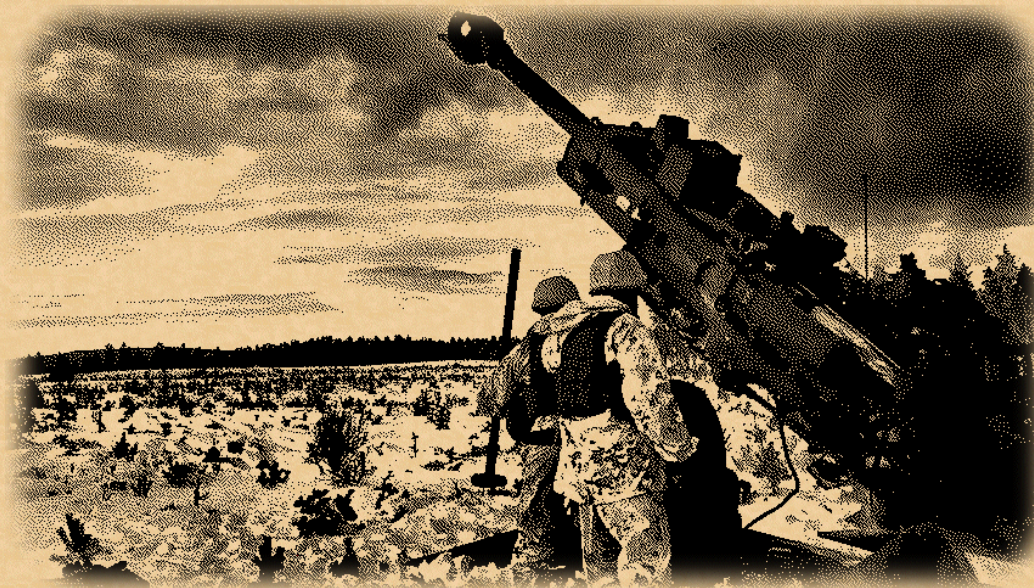To Order the Extended version of the game either via Electronic Download or as a Safe Box Version , click **HERE**

To read about all the excellent additional features available in the enhanced (CD) version click **HERE**

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GAME GUIDE ©

Introduction

What is WinSPMBT?

WinSPMBT *(Windows, Steel Panthers, Main Battle Tank)* is a Post World War II combined arms tactical level wargame derived from SSI's Steel Panthers: Modern Battles (SP2) code.

Its time frame covers 1946 to 2025 AD. WinSPMBT has **93** nation's forces available for historical or "what-if" experimental battles. It is hexagon based, and the game is an alternating turn based (I go you go or IGOUGO) design.

One unit playing piece represents one vehicle or gun, or an infantry section or squad of up to 13 men or a section of 1 to 4 support weapons. Therefore, 1 machine gun or mortar "piece" CAN represent 2 or 3 actual MG or mortars.

One game hexagon represents 50 metres of terrain.

One game move (player 1 turn plus player 2 turn) represents roughly 2 - 3 minutes of 'real time'.

Each Terrain level represents roughly 20 feet or 6 meters of elevation. Each of the ten units that make up one level of elevation represent roughly 24 inches or 60 centimeters each

 For the full details of the developments over the original Steel Panthers 2 game, please refer to the **Development History** section.

Using the Game Guide

This Game Guide has been reworked in 2015 to display on a wide screen monitor and as one continuous file so that normal browser search features can find any word or phrase in the entire main guide without changing pages and starting the search again as had been common in the past.

HOWEVER, if you have an older style monitor and / or are having trouble reading the text or it is showing scrollbars on your display you need to click on the "View" tab of you browser and adjust the "zoom" and "Text Size" until you find a combination that works for you on your computer. **For example** when I try to view the new guide on my old Dell running XP on a 1152x864 CRT monitor using the standard (for me) 100% Zoom with Medium text I get multiple scrollbars but when I adjust the Zoom to 80% and text to "Larger" the scroll bars mostly go away and the guide is easily readable. If you are viewing this on a **really** old monitor your best solution would be to **RIGHT CLICK** on left side of the guide in the area under the INDEX and when the sub headings list appears click on "open in new window". That will give you a guide without the index but the main text will use the entire width of your display making it easier to read and you will be able to search words and/or phrases in the entire main guide.

Please note the following point when doing a search of the revised game guide.

This guide primarily uses English (UK, Canada) spellings, with some exceptions, therefore, please remember when doing a search to use English spellings [e.g. 'armour', 'colour', 'ised' etc.] AS WELL AS American spellings [e.g. 'armor' ,color' ,ized' etc.] American designations will be used where American units are being discussed (e.g. armored cavalry).

Remember that your browser's 'Back' button will take you back to where you were previously, e.g. after jumping to a new section. (Please note that to link to any external URL link in this guide, you will require to be online at that time, as this HTML cannot start up the Windows Dial Up Connection - this is subject to your Windows setup on your own machine).

PLEASE ALSO NOTE : It is **very important** for new players to read all of the information in the **RELEASE HISTORY** section. This section provides players with all the information regarding game changes that have been made for every release of the game and this, in many cases, supplements the information provided by the main guide. Changes made don't always make their way to the main game guide so if you cannot find info on some aspect of game play in the main guide chances are you will find it in the Release history section and if you still have a question PLEASE go to our **Discussion Group**. Another resource of information that is often overlooked is MOBHack Help . This provides an overview of OOB information relevant to game play

Game Requirements ⚠️

Windows 95,98, ME, Windows2000, XP, Vista, Windows 7 ,Windows 8 or Windows 10 with DirectX 5 or higher installed. Any computer sold since the release of Windows XP should run the game acceptably. Recommended minimum CPU would be a Pentium 2 of 500 MHz or better, DirectX 8.1 or better, and a video card (3D DirectX features are not used) with 32MB of on board video RAM. A basic Windows sound card will suffice for the MP3 sound .

Camo Workshop, as developers, *Highly recommend* the game be played in windowed desktop mode.. Full screen mode was provided as a legacy when we introduced the windows compatible versions but we feel that to be an outmoded way to run these games and for many people, they simply won't run in full screen mode but windowed mode runs perfectly. If you can get your game to run for you with your computer in full screen mode.....congratulations you are doing well ...but **Camo Workshop no longer supports full screen mode**

⚠️ **However** for those of you that prefer the " full screen" experience while playing the game many players have found that a very simple & lightweight software, called **"Borderless Gaming"** has many of the benifits of windowed and fullscreen mode combined . The latest version of this program can be found **HERE**

Game Installation

This game is a complete stand-alone product. It is not a patch to be applied over any other SP series game.

Double click on the installation programme, this is an **Install Creator** scripted install. Read and follow the instructions presented to you by this programme. Also, ensure that you read any late breaking news in the readme.txt file which may be presented to you as an option by the installer.

Windows Vista, Windows 7 or later installation (this includes Windows 8, 8.1 and 10)

If you are running the game under Vista or Windows 7 or later, install the game to a separate Games folder (directory), **DO NOT install the game in the Program Files folder** (Vista or Windows 7 only -XP and earlier it is OK to install under Program Files). However you **will** need to remember this new path when installing any patches.

This new folder **must** be outside the "Program Files" hierarchy, in order to avoid Vista and Win7's operating system's attempts to "manage" the game files in what it considers to be a "system" area.

The simplest way to do this would be to edit the default installation location line the installer uses by removing \Program files, so change this...

C:\Program Files\Shrapnel Games\The Camo Workshop\WinSPMBT

to this...

C:\Shrapnel Games\The Camo Workshop\WinSPMBT

However, you may be happier with something like

C:\Games\WinSPMBT

Use Windows Explorer to create this before running the installer, or the appropriate 'make new folder' control in the installer's navigation screen, as you prefer.

Game Patch installation

After installing the base package, you must then install each of the patches for the game in order. If you have used a different installation path that the default (Which Vista and Seven users must do), then remember to point the installer at the appropriate folder.

The patches can be found at

http://www.shrapnelgames.com/Camo_Workshop/MBT/MBT_page.html

in the 'Downloads' section. We usually now release updates in March or April.

Running WinSPMBT from the GameOptions Programme

The default installation will place a shortcut for the GameOptions programmes on your desktop. We **HIGHLY** recommend starting the game via the GameOptions programme at all times.

This game will use a lot of Windows memory, so it is best if you run it on its own, bar any use of your browser to read the game manual. It wants "real RAM" and so it is best to start any other memory hogs after launching the game, should you wish to try say some word-processing or spreadsheet programme - start these after the game is launched.

Please also refer to the **Tuning Your Machine** section after reading through this section.

⚠️ **PLEASE READ THIS NOTE!** ⚠️

Before attempting to play the game in WINDOWED MODE first ensure that you do not, repeat DO NOT have your windows task bar set to "Auto-Hide" mode.

Right click your task bar, choose "properties" and **ensure that The Auto Hide check box is not checked**!. Auto hide, if on, will confuse the game's calls to the windows system metrics routines, and a false result will be returned for the desktop size. As well, you should also **ONLY** run the taskbar from the bottom of your screen while playing in **WINDOWED MODE. DO NOT** run it from the side or top of the screen.

These are simple restrictions to make the game happy. **NO** autohide and **DO NOT** run a taskbar from the top or side of your screen.
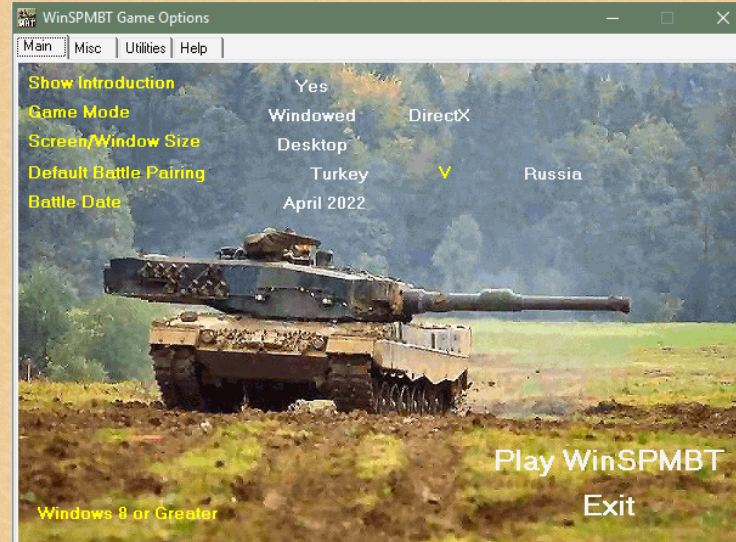
These restrictions do not apply to fullscreen mode

⚠️Game Options Programme

The Game Options programme allows you to preset some of the more common game preferences and access to our utility programs

Game Options, Tab 1 (Main)

Show Introduction- Turns the start up splash screen on or off.

Game Mode-Sets up the game to start in as a Window or Full screen and to use Direct X or GDI. GDI may be useful in some windows emulators e.g. on Linux. Normally DirectX is recommended but testing has revealed that GDI works better when the game is run in Windowed mode with MS Vista or Windows 7 because If directx mode is chosen the Windows Aero system will still scramble the palette when you alt-tab to another programme and the game is minimised to the task bar. On restoring the game later the palette will be scrambled. However, with GDI mode, this problem does not occur, and so the GameOptions launcher now selects GDI mode for windowed game play and DirectX mode is disabled for Windowed mode when gameoptions finds Vista or Win7 on start up

Screen/Window Size- Set to 640x480 or 800x600. If you own the CD with the game enhancements you can additionally set the screen resolution to 1024x768, 1152x864, 1280x1024 and 1600x1280. The maximum game resolution is determined by your systems display resolution. If you have your monitor set to 1152x864 then that is the maximum size for the game as well. **NEW!** for CD owners a new setting named " Desktop" that , when set, automatically adjusts the game to fit the resolution your computer is currently set to and is particularly useful for widescreen monitors.

Default battle pairing- Choose your standard battle opponents here for when setting up a battle once the game starts.

Battle Date- Presets the default battle date that appears for generated battles. Note that if the chosen date is out of range for the pair of nations selected then the game will choose a suitable default battle date which is in range for both. Click **HERE** for the list of nation availability dates.

Windows (Vista) or greater / Windows XP or earlier- Shows the operating system you have. This information is read and used by Gameoptions to determine the best way for it to run the game depending on what operating system you are using and if you are running windowed or fullscreen mode

Play WinSPMBT- Starts the game, closing the Options Programme, with the options as you have set up here.

Exit- Exits Game Options, saves the game settings you chose, but does not play the game.

Game Options, Tab 2 (Misc)
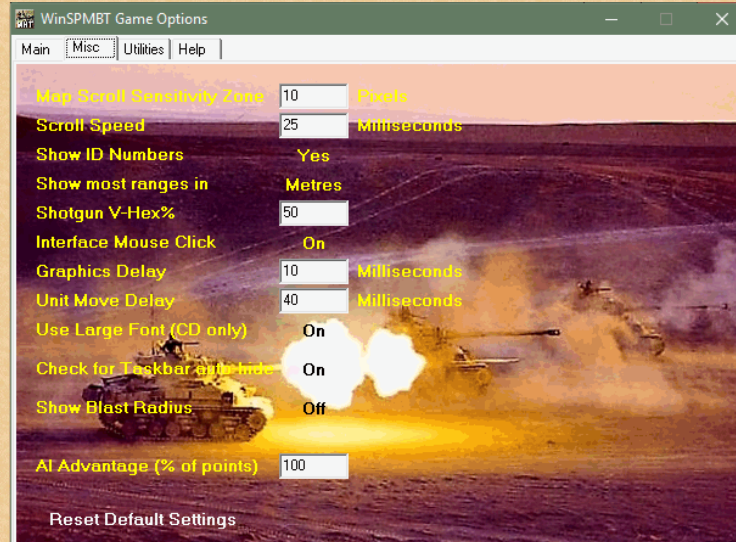
Map Scroll Sensitivity Zone- Sets how close to the edge of the map window the auto-scrolling starts to move the map. Set this to 0 if you do not like mouse map-edge scrolling. (NB - Mouse scrolling is not checked for in the edge portions of the map covered by the mini-map display).

Scroll speed- Sets how fast the scrolling works. Different machines and players will need different settings for optimal useage. 0 is scroll as fast as possible.

Show ID Numbers- Sets the game to show the unit and formation numbers in the game. Generally this is for OOB designers use, but it is very useful for reporting bugs to the design team, as you can then say "Unit 123 - Leo 1" which will point us to the exact unit in question, especially if there are several Leo 1's in that OOB.

Show most ranges in- Set the game to report ranges in Hexes, Yards or Metres.

Shotgun V-Hex%- Set's how often you will get the **The Camo Workshop** individual Victory hexes routine and how often the tradition 3 x 7 V hex clusters will appear

Interface Mouse Click- Turns ON or OFF the mouse sound F/X that are used when clicking on the various buttons etc in the game

These next two controls are critical to how the game runs and displays graphics. There is a huge range of different computer processers used to play the game as well as the number of operating systems can vary through a number of different versions of windows PLUS some players play the game on Macs and some use Linux so it is *VERY IMPORTANT* that players experiment with these controls once they have played a game or two using the default settings which we set up to work " good enough" for most but everyone's different

⚠ **Graphics Delay-** This adjusts the minimum wait between screen frames in Milliseconds (zero is fastest). Use larger numbers to slow down fast CPU's.

That is the basic advise we have given since adding the abilty to change these settings. **Graphics Delay** controls how fast you see explosions or shots in the game...any *ACTION* in the game that is not unit movement is controlled here so if you think things are resolving too fast or too slow this is the control you want to adjust. If you play with fast artilliery ON but find it's a bit too fast this is the contol you want to adjust. On my machine setting that to 90 as an experiment slows fast arty down enough you could almost count the blast radius circles but if that is left at 90 for normal single shots hitting the target is far too slow to be practical......but for fast arty on it's good. This control also affects how slow or fast an ATGM flies or a tank shot takes to run and how quickly and explosion takes to run it's cycle. Bombs or napalm slowed down with a high delay number shows every frame in the sequence so really high numbers are not recomended unless you have a lot of time to waste. Low numbers, for example 10 when used with blast radius OFF will show artillery resolutions almost as fast as having Fast Artillery ON but for example you cannot run fast artilllery ON in a PBEM but with the graphics delay low, long bombardments need not be tedious but be warned when they are made too low they arrive at machinegun speed. This control works hand in hand with the __Animation Level__ control in preferences. Animation Level controls how " detailed" the graphic sequences will be so if you have graphics delay set high but Animation Level set low everything will resolve slower but you might only see one mortar explosion for every three showing with blast radius on.

⚠ **Unit Move Delay-** This adjusts how long a unit "waits" on a hex in a multi hex move. If you feel the movement is too slow turn this number down. If you have a fast CPU and the units are moving too fast for your taste adjust this number higher.

If you like your units zippy then keep this number low, if you are the type of player who only moves one hex at a time it won't matter, but if you need to move a lot of units at their full movement and aren't concerned about enemy activity you might like playing with this set lower than default. Doubling the value will slow all movement to a very deliberate pace .

It's important to experiment with these numbers as they affect how the game plays for you EVEN IF you have played for awile and like how it runs it's still worth trying variations as you may find you like something better than you have now.

Use Large Font (CD only)- allows a slightly larger font to be used which makes for easier reading of the screen

Check for taskbar auto-hide- If set to ON the game will warn players that auto-hide is on and should be turned off in windowed mode. If set to OFF no warning will be given

Show Blast Radius- An external control to turn blast radius ON or OFF

AI Advantage (% of Points)- The Game Options launcher programme now allows CD game owners to easily edit the INI value for the **AIAdjustpercent variable** on the Misc Tab. Set at 100% for the default points, 120 to give the AI a 20% points advantage and so on. (Free game users can see this value but not edit it unless they manually do so in the INI file as described in the Game Guide section on AIAdjustpercent).

Reset Default settings- Resets all settings to "factory spec"

GameOptions, Tab 3 (Utilities)
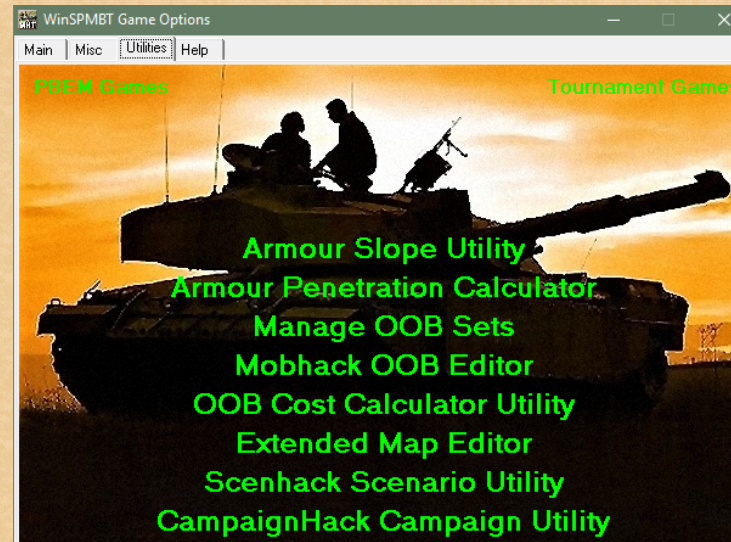
PBEM Games - Clicking on this opens the \WinSPMBT\PBEM Games folder with Windows Explorer and allows PBEM players easy access to their PBEM files for zipping and sending to their opponents.

Tournament Games - Allows Tournament organizers easy access to the Tournament folder when sending out their games. This is only operational in the extend features CD version

NEW!Armour Slope Utility- Allows direct access to a small utility program that calculates armour + angle and gives the effective armour thickness **More info**

NEW!Armour Penetration Calculator - Allows direct access to a utility program that shows weapon effectiveness by nation and weapon and displays the potential armour penetration at various range increments for AP and Sabot. HE and HEAT **More info**

Manage OOB Sets - This is a wonderful new feature for WinSPMBT that allows players to store an infinite number of custom OOB sets and load them into the game anytime they want and be able to restore the default OOB's just as easily. It is no longer necessary to juggle custom OOB's that may come with a PBEM or Tournament game or even a special OOB for a scenario. The procedure is fast and simple. First click on "Manage OOB Sets and this screen will appear
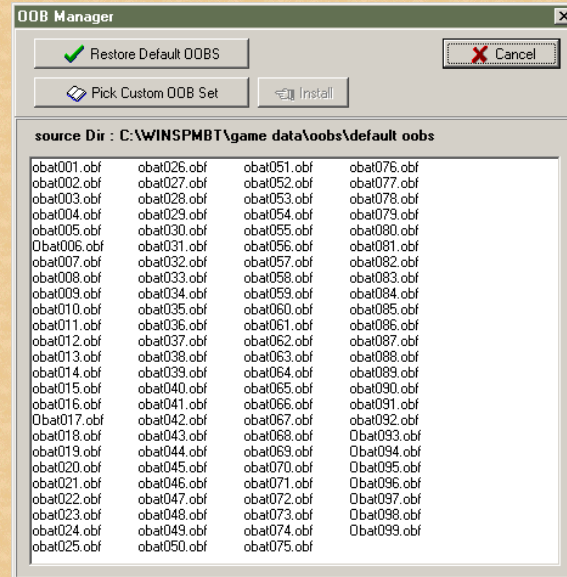
Next, click on the "Pick Custom OOB set" button and this screen will appear...
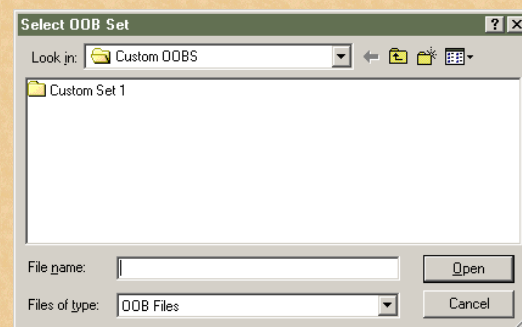
The game is issued with one folder as an example. The custom OOB's would be inside this or any other folder found under \Game Data\OOBs\Custom OOBS There are NO custom OOB's in there when you first open the game now but this is where you would create the folders to hold them.

You do NOT need to make a complete set of OOBs. It can be as little as one OOB. This example below has four custom OOB's
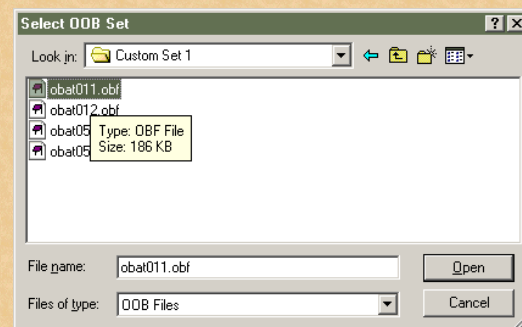
To load a custom set all you need to do is click on **ONE** of the OOBs then press the OPEN button. When you do this screen appears

OOB Manager

Restore Default OOBS   ✗ Cancel

◇ Pick Custom OOB Set   ⏎ Install

source Dir : C:\WinSPMBT\Game Data\OOBs\Custom OOBS\Custom Set 1

```
obat011.obf
obat012.obf
obat055.obf
obat059.obf
```
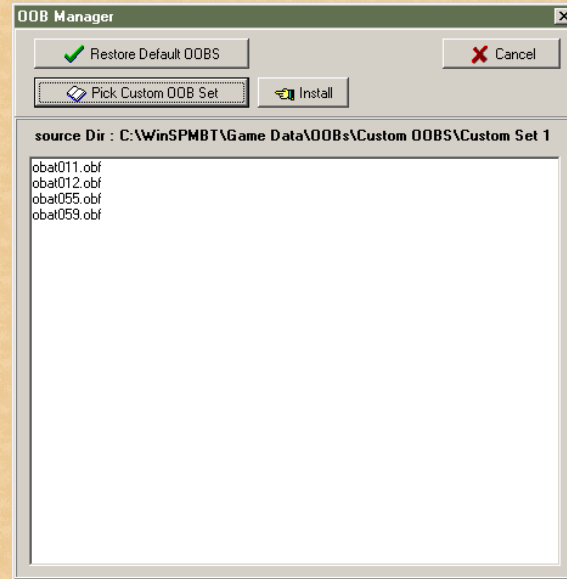
Now press the INSTALL button and this screen will appear

Install

Install these Custom OOBs?

Yes   No
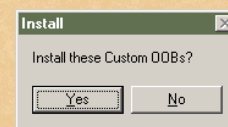
Click on Yes and this screen will appear

Files Copied

4 Files copied to C:\WINSPMBT\game data\oobs

OK
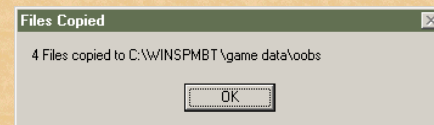
Your custom OOB's will now load when you start the game!

When you want to restore the default OOB's (always a good idea when playing a scenario or campaign!) the procedure is quite simple.

Start up the OOB manager and when the screen loads click on the ✔ Restore Default OOBS button , answer Yes when the confirmation screen appears and all the default game OOB's will be reloaded.

You can add as many custom OOB folders as you can keep track of and name the folders whatever you like so you could have something like this after playing the game for awhile

Select OOB Set

Look in: 📁 Custom OOBS

📁 Custom Set 1
📁 Freds OOBs for PBEM
📁 Johanns OOBs
📁 Revised German OOB
📁 Test OOB set
📁 Tournament OOB set

File name: Open

Files of type: OOB Files   Cancel
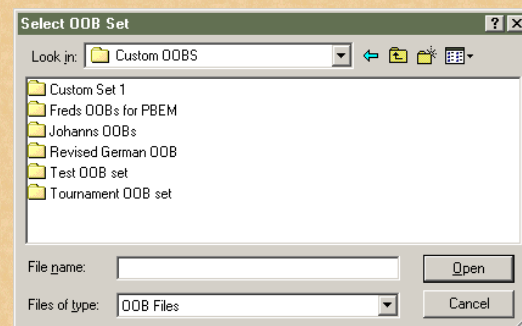
There is no limit to the number of sets you can have on hand to load into the game and restoring the as-issued set is a button click away. You can edit the OOB's with MoBHack and save them with the SAVE AS button into the custom OOB folders. You can also run the cost calculator from the custom folders on individual OOB's. You **CANNO**T run batch calc on custom sets unless you do it from the main OOB folder. You can always restore the as-issued set afterwards as they are stored in another folder. **NEVER** MoBHack the set of OOB's in the DEFAULT OOB's folder. ALWAYS use the games set in the regular OOB folder as a starting point. Even if you feel the need to alter most or all of the OOB's for one reason of the other you should store them in a custom folder and load them into your game from there.

MoBHack OOB editor - Allows you access to our OOB editor. For more information on MoBHack please return to the GameOptions screen and click on the HELP tab then "MoBHack Help"

OOB Cost Calculator - Allows you to run the OOB cost calculator program . For more information on The OOB Cost Calculator please return to the GameOptions screen and click on the HELP tab then "MoBHack Help". When that help file appears click on "Running the Cost Calculator"

Extended map editor - Allows access to the new extended map editor with cut and paste capability only available as an extra feature on the CD. For more information on the new Map Editor click **HERE**

ScenHack scenario Utility - A utility for scenario maintenance that allows players to delete, move scenarios to another scenario slot (i.e. renumber), or to copy an existing scenario to another slot as well as providing extensive repair and editing functions for existing scenarios as an extra feature on the CD. For more information on the new Map Editor click **HERE**

CampaignHack Campaign Utility - Allows the conversion of existing DOS based campaigns to work with WinSPMBT and allows the extraction of a campaigns scenarios into the scenario menu for alteration. Previous to this it was impossible to alter existing scenarios in a campaign without having the original scenarios in their original slots as an extra feature on the CD. For more information on the new Map Editor click **HERE**

GameOptions, Tab 4 (Help)

Game Documentation:

Game Manual- Start up the **Game Guide** from here

MOBHack HELP - Start up the **MOBHack HELP** from here

GameOptions Version - Show the version number of the GameIptions program **NOT** the main game version

Links to Websites- Links to WinSPMBT Websites

Running The Programme Directly

You can of course run the programme by double clicking the desktop shortcut provided, or the actual EXE in the root folder. This bypasses the Game Options programme, and runs with the settings as currently set. If you have your settings exactly as you desire, this is the quick option.
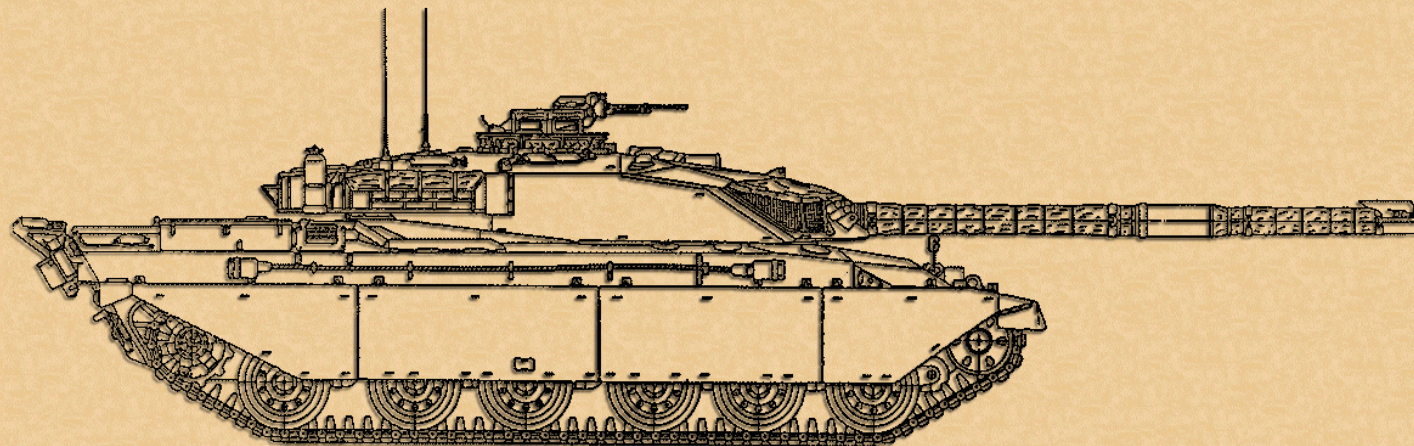
Tuning Your Machine

⚠️**Windows Vista and Seven**

Full-screen mode

Full-screen mode requires the use of a batch file which turns off the windows desktop and hence the Aero interface which interferes with the game's colour palette. The GameOptions launcher will **automatically** run the game using this batch (.CMD) file if it detects a windows Vista or later operating system.

Should the Windows desktop not be restored on exit from playing the game full-screen, press CTRL+ALT+ESC to bring up the Windows Task Manager. Start a new task "explorer.exe". Close Task Manager.

Note that under Windows Vista or greater, the ability to ALT+TAB out of the game as with Windows XP or earlier is no longer possible, although any programmes running when you started the batch file session may still be available - perhaps with palette reduced to 256 colour mode. In Vista or later, the batch file that runs the Full Screen game is designed to run the game exclusively. Should you require to work with other programmes (multi-task) while playing the game, then we recommend that CD owners play in "windowed mode" with desktop resolution.

Windowed Mode

The GameOptions launcher now automatically selects GDI mode when running in windowed mode in Vista or later operating systems. The game is fast enough in GDI mode, and no conflicts with the Aero interface will occur (When DirectX is allowed palette problems can occur as Aero clashes with the 256 colour mode - even if the 256 colour "Compatibility Mode" setting is selected).

Vista/Seven Compatibility mode switches

These **are not** required to play the game due to the above mentioned batch file that automatically removes explorer during "full screen" mode, and use of GDI mode in "windowed" mode).

Windows 8 does not need to run the batch file and GameOptions now detects that OS

The game wants as much real memory as possible, so for optimum performance, especially on lower end machines, try to run the game with as few other windows programmes running in the background as possible. Also, since many other programmes will fragment the main Windows memory, it is often a good idea to reboot the box and start the game as the first thing run. Do not run it in paralell with any other games! - only windows desktop type applications.

Screen Size is the first determinant of horsepower required. The larger the screen size you choose, the more pixels the CPU and graphics card have to push about. Especially with a lower end machine, you will have to find the screen

size that suits your hardware's capability. The smaller the screen size you choose, the higher the performance you will get.

In **Full Screen mode**, only DirectX graphics are supported. The game will play in full screen mode using the resolution you specify. On regular CRT monitors, this is not a problem as the CRT will resize to fit, but on LCD type displays, the fixed pixels of these cannot resize. Different LCD type displays will handle resize requests differently. Some will play full screen modes at less than the native resolution in a "postage stamp" with black pixels to fill up to the native resolution. Some will interpolate the pixels to fit, which can make a fuzzy and/or stretched screen. Consult the user documentation of your LCD screen. In general it is best to choose the native screen resolution of your LCD screen. For those laptops which have non-standard display sizes outside the regular windows desktop sizes (e.g. 1450 pixels wide) then try a resolution close to this, or avoid full screen mode and play in windowed mode.

Unlike many full screen DirectX games, we allow you to ALT-TAB out to the desktop from Full Screen DirectX mode. This is at your own risk of course!. However we have not noticed any real problems, except that sometimes on returning to the game you may get a "psychedelic" screen, as windows has destroyed the game palette. The cure for this is to go into a sub screen which disables and then re-enables the colour cycling. Thus if in the game screen, open the preferences screen and exit it and the game palette should be restored. This effect seems to be graphics card related. A few of our playtesters had this happen frequently, most had to really try to get it to happen and some never saw it. It also seems to be related to how many other programmes you had up and running either before you started the game, or tried to run while the game was ALT-TABBED to the task bar.

Full screen DirectX mode is the **fastest** graphics mode. There is no Windows desktop to worry about co-operating with. It will therefore likely be of most use to those users with older machines and/or graphics cards.

If you do not have the the CD version of the game, you can choose from the 640x480 or 800x600 full-screen modes only.

In **Windowed Mode**, the game will play in a fixed size window. The Window cannot be resized, due to the constraints of the graphics package used as the game core. The window will take up only as much of the desktop as is actually available after deducting the windows task bar. So if you have say a 1024 by 768 screen and select 1024 by 768 (or a larger size) then the window will take the full screen, barring the windows task bar, which will remain visible. If the window size is much smaller than the desktop, the game will play in a small fixed window.

In any case, you can minimise the game to the taskbar (sequences in play, such as enemy AI turns will **not** stop while the game is minimised - the game will be playing on. Use the replay feature, if desired, to see the result of the AI turn in detail. Can be handy to let the AI play while you handle some email).

Windowed mode is the mode which is guaranteed to be "cuddly and friendly" towards the windows desktop, as opposed to full screen DirectX mode, where we do allow task switching with ALT_TAB, but there cannot be guarantees. As it has to coexist with the windows desktop, it is somewhat slower than full screen mode. However, on modern machines there is likely not to be a noticeable difference. This is not a 3D shooter type game after all.

We offer 2 different graphics modes for Windowed mode. The Default is DirectX acceleration. Most Windows users will want to stick with this, as it is significantly faster than the Windows Graphics Device Interface (GDI). We also allow you to select the regular windows (slow!) GDI non accelerated mode. This may be handy for some situations where the DirectX drivers on your card are "flaky" perhaps, but mainly this mode is the only (as-is) support we give for non-DirectX systems. We see this as perhaps useful in non-Windows machines (Linux boxes perhaps?) which may have an emulation mode, but cannot handle DirectX calls.We have not tested the game on such emulators, and provide no warranty as to the fitness of this option.

There is no need of any external screen capture mode when using Windowed Mode. The normal Windows ALT-PRINTSCREEN will copy the window to the Windows paste buffer. Simply open up a normal paint programme (such as the supplied Microsoft utility) and select paste.

If you do not have the the CD version of the game, you can choose from the 640x480 or 800x600 windowed modes only.

Map Scroll Sensitivity Zone Is a value in pixels from the map edge where the mouse scrolling kicks in. This value is user selectable, as it is entirely up to you where you like your mouse scrolling to start from. Some folk like it very small in value (say 6 pixels) , others may prefer a large value. The edges of the map beside the mini map are not checked for mouse scrolling. Use 0 here if mouse initiated scrolling irritates you, and you want to rely only on pressing the mini-map to move around the battlefield. You may find you have different preferences for this if you play in different window sizes, and perhaps in full screen (In full screen, you may want say 1 or 2 pixels here, i.e. the mouse fully to the display edge).

Scroll speed is set in milliseconds (Unlike the previous game which used ticks which changed as CPU speed increased). We would suggest you try increments of 250 milliseconds (quarter second sized chunks) as you experiment to get this to your satisfaction. Again, you may find you want to change this to suit the current display type and size.

Where you are using windowed mode and the window is smaller than the desktop, you may want to move the mouse out of the game window to select another programme, on the desktop say. If you move the mouse too slowly, it may trigger an undesired scroll. To avoid this - simply move the mouse over the scrolling zone fast enough that the scroll is not initiated.

WINSPMBT TUTORIAL

Playing WinSPMBT

This game is a variant on SSI's Steel Panthers II. Game play is therefore similar, for any of you who have played an SSI Steel Panthers title before. However, WinSPMBT is an extremely refined and extended product over the original baseline. Experienced SP players will do well to read through the notes provided, starting with the Main Screen section.

All players should at least read through the following tutorial. It is recommended you play this through, especially if you are new to the game.

<u>Introduction</u>

This Tutorial for WinSPMBT is designed for players who may be new to the Steel Panther's gaming system. It is modeled after the Tutorial included in the SSI, <u>Steel Panthers II Modern Battles</u> manual and is deliberately limited to explaining only the most basic of game play functions.

New players using this Tutorial text should keep it open in their browser, while playing the game in Windowed mode order to easily follow along step by step while playing the Tutorial scenario. If you play in full screen mode, you will need to ALT_TAB in and out of full screen mode to read along.

WinSPMBT is a very complex and detailed tactical war game. Learning all of the many fine points and nuances of game play will take some time. Learning the basics should be relatively easy and intuitive for most players regardless of their military knowledge or experience. I have found playing this game to be a rewarding learning experience and hope that you will discover it to be equally enjoyable.

Dick Burleigh aka "Boomer"

<u>PLEASE NOTE</u> ⚠️

As of WinSPMBT version 7.0, Artillery can no longer be plotted (including air transports and spotters) on turn 0, or 1 if the battle is a **meeting engagement** or you are the **delayer** or **defender**. A scenario designer can still plot artillery as he desires in his scenario, however. The AI may still plot fire as before. This is deliberate to penalise a human player who packs the approach roads. Note that the bombardment screen may still be entered to plot FDF gold spots, or toggle the blast radius display. The arty units just will not show up till post turn 1 if unavailable in the scenario for pre-game bombardment *so you will not be able to plot the spotter aircraft or any bombardment in the tutorial scenario until turn 2*

Starting the Tutorial

After game start up, you should already be presented with the Scenario List..

Game Main Screen

When the Intro ends you will be taken to the game's Main Screen with the Scenario List presented as the default selection. Left click on the first scenario, titled WinSPMBT Tutorial and a brief description of the scenario will appear. Left click on Start and the Player Control Screen will appear. Here is where you can choose to set player 1 and 2 (USA and Iraq) to either Human or Computer (AI) control. For the Tutorial, leave the selection at default with you as the Human Player 1 and the AI as the Player 2. Later if you want a challenge you can play again as the Human Player 2. Click Continue.

Player Control Screen
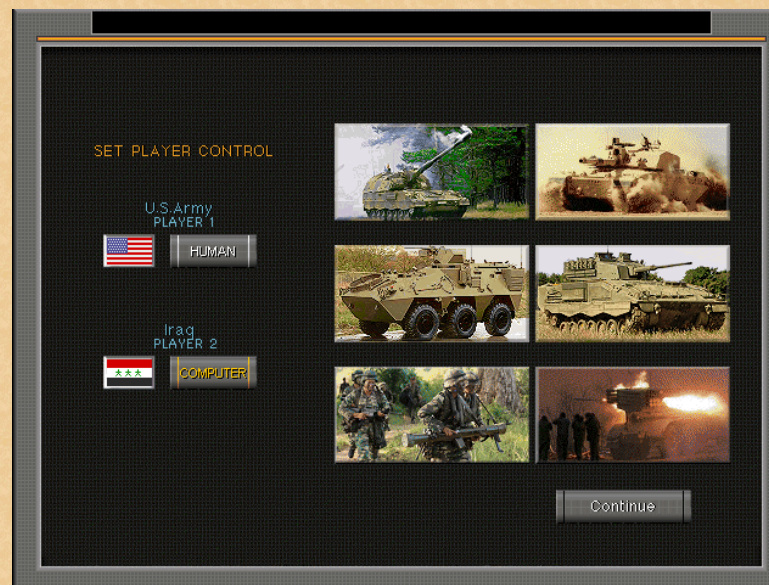
The next screen gives you the options of Start Turn, Save Game, Quit Orders (which means "End Turn") or Exit Game. Note that running your cursor over these buttons provides a brief description of their function on the message bar at the top of the screen. Click on Start Turn to get into the game.

Start Turn Screen

Go to Map - Give Orders to Units

U.S.Army Player

START TURN

SAVE GAME

QUIT ORDERS

EXIT GAME

[The Tactical Screen](#)

You now go to the Tactical Screen and your HQ Unit (which is you) is centred in the Battle Map Screen. The game first starts at max zoom-1 on the Tactical Map, so to better see what is going on lets zoom out a bit. Click on the magnifying glass button with the [-] or press the minus key on your keyboard. Do this 2 or three times and you'll have a better view of the Battle Map. The [+] button or + HotKey will allow you to zoom back in again.

The Tactical Screen is where most of the game is played. The actual playing area is composed of individual hexes, each hex approximating about 50 yards or meters. The hexes may or may not have visible borders depending on your in-game preferences (more on that later).

Tactical Screen (with hex borders on, movement outline on)

There are five main display sections on the Tactical Screen: The Battle Map which displays the battlefield terrain and units; the Unit Information Bar along the bottom of the screen; a mini-map in the bottom right corner that shows the overall battlefield; a set of 24 Tactical Control Buttons which you will use to provide "orders" to your units: a red message/information bar along the top of the screen. At various times, messages will also be displayed in the Unit Information Bar as well.

To see different portions of the Battle Map, move the mouse cursor arrow to the top of the Map screen to scroll up or to the right edge of the Map screen to scroll right and so on. Another way to quickly move to another location on the map is to left click on that area within the mini-map in the corner. As you move your cursor over the map you will receive a description of each terrain hex tile on the red message bar at the top of the screen. This will tell you each hex's grid coordinates, relative elevation (an abstraction with no units such as feet or meters) and terrain type. As you move the cursor arrow over your units, the message bar will display the unit's roster number, its name and relative

readiness status (more on this later).

Now take a moment to run your cursor arrow over the various buttons on the right of the screen.

Current Nation	Playback the last players turn
Next Unit	Previous Unit
Help	Find the next Formation HQ
Load	Set Range
Bombardment/para menu	Rally Troops
Fire	Targeting
Area Fire	Make Smoke
Zoom Map in closer	Zoom map OUT
Clear dark Hexes	Unit Menu
Undo	HQ Menu
Encyclopaedia	End game and Exit
Save the game	Quit the orders phase

Note that as you do, a brief explanation of each buttons function appears on the red message bar. Also, note that most of the buttons contain a letter or other symbol relating to equivalent "HotKeys" on your keyboard. During game play you can activate many functions or orders by either clicking on the appropriate button or stroking its corresponding HotKey. Actually, there are more HotKeys than there are buttons.

Move your cursor over the red question mark (?). The message says that this is the "go to the (in game) Help Screen". Left click it. This is the in game Help and the first screen displayed here is the "Game Help". The six buttons on the right will take you to five other in game help topics, identified when you run your cursor over them. Here on the Game Help Screen, you will find a detailed functional description of all of the HotKeys available during game play. As you will see later there are other times when different lists of HotKeys are used…. such as when you are designing your own scenario. Look over these HotKeys on the Game Notes page and remember that they are always available during game play via the Help button. Exit the Help and return to the Tactical Screen.

The Unit Information Bar

```
AO>  Headquarters      In Contact      SHOTS: 6:6:6:6    RANGE: 400 metres           Turn 1
Ready                                  MOVES: 6 : 0                                  Visibility 39
ENEMY SEEN: 0                                                                        Length 10
```

During game play, the Unit Information Bar along the bottom of the screen displays the current active unit's (ie: unit selected) information as follows:

- The selected unit's formation designation number such as A0, A1, B0 etc. (Note: The scenario opens with the A0, Command HQ unit as the selected unit. Note that it's hex is outlined in red. To select other units in your force you can either left click on them in the map or scroll through them in sequential order by clicking on the Next (N) or Previous (P) buttons or HotKeys).

- The unit's name.

- The readiness/movement status such as Ready, Dug-in, Pinned, Retreating, Routed and unit speed if moving.

- ENEMY SEEN: indicates the number of visible enemy units.

- Shots: shows the number of times this unit may shoot during this turn. If there is more than one number then that unit has more than one type of weapon available. The number of shots for each weapon type is listed in the order in which the weapons are listed on the Unit Information Screen. To view the Unit Information Screen, right click on the selected unit. Move your cursor over the M2A2 Bradley that is sharing the hex with your HQ Unit. Now right click on it. The Unit Information screen shows that this Bradley IFV has three weapons, a 25mm chain gun, a 7.62mm coaxial machinegun and a TOW-2 antitank guided missile. More on this later, click continue to return to the

- **MOVES:** shows the selected unit's number of movement points remaining this turn. Different terrain requires different numbers of movement points per hex of unit travel. If MOVES is not displayed then the unit may not move this turn. The second number, in blue reflects the units' movement range in water hexes.

- **RANGE:** shows the units attack range displayed in hexes, meters or yards (you select how you want the ranges reported to you in GameOptions start up screen from the Misc Tab). This range can either be the default max weapon range of the first weapon or a lower range that you can set with the Y Button / HotKey. If range is set to say 9 hexes (or 450 meters or yards) then this unit will automatically fire at any visible enemy that moves into range during the enemies turn. (this is called op-fire).

- **Altitude:** if the selected unit is a helicopter (Landed, Low or High).

- **Turn:** is the current turn number.

- **Visibility** is the farthest distance in hexes that any unit can see (due to time of day or weather conditions).

- **Length** is how many turns the current scenario lasts.

Unit Information Screen

To get even more detailed information about a unit, select one of your M1A1HA+ Abrams tanks and right click on it to get its Unit Information screen. Here you will learn the unit's name, readiness status, CHQ Link (indicating whether or not the unit is in contact with it's leader), amount of suppression it has, weapon type(s), amount of ammunition available, experience, morale and leader information. Types of ammunition available include HE (High Explosive used against "soft" targets), AP (Armour Piercing Shells), SABOT (armour piercing, discarding sabot penetrators) and HEAT (High Explosive Anti-Tank). Also displayed is an armour diagram that indicates a unit's front, side, rear and top armour ratings for both the turret and hull sections. For much more information about the Unit Information Screen and its controls go **HERE**.

Before continuing, select and the right-click on one each of your unit types to get a feel for their capabilities. You can read about these in more detail in **MBT Unit Classes**.

Unit Information Screen for the Abrams

Game Turns

Each scenario and campaign or Play By Email (PBEM) battle is made up of a number of turns, each turn equaling several minutes of real time. In one turn you get to move and fire all of your units and then your opponent gets to do the same. The Tutorial scenario has 10 turns. In each turn, both you and the AI opponent may receive incoming artillery fire (if appropriate) rally your units, load/unload transport vehicles, move and attack enemy units, receive enemy op-fire, and order up artillery fire missions, air strikes, recon flights and/or paratroop drops.

Game Preferences

Now is a good time to change or set any game preferences and realism settings. Click the "Preferences" button on the bottom right of the Tactical Screen. This will bring up the Preferences screen. This is probably your first battle so these will be set at the "factory defaults". All realism settings will be on. For ease of play, you may want to turn the "Hex Grid" and "ID Tags" to ON. As you play the game, you can experiment with these values. They are all explained fully in the **preferences** section.

Preferences Screen
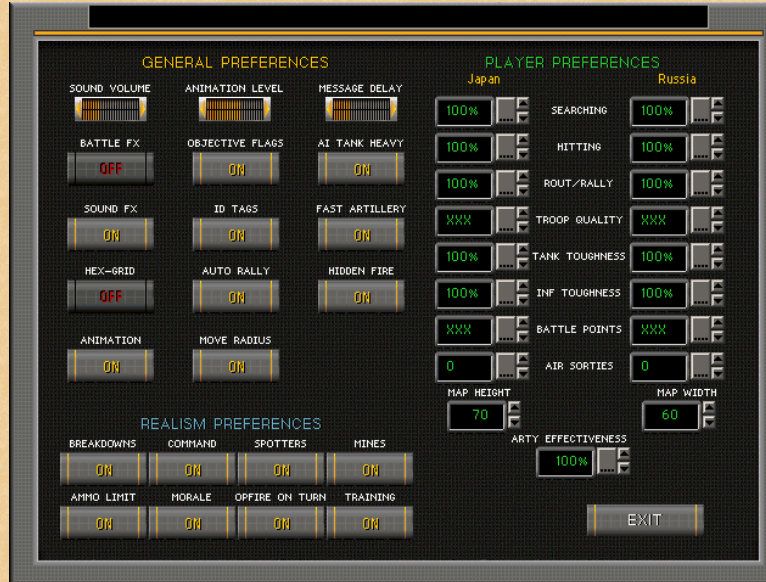
Your Fighting Force

From the Tactical Screen press the Headquarters Menu button or H HotKey. On the right hand side of the screen, you will find the Unit Status List that lists the units in your battle force. They include:

A0 …….   HQ infantry squad. (This is you)

B0-B1…   M1A1HA Tank Section

C0-C1…   M1A1HA Tank Section

D0-D3…   M1A1HA Tank Platoon

E0-E1….   M901 Anti-armor section

F0-F1….   M901 Anti-armor section

G0-G1…   M106A2 Self-Propelled (SP) Mortar section

H0-H6…   Cavalry Group

I0-I1……   A-10 Warthog Strike element

J0-1……   AH-64A Apache Attack Helicopter section

K0-K5…   155mm Medium Artillery Battalion (off-map)

L0…..   UAV unmanned aerial reconnaissance vehicle (off-map)

M0…..   M981A3 FIST-V forward artillery observer vehicle

N0……   M2A2 Bradley IFV (transport for your HQ unit)

M-548…   Ammo Carrier section (reinforcements)

Each unit with a "0" designator (A0, B0, C0 etc) is a leader who plays a vital role in rallying your troops and maintaining formation readiness. The "H", "C" or "P" letters in the left hand column of the Unit Status List indicate that this leader is in charge of a Headquarter, Company or Platoon formation. All new players should take a few moments to learn more about this and the other information and controls found on this screen in the **headquarters** screen].

Your Turn One

Back to the Tactical Screen to finally play the game! Your units are spread out on and between the two ridglines in the west (left) side of the map, with the HQ (A0) unit in the center. The HQ starts out as the first selected unit when the Tactical Screen opens. You can cycle through all of your units by using the Next Unit (N) or Previous Unit (P) buttons or HotKeys. You can cycle through formation leaders by using the Next Formation HQ button or "G" HotKey. From

the Unit Status List or Unit Menu (clipboard icon button), if you click on any unit then you will be taken to that unit selected in the tactical Screen.

Moving your units: A selected unit is either in one of two display modes: either "view move radius" or "view LOS (Line of Sight visibility). A red hex shaped border surrounds the currently selected unit. When a unit is first selected it displays lighter shaded hexes to show where it could move to given it's movement points available. Notice that your HQ unit could move three hexes in any direction. This light area is the "move radius". To move your HQ unit 3 hexes forward, just left click on the lighted hex just below the US flag victory hex. Now, right click on any hex on the hill just above your HQ unit. The lightly shaded area now represents the field of vision that your HQ unit has. Right click again about 10 hexes to the right of your HQ. There is his field of vision in the direction of the reported enemy.

NEW for WinSPMBT!!!

You may now reverse Vehicles in WinSPMBT using the '8' key on your keyboard. Reversing uses 3 times the forwards move cost but allows you to keep your front armour pointed towards the enemy.

As your HQ unit walked forward, he left his M2A2 Bradley behind. To move that Bradley up into the same hex as your HQ, select the Bradley by left clicking on it, the while holding down the shift key, left click on the hex with the HQ unit in it. The Bradley should move up and join the HQ. **Depressing the shift key allows units to move into the same hex as one another and must be used even when moving into a hex occupied by the enemy and/or a destroyed unit.**

There are two sections of M1A1HA+ Abrams tanks to the left of the hill just above your HQ. Move those tanks, one at a time to the right hand edge of that hill. Notice that movement in dusty terrain and good visibility produces dust trails. Notice also that as your tanks moved that their remaining movement points and shots remaining numbers became smaller. On the hill below your HQ unit are two sections of M901 anti-tank missile vehicles. Move them one at a time to the right hand edge of their hill. Do not move any of the M1A1HA tanks on the lower hill yet. They are in an "over-watch" position, set to protect the other units while they are moving. Do check their LOS visibility though! Select one and look off to the right. They have no trouble at all seeing through the dust clouds generated by the M901's. Select and right click one of those Abrams and look at its visibility rating on the Unit information screen: 40, which indicates thermal imaging that allows it to "see" through dust and smoke (in game terms). This will prove to be a MAJOR advantage for you in this scenario. The enemy forces have no vision 40 units. Keep this in mind as the battle unfolds.

Behind or to the left of the lower hill is the H formation of a Cavalry Group. Mount the Scouts and the LMG team into the uppermost Bradley IFV. To do this, first move the Scout unit (H0) into the same hex as the Bradley by using the Shift key then press the Load button or L HotKey and left click on the Bradley. The scout should load onto (or into) the Bradley, which now becomes the selected unit. Note that the Unit Information Bar at the bottom of the screen now shows the Scouts as a passenger aboard the Bradley. Now select the LMG Team to the left, move them into the same hex as the Bradley and load them aboard the same way. Now load the two TOW Teams aboard their Bradleys. Move the Bradleys as far to the right as possible.

Possible situation at end of your turn 1 movement (north and south areas)

If you happen to make a mistake and move a unit incorrectly, you may be able to use the cancel button to retrace your steps. The Undo/Cancel button does NOT work if during your move you were fired on, you became immobilised, or you spotted <u>OR WERE SPOTTED BY</u> , an enemy unit. (Remember, just because YOU didn't spot THEM does not mean THEY didn't spot YOU...and if you were spotted you cannot undo. These limitations are there to prevent cheating.

Saving The Game

This is a good time to save your game. To save a game, click the SAVE button which will take you to the Save screen. Click on an empty slot on the Save Game list. A new save game will appear on the left. The game name will be "T1 U.S vs Ira,2/91". This tells you it is Turn 1 of a battle between U.S. and Iraq taking place in February 1991. You can choose to type in a new name if you want, but let it default for now and hit the <enter> key. This will save the game, and take you back to the tactical screen.

Finally, on the tactical screen, click the Blue arrow, and type "Y" to confirm, to end the turn. You'll notice a pause as the enemy forces take *their* turn. Depending on how you moved, you may be spotted by enemy units. You may be fired on. During the AI turn, there is nothing you can do to influence events! You must wait until the AI move is complete.

Turn Two

Bombardment Screen

The Bombardment screen is disabled on the first turn (as of the WinSPMBT version 7.0 Upgrade patch) but at the start of turn 2 you can set up an air recon flight to get an idea of enemy positions. Although any "0" formation HQ with a radio can perform spotting, it is often best to use a dedicated artillery observer. The M981A3 FIST-V is such a unit. It makes all artillery calls faster, and there is a smaller penalty for adjusting fire. Select the M981A3 FIST-V, then click the Bombardment button or hit the "B" key. The bombardment screen opens. This is the interface that lets you perform the following 3 actions:

- BOMBARDMENT VIEW: Assign artillery bombardment targets for on-map and off-map artillery units and tactical air strikes.
- SPOTTERS VIEW: Assign aircraft spotting pass.
- AIRBORNE VIEW: Assign paratroop drops.

Bombardment Screen, bombard view

As the bombardment features are discussed, keep in mind they are much easier to use than they are to describe! In many games, you'll spend a few seconds every turn reviewing the bombardment screen.

When the bombard screen first opens, it is set to BOMBARD view by default (It will say "BOMBARD" in the upper right corner). In the right pane, you can see which units you have available for plotting bombardments, which should be 2 M106 A2 SP mortars, 2 A-10 Warthog attack aircraft, and 6 155mm artillery platoons. This is a LOT of firepower. In the left pane, you see a reduced version of the main map. You have the same zoom and pan features as the tactical screen.

Click on the 'Switch To' button in the lower right. That should say "SPOTTERS". This toggles the window to Spotters view. You can see the UAV there. Finally, click the "Switch To" button again and it will toggle you to AIRBORNE view. You will not see any unit available in this scenario for plotting airborne drops. Click "Switch To" again to take you back to the bombardment view.

Bombardment Screen, spotters view

For now, even though a few enemy units may be spotted, you will not set up any bombardments. Go to SPOTTERS view, and you will set up an air recon mission. Pan around the map on the left pane, and locate the objective area on the eastern ridgeline. You'll notice several hexes containing flashing yellow and orange circles with a number inside. These are pre-planned bombardment spots and were set up by the scenario author. When you plot a barrage on one of these hexes, it has an especially quick response time.

Look at the first unit in the right pane, where the UAV is listed. There are 4 buttons to the right of it. The button that looks like an Eye will take you to the unit details screen where you can view the unit status. The second button is the

Spotting Mission button. You select this button to set up a spotting mission in the target hex. The red circle with the cross-bar is the cancel button. Clicking this will cancel the spotting mission for that unit. The Blue "Plus" symbol is the shift button. This allows you to shift the spotting run for the selected unit. The number to the left of the Shift button indicates the turn delay. 1.0 means a one full turn delay. Any number less than one means it will occur at the end of the current turn (after the enemy move phase). If you want to start over, click the cancel mission button.

In the bottom of the right pane you will see a "Air Entry and Exit" button. When that is toggled to "Displayed", you'll see a set of arrows in the mini map in the bottom-right. These arrows show the aircraft entry and exit direction. Click on the buttons as shown in the image so that the aircraft will approach from the upper-left and exit to the lower-left. If the UAV does not get shot down, it will be available on subsequent turns.

Once you have plotted the spotting mission, click the exit button at the bottom to exit the bombardment screen and take you back to the main screen.

Your bombardment/spotting phase marks the beginning of your second turn. If all has gone according to plan, your UAV will make it's spotting run now. It will fly to it's designated spot, and will circle around that spot several times. There is always a chance it may get shot down. However, it will reveal valuable intelligence. Look for Iraq units marked in Red on the small inset map, and zoom for a closer view. You may see some T-55 and T-72 tanks.

You continue the movements that you began on turn 1. Use one Abrams platoon in an overwatch position as you move the other. Keep the Bradleys behind the tanks. Start to be a bit more cautious. Use your Apaches, Abrams, and M901s to fire *before they move that turn, if possible, on* visible enemy tanks. However, the fire control on your Abrams, Bradleys, and Apaches will often allow them to fire with high accuracy even after moving.

Targeting an Enemy Unit

Select one tank. In the status bar, note if there are any "Enemy Seen" indicated in the lower left. Keep selecting your tanks until one tank has at least one enemy seen. Then select the "T" key or hit the "Target" button. You will see a red line draw from the tank to the nearest enemy unit.

Now click the "F" key or hit the "Fire" button. Your tank will shoot some or all of it's weapons at the enemy tank. You can continue to fire until all your shots (or your ammo) are exhausted.

This is the "smart" way to fire at an enemy unit. You can also simply select your unit, then let your mouse hover over enemy units. If one of them is a valid target, a cross-hairs will appear on it, then click to fire.

Targeting an enemy unit
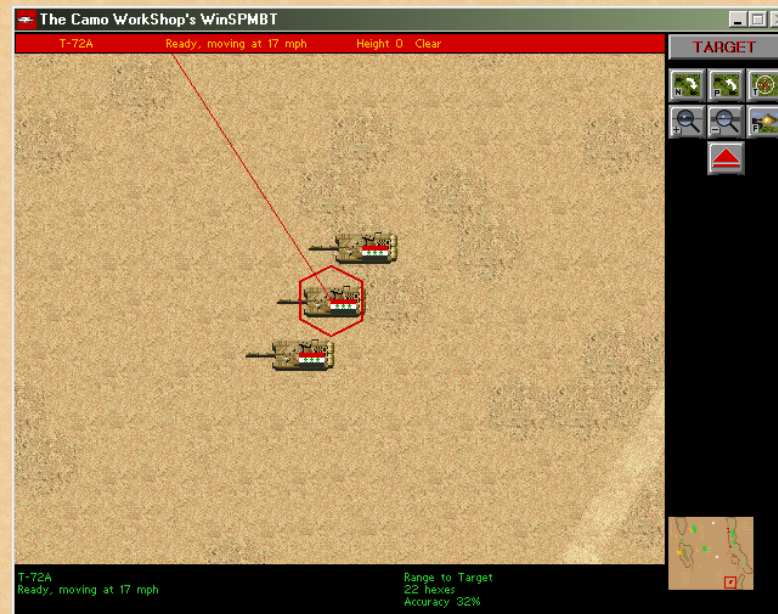
In general, you want to use your Abrams, M901s and Apaches to fire on enemy tanks and other armoured vehicles, and your Bradleys to target enemy infantry.

Targeting an enemy unit using the " W " HotKey

The " W " HotKey allows a player to specify one weapon only to fire at an enemy unit. Let's assume you spot an enemy rifle squad but do not want waste your main guns HEAT ammo firing at them and would rather just use your Machine Guns. Using the " W " key you can easily specify one of your other weapons to fire assuming they have the range to do so.

To correctly utilize this feature follow these steps

If you have not fired at this unit yet select the "T" key or hit the "Target" button and when the unit you wish to fire at is targeted press the "T" key a second time. Pressing the "T" key a second time locks in the target. . Now press the "W" key and you will see a sub menu appear on screen that looks this:
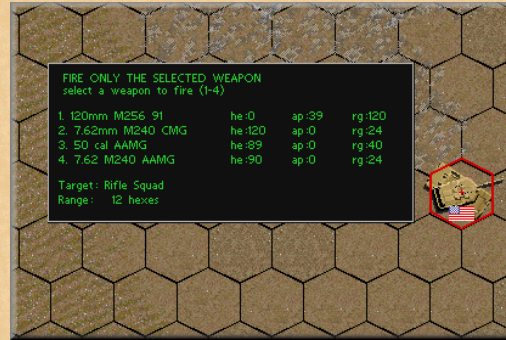
Let's assume you wish to fire only your .50 Cal AAMG at the infantry. Press 3 on your keyboard and the .50 cal AAMG only will fire.

If you have already fired at the unit you do not need to go through the targeting sequence a second time as that target has already been locked in so just press W and you will again be able to select a single weapon to fire.

The "W" key allows you to select just one weapon to fire but let's assume you want to fire ALL your MG's at that rifle squad but not your main armament. In this case **RIGHT CLICK** on your own unit, click on the main gun (it will turn blue when out of service) , press CONTINUE then target that rifle squad and when you press the fire button all the weapons you have that are in range EXCEPT the main armament (which you turned off) will fire at that rifle squad.

When you are done **DO NOT** forget to turn the main armament back on otherwise if the enemy moves a tank in range on the next turn your vehicle will not be able to opfire with it's main gun

Helicopter Altitude

Helicopters actually move in 3 dimensions and this is abstracted in SPMBT to 3 altitude levels: High, Low, and Landed. Your Apaches start in Low altitude. You can check this by selecting an Apache and looking at the unit information screen (by right-clicking on it). In the upper right of the screen you will see a toggle switch with the altitude selections. Changing altitude will use up movement points. For now, keep them in Low altitude as you move them. This represents "Nap of the Earth" movement, and ground obstructions will hide them from enemy view.

Setting up an Artillery Bombardment

After you have moved and fired all the units you intend to (remember you do not have to fire or move every unit), go to the bombard screen by first selecting your Artillery Observer unit, then select the Bombard button or hit the "B" key.

This time when the bombard screen open's, you will let it stay on the default BOMBARD view. You can see which units you have available for plotting bombardments as we covered before. Before doing anything else, click the button in the lower right that should say

Now look at the first unit in the right pane, an M106A2. There are 6 buttons to the right of the unit. The button that looks like an Eye will take you to the unit details screen where you can, for example, see how much ammunition it has. The second button is the High Explosive bombardment button. You select this button to set up a fire mission on the target hex. If this button is blank, it means the selected unit cannot fire an HE fire mission. To the right of the HE button is the smoke button. Most artillery other than aircraft is able to fire Smoke bombardments. The red circle with the cross-bar is the cancel button. Clicking this will cancel the fire mission for that unit. The Blue "plus" symbol is the Shift Fire button. This allows you to shift fire for the selected unit. The final button may have a "cluster" of 3 dots. If it does, that indicates this weapon can fire cluster munitions, especially lethal against vehicles and moving infantry.

Artillery bombardment screen details

Just like you assigned a target hex to the spotting aircraft, now select one or more hexes –preferably the "hot spot" hexes – and select one or more artillery units for each hex. Click the "HE" button for bombardment on that hex. The delay numbers work just like they did for the UAV, meaning the artillery barrage will take place at the beginning of the next turn – turn 3. If the number is some fraction of 1, for example 0.4, then only a portion of the artillery that *could* be fired, will be. The lower the number the better.

If you want to shift the spotting mission from the original hex, click the shift button, and you'll see a blue circle appear on the map showing a 2-hex radius. You can click within this circle on the map to shift the artillery fire with minimal delay – usually less than one turn.

If you have good targets for the cluster munitions, use them by clicking the "Cluster" button instead of the "HE" button. Ammo for this type will be limited, so use it wisely.

Hint: Always first click on the unit name before selecting one of the other buttons.

Although it is not relevant to this scenario, you can also assign bombardments during pre-game setup if playing a battle-generated game or a campaign game. Additional hint - Once an artillery (not air) mission has completed, the firing unit will remember the last target hex it fired upon, provided that it has not moved or fired. Should you want to repeat that mission, just press the HE (or smoke etc) button, and the mission is plotted with minimal delay on that last spot. You can of course, now adjust from that point for additional delay cost, but a "repeat" into the same general area as before, even with some adjustment, is generally *much* faster than plotting a completely new fire mission.

Also keep an eye out for enemy AA units. There are two with vision 40 that may target your Apaches before you spot them. Make them a high priority, so your Apaches can have virtual freedom of movement over the battlefield. If you are careless, the Iraqi AA has the capability of shooting them down.

You are now done, so click the End Turn button.

During the Iraqi turn, Iraqi units may fire on any of your units they can see. Or, your units might use Opportunity (OP) Fire, and shoot at any Iraqi units that they have spotted. OP fire only takes place if an enemy unit moves OR shoots while in LOS of one of your units. OP fire does not *always* occur though, because it is effected by the suppression of your unit, whether it has any shots left, whether it has the right kind of ammo, and other factors. Hopefully, at the end of the Iraqi turn you have not incurred any more casualties.

In the battle, because none of the Iraqi tanks have vision of 40, they may never even see you to fire on you.

Turn 3

Now your forces are really started to taste combat. In the south, several infantry units should be visible. Use your Bradleys to suppress these units. B platoon should pass through the objective area around 21/9 on it's way to the enemy ridgeline. D platoon should do the same in objective area 29/25. In both cases, watch out for "Soft Sand" terrain type that may immobilize your vehicles. As your units move through each hex, it will change ownership to a US flag. Hold you mouse over each flag, and note each flag's victory point value in the upper right status screen.

Capturing Objectives

Continue as before, using one platoon in overwatch, moving the others. Try to destroy every spotted Iraqi tank by the end of your turn. Your tank machineguns can also be used on infantry after they use all their AP shots that turn.

Click the End Turn button to end your turn. During the Iraqi movement phase your tanks will probably fire on several moving enemy squads and perhaps tanks. Pay attention to where any fire is coming from. Unspotted enemy units are good potential targets for your artillery fire.

End Turn 3 Situation, Iraqi side

Enemy Unit Status.

If you Right-click while the mouse is over an enemy unit, you will see the enemy unit details. If you are not already familiar with a specific enemy unit type, it is always a good idea to check the details. You can see what weapons the unit has, how many men, etc. If it is a tank or other vehicle, it will also show you what it's armour values are. You do not see all the information you do for your own units.

Turns 4-7

During the next few turns, continue your careful advance to the ridgeline. Your units may begin to take some fire from the enemy. When your units are being shot at, they will tend to gain suppression. Remember that the suppression

value is listed in bottom status screen. You can see this effect by checking the suppression before you fire on an enemy unit, and assuming you get some enemy return fire, it will usually increase. Since lower numbers are better, click the Rally button if your unit has gained several points of suppression. Reducing suppression will increase it's chance to hit. Presence of wrecks, smoke, and friendly casualties will also tend to cause suppression.

The Iraqis have several types of AFVs in this battle. One of the most formidable is the T-72. Give shooting these a priority.

Review your artillery status at the end of each turn before clicking the "End Turn" button. Make sure that artillery is not drifting over your own units, and readjust if necessary. Remember that artillery barrages may drift, so do not place them too close to your own units.

Typical Turn 6 Situation. (Both Abrams platoons on the move)

Turn 8 to End Game

If you've had even a little luck, there should be large numbers of burning enemy tanks, and few or none of yours. Occupy the last enemy objectives. Use your Apaches aggressively to hunt down enemy infantry. If they run out of ammunition, you can resupply them from the supply vehicles that arrived as reinforcements.

Ammo Resupply

To resupply a unit that has run out of ammunition, move the unit next to the ammo carrier. If it is a helicopter, you must land it. Let the unit sit next to the ammo supply carrier for an entire turn. At the end of each turn, select the unit, right-click to get the unit information screen, and check the ammo supply. Resupply works based on a number of variables including suppression, and number of units resupplying at once. For a full description, read about ammo resupply **HERE**

Battle Results Screen

When you finish the last turn (or possibly before, if you have already captured the objective hexes and destroyed the enemy HQ unit, and destroyed or routed 5-% or more of the enemy units) you will be presented with the Results screen below. This player has achieved a Decisive Victory based on the total Points Score. Victory criteria are based completely on Victory hexes held at the end of the game, **and** the number of friendly and enemy units destroyed. A greater-than **8:1** margin is a "Decisive" victory. Between **8:1** and **2:1** is a "Marginal" Victory and if your result was between **2:1** and **1:2**, the result will be a draw. Here, the score of 8765 to 570 is a 15:1 ratio and is most definitely a "decisive victory". These are, however, artifical lines. Many scenarios are simply victories or defeats where if you have more points at the end than the AI... "You win".

The buttons at the bottom of the screen allow you to see the situation at the end of the game. This is the FIRST and ONLY time you can view the enemy unit side.

Battle Result Screen

```
                              B A T T L E   R E P O R T
                         U.S.Army              Iraq
                         Player 1 Losses       Player 2 Losses
                         Battle : total        Battle : total
Men                              8  :     8        174  :    174
Artillery                        0  :     0          0  :      0
Soft Vehicles                    0  :     0          2  :      2
APCs                             2  :     2          2  :      2
AFVs                             0  :     0         43  :     43
Air Transports/Helos             0  :     0          0  :      0
Aircraft                         0  :     0          0  :      0



Standard score:                      8765                   570

Artillery Overload points:              0                     0
Timed Objective points:                 0                     0

TOTAL SCORE                          8765                   570
```

| Continue | Player 1 | Player 2 | View Map |

In this case, the result of "Decisive Victory" is confirmed by the Message Screen where you are told how you performed in this battle. Note: These messages are generic for each battle type but can be customised in a User-Designed Campaign.

Message Screen


```
DECISIVE VICTORY: You have led your forces to the masterful completion of your
designated mission. Enemy plans have suffered a severe setback in your sector of
operations. Congratulations!
```

| Go On |

Conclusion

We hope one lesson you learned from this simple scenario is the importance of combined arms and sound tactics. Had you charged your tanks forward without supporting arms, the result might have been very different. In fact, you might want to try doing just that and see what happens. Throwing just tanks, or just infantry, at an opponent will *usually* meet with defeat. You need to intelligently combine your armour, infantry, artillery, and airpower to overcome the enemy.

Click **HERE** for more hints on tactics in the GG.

Good hunting!

Main Game Screen

SCENARIO LIST

```
000   0 WinSPMBT Tutorial Scenario
001   1 Obong-Ni Ridge 8/50
002   2 Abandoning Seoul 1/51
003   3 Road to el-Arish 11/56
004   4 Egyptian Armor -- Six Day War
005   5 A/69 Armor vs. NVA 4/68
006   6 Lam Son 719 2/71
007   7 Egypt Crosses the Canal 10/73
008   8 The Syrian Front 10/73
009   9 Rhodesian SAS -- Op Dingo 11/77
010  10 Raid on Cassinga 5/78
011  11 Raid on Chetequera 5/78
012  12 Operation Snoopy 9/78
013  13 Operation Protea 8/81
014  14 China punishes Vietnam 3/79
015  15 Panjishir Valley 5/82
016  16 Bekaa Valley 6/82
017  17 South of Beirut 8/82
018  18 Humanwave 2/83
019  19 Contra Raid 4/85
020  20 Iranian Amphibious Assault 2/86
021  21 Gulf '91, G-4: Feint Attack
022  22 Gulf '91, Day 1: French attack
023  23 Gulf '91, Day 2: Desert Rats
024  24 Gulf '91, Day 3: 73 Easting
```

```
----------------------------
WinSPMBT Tutorial Scenario
----------------------------

This is a companion scenario to the
introductory Tutorial. It introduces game
concepts and familiarizes novice players with
the game interface.

We recommend you print the introductory
Tutorial first, so you can follow it's
directions as you play.

Tactical Situation:
February 1991
U.S. vs Iraq
Your orders are to advance and capture the
ridgeline approximately 2 km (40 hexes)
forward of your current position. Iraqi
forces in the area include armor and infantry.
```

NEXT   GOTO

SAVED GAMES | SCENARIOS | CAMPAIGNS | HELP
BATTLE | PREFERENCES | ENCYCLOPAEDIA | EDITOR
START | MAP EDITOR | EXIT

WinSPMBT v11.0-CD

Saved Games including **PBEM Saved Games** and **Tournament Save Games**	Press this button to get a list of your saved games for each type. Pressing the button will cycle through all three save menu options
Scenarios	Press to see the scenario list (default view on start)
Campaigns	This button will take you to the campaigns main screen
Battle	Build and play a one off battle to your specifications
Editor	This Button will take you to the scenario editor
Preferences	This takes you to the preferences screen where you can adjust game parameters
Encyclopaedia	Browse the equipment encyclopaedia
Help	Provides some basic in-game help
Exit	Terminates WinSPMBT
Start	Start playing the selected Scenario, saved game etc.

Playing a one off battle

Select the 2 nationalities involved by clicking on the appropriate flag on either side of the dial (the green indicator will light to indicate which is current) and then click on the required nation's flag from the group on the top half of the screen.

Battle date, use to set the year and month of the battle. Note that some nation's flags will appear and disappear as time changes, or will change due to political circumstances (Soviet flag to Russian national flag for example). The game restricts the time frame to the lesser period of the 2 nationalities selected, so if you simply want to cycle through from 1946 to 2025, it is best to set **both** the initial countries to 2 available right from 1946 to 2025, say UK and USSR or USA and USSR, **then** set the 2 'real' players *after* setting the battle date.

Player 1 goes first, and is normally the human player when playing against the computer. Player is either human or computer (it is possible to play computer AI versus computer AI, if so, use the **space bar** to break into such a game at the next move end). A human versus human game assumes a Play By EMAIL (PBEM) game, but it is perfectly possible to play on the same PC versus a friend by this method (Hot Seat play). See PBEM games section. NB: A computer versus computer game will pit the AI to play both sides in a sort of "demonstration" game mode. If you start such an AI v AI game, simply press the space bar when you have seen enough, should you wish to terminate the game before the end, or to intervene. The game will halt at the next player break, then you can then choose to exit or break into the game and intervene as you like.

The **purchase** button determines whether the computer selects the force, or the human player does. Usually left at human for human players. You could of course set this to human for your AI opponent, should you wish to set this yourself for some reason (at a loss of any surprise element).

Deploy, selects whether the computer or the human deploys your forces at game start, again it is recommended that the human deploys his own troops. Note that if you take computer deployment, you may find troops deployed outside the legal areas for a human deploy. The auto deploy uses the AI deploy, and it is allowed this. Note that in a human plays human game (PBEM or on the same PC), setting human player 2 as 'computer purchase' does **not** work, player 2 will always be asked to manually buy his force. You can select human deploy here for an AI player, if perhaps you want to set up a specific situation (for testing purposes perhaps), again with a loss of any surprise element.

Water Conditions, this selector becomes visible if you select an **assault** type battle, and allows you to select the water conditions including river width where 0 is a sort of part dried up river bed.

The **Battle Arrow**. Click on the increments along the bottom to change the **battle type**. The default is the meeting engagement.

Battle Type	Description
Meeting Engagement	Both sides advance and try to take the various victory hexes on the map, dealing out casualties to the enemy whilst trying to reduce their own. Both sides get the same points to buy troops. Victory points per hex tend to be low, so points scored for destruction of units tends to be as equally important as taking objective hexes. 3 objectives deep in each sides own area are pointed relatively high, to reward a deep thrust into enemy territory if the shotgun type of victory hex assignment is used. NB- Victory hexes can overlap thus adding their value, there may not always be 21 visible.
Advance vs. Delay	One side (depending on the direction of the battle arrow) is making a hasty attack against an enemy who is in a defensive posture, but has not yet had time to dig in and prepare static field defences.

The attacker gets more points than the delaying player, but the victory hexes are in the defenders part of the map, and the defender gets a larger area to deploy inside.

Victory hexes are more valuable than in the meeting engagement, so the attacker should focus on taking these whilst minimising his own casualties, destruction of enemy troops being regarded as a bonus. The delaying player wants to inflict maximum casualties on the attacker while remaining in possession of as many victory hexes as possible at game end, without losing too many troops in the process. |
| **Assault vs. Defend** | The attacker is making a formal assault on a prepared enemy position, the defender gets less points than in the delay, but is allowed to buy fortifications and field defences, mines and dragons teeth etc. All the defenders troops are dug in as well.

Objectives are far more valuable than in the advance/delay battle.

There are several assault sub-variations as set out below. |

-Plain assault	This is played out on a normal battlefield. No special buttons have been pressed, but the **water conditions** setting for a random wide river can be used, this does NOT generate a river crossing (so no rafts are issued for example!), and is best left for a human versus human game only. The default assault battle type.
-River crossing assault	Use the **water conditions** button to select 'Wide river, North to South' and the assault becomes a river crossing. A wide river extends down the map centre, and any bridges are usually blown. The attacker needs to cross the river to get to the objective, and the defender gets to sink lots of rubber rafts. Usually a turkey shoot when the human plays the AI, it can be moderately difficult for a human playing against the AI, and a tough game to play human versus human. All attacker infantry squads carry a rubber raft, but you will as the attacker require to buy barge carriers (carry a barge each) to get vehicles across. Helicopters very useful to the attacker, and possibly to a defender who has a long front to cover (e.g. on a wider map). Note: there is a limit to the number of attacker units at about 400. This is intended to leave a "pool" of free units to generate rafts from. If the attacker has 400 units, he can only have a maximum of 100 infantry in the water in rafts (minus any deployed barges) at any one time. For example, if he had only 300, then he could have 200 active rafts. In WinSPMBT many APC's can swim, meaning the river is less of an obstacle than in WinSPWW2, but your AFV's will still need to be barged across so you will need to buy **BARGE CARRIERS** to do so. Barge Carriers already carry a barge when you buy them so you **do not** need to buy separate barges as there is no way to get them to the river without the Barge carriers. The only time you would buy a barge without the carrier vehicle is in Beach Assaults where you always start on the water
-Beach assault	Use the **water conditions** button to select 'Beach'. Half the map (the attacker's half!) will be ocean, and the attackers units will be deployed in amphibious transport. The attacker gets naval artillery support, not field artillery in this one. Note that there is a limit to the attacker's total number of units, as the transports require to be allocated from the total number of units available to him, about 350 units maximum. The attacker has to cross the water in transport and then fight over the beach to the objectives, and the defenders task naturally enough is to stop this process as bloodily as he can. The defender should try to sink as many incoming transports while still in the water as he can, using say pillboxes with large guns, or driving tanks to the water edge. He may also lay mines and so on to make the attacker's task more interesting. Similar to the water crossing in difficulty, the attacker should use smoke to mask his approach, the defender should plan to paste the unloading area of the beach with artillery. Again, against the AI, usually a shooting gallery for a human player, moderate difficulty for a human versus the AI, and perhaps quite challenging as a human versus human game. Helicopters very useful to the attacker. Once Thermal Imaging sights become common, this will likely be a 'turkey shoot' for the defender unless the area overlooking the beach is very highly saturated with high explosives!. Consider a narrow thrust in those conditions rather than a broad front approach. Find the weak spot and exploit it.

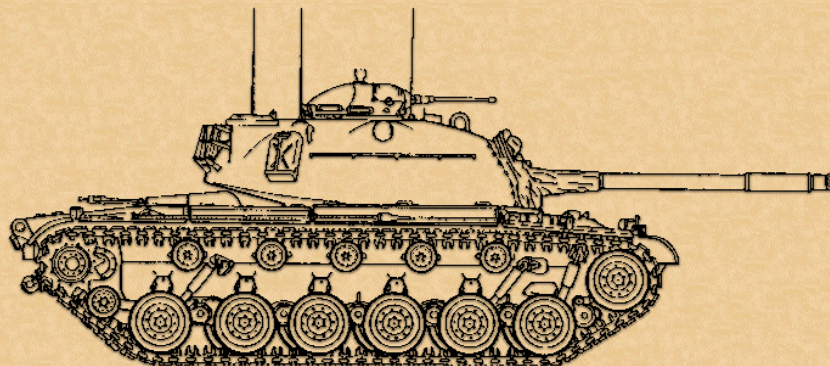|	
Visibility	This button selects the maximum visibility in hexes from 1 to 99. (In this game, visibility covers both night and fog, rain etc.). **NOTE**: Before 1970 low visibility (less than 20 hexes or so) means that air strikes are unlikely to be allocated, *even if* set to a positive number in the **preferences** screen, as visibility is too low at the airfields for flying that day. From 1970-1980 there may be times when you cannot get air support and from 1980 on this restriction is ignored. **HOWEVER** it is completely up to the player now to select air units to match the visibility conditions. If you choose an air asset with poor vision don't expect it to be very useful in a poor visibility situation. On the other hand if you are hunting enemy tanks with Apache attack Helicopters with aTI/GSR rating of 60 in a game with 5 visibility you will appreciate this change
Map	Leave at *random* for a computer generated map, or *load* to use a map previously created in the game scenario editor and saved in a map save file (ensure that the map will be correct for the season etc. of the generated battle as this information (season) is **not** part of the map data, but comes from the scenario data, a 'white snow' map loaded into summer just means that you have white ordinary summer grass hexes, barring any special tiles like deep snow).
Map Size	Use to select a map size from the list for the random map generator. A loaded map will override the settings here. There are now 180 map sizes to choose from ranging from 20x20 hexes up to 200x160 hexes
Preferences	See the preferences section, but there you would set up things like aircraft availability, buy points etc. Understanding the game preferences is most helpful in generating battles.
Continue	Go on and set up the battle with the selected parameters.
Exit	Abandon this process, and go back to the game main screen

Purchase Screen

(Note that if you selected the computer to buy your units you will skip the purchase screens and go straight to deployment)

POINTS	The important bit, how much you have left to buy toys with. Player No 2's points depend on what player No 1 spent, and are multiplied or reduced depending on the battle type, if Player 1 is assaulting and spent 2000 points, then Player 2 will have rather less than 2000 buy points when it is his turn to purchase. Note, even if player 1 selected max points, but only spent 2000 of that, then that 2000 will be the basis of player two's point allocation and not the max points. Exception, if player 2's points are not set to XXX in the preferences screen he will get the value set for player 2 in the preferences screen regardless of player 1's buy.
Mines/DT's/Trenches/BW X5	This button will **only** appear when you are the defender in an Assault / defend game. Every time it is pressed you will reserved 5 points which can be redeemed as one of the four types during the deployment phase . Press 'X' during deployment to access that screen or press the mines button in the deployment menu.
View map	Allows you to look at the map you are going to play over, and it is usually a good idea to look at the ground first before buying your troops. (A whole bucket load of expensive long range tank types who really want wide open fields of fire may be somewhat embarrassed if the battlefield is closed woodland and/or it is night time!). Map side is determined by the 2 sides involved. You will usually know your side by any victory hexes shown in your colours, or the oppositions. Game play is always left to right.
Encyclopaedia	Look at the stats for the game units, useful info when buying things.
Mission	Tells you what you are going to do, and against whom just in case you forgot, or are player 2 in a PBEM game set up by somebody else.
Max Points	Make the maximum points available to buy troops, if you want this use it **before** buying anything as it goes away immediately something is purchased. Only available to player 1.(Remember, the player 2 opponents buy is based on what player 1 actually spends, not what was initially allocated)
Base Experience	This tells you what your army's *average* experience level is, 70 is the basic level, more experienced troops will cost more and be more effective, less cost less, but perform less well. Set in Preferences, either user selected or based on a year by year national troop quality.
Force value	The **true** cost of your troops bought so far (**not** the actual points spent), as there is variance around the selected average base level when a formation is created (actually bought), some of the bought troops will be much better than Base Experience and some rather less in the formations you have purchased. This indicates the true points value of your men, not the basic 'book' value you paid in points.
Unit List	The list of things you have bought so far, this grows as you buy things. To delete something you have bought, click on it in the Unit List and it goes away. **Note**, it deletes by *platoon*, and the next unit bought will use that platoon slot. Deleting a platoon from under a company type HQ makes a 'short' company with less platoons under command. Any individually bought platoons go under the A0 unit's direct command (A Company, or the HQ Company in organisational terms). All company HQ are under A0, and their subordinates are under them for rallying purposes. In the deployment menu in turn 0 (set up) you can now *cross attach* platoons under different company HQ. Note that the overall HQ unit (A0) cannot be deleted, this is *you*!
COST	At the top of the Unit List, How many points you have spent on buying the listed troops. This will not necessarily agree with Force Value! You pay 'book' price based on Base Experience (and any unit quality modifiers), when the bought formation is created, some of the troops will be better experience, some lesser around the mean of the Base Experience.
	View a list of the tank type units you can purchase, **NOTE**: some armies might have say soft skin AT units here, as they are considered part of the tank forces (like WW2 USA

|	
ARMOUR	towed Tank Destroyers). Some may have armoured SP guns and Flak units here, it depends on the OB designer.
ARTILLERY	View a list of your artillery types, Off and on map artillery, forward observer teams, AAA, both towed and SPA, some SP AT units will be found here, AT guns and Naval Artillery etc.
INFANTRY	See what you have available in the grunt category. Some light infantry support weapons types may be available also in this section.
MISC	Oddments which do not fit elsewhere, APCs, trucks, some scouts, barge carriers, and most importantly, **aircraft** are found here when made available, except for integrated air transport + passenger formations, which appear on the Infantry page..
ALLIES	This takes you to a screen where you can change the troops nationality that you are buying to any other allowed nation at that point in time. From that point on, the troop choice is from that list, as and until you reset it back to your preferred main nationality. **SET ALLIED** is the default, the troops bought will appear with their own national ID flag, and their leaders will be taken from that nation's leader table, not those of your main army. You can elect to **SET CAPTURED** to use those troops as part of your force, but as captured items. They will display the same nationality flag as your main army, and their leaders and crews will be taken from your main army types and troop quality ratings, e.g. if you were German, and changed to Soviet, and bought some T34s after pressing **SET CAPTURED**, you will have T34 tanks, but with German ID tags crewed by Gefreiter Schmidt, rather than with Russian flags and crewed by Sterleit Romanov. As well as 'captured from the enemy', this can be useful for utilising Allied kit not in your OB but with your own nation's crew (and ID flag), rather than the provider nation's. There is no restriction as to whom you can have as allies, so use this facility sensibly :-). In order to return to your main army, say after a purchase of some captures or allies, just go back to the allies screen, press the flag of your main army, and select **SET ALLIED**.
DONE	Finished all purchases, go on to the next stage and **deploy**.
Units	Totals how many playing pieces you have bought.
MinesDT's/Trenches/BW	If you are defending, this number will be the total number of defensive features you have bought to build obstacles with later on in the deployment phase.
Remaining Flights	If you are allocated air support a total of the number of air formations (not individual aircraft!) you have available. Strike planes (Attack air, attack helo, spotter, bomber and SEAD plane) formations reduce the strike number by 1 per formation bought, number of planes in the formation is irrelevant. Strike formations are therefore limited usually to elements of 2 planes. Transport planes and helos do not decrement the strike points, but buy your attack air first (or ensure at least 1 strike point is remaining!) as once strike points is reduced to zero, transport plane formations are removed from the listing. Deleting a strike flight adds back the 1 air strike point it deducted.
Formations	The total number of formations (platoons) bought. Note that a company HQ is a formation, a company of HQ platoon and 4 platoons is 5 formations in total. Formation total is limited, so an army of 1 man sniper formations will tend to exhaust the maximum formation count long before it runs out of buy points.
Formation List	On the left of the screen is a list of formations of the type selected, Use the next and previous buttons if more than a page full of these are available. Pressing on one of these buttons brings up the Formation Purchase Screen. The current page and total number of pages is listed below the active button set.
EXIT	Abandon purchases, and go back to game main screen.

View Map Screen

The View map screen allows players to have a look around at the map before playing but also includes a number of features that allow players to alter their battle conditions before starting play. The 15 buttons on this screen have the following functions (described from top left to bottom right)

- Redraw the Map for the Current Opponents --use different battle location, and map, for these opponents and date
- Redraw Map for the Current Battle Location --use same battle location but a different version of that map
- Change Map ID --specifically change battle location to another one by indicating batloc ID number. These numbers can be found in the in-game Help file.
- Redraw V-Hexes without changing terrain -- This resorts the V hexes.
- Access the help screen
- Change Game Length --allows you to change the game length from 0 - 90 turns.
- Zoom in
- Zoom out
- EXIT the View Map screen
- Edit the Victory Objectives. --You can change the position of the Victory hexes with this function and place them anywhere you like.
- Make Victory hexes visible/invisible -- used to inspect the area under the V-Hexes
- Change Game Visibility NEW! for WinSPMBTv1.02-- Allows you to change the game visibility from 0 - 90 hexes
- Save the map in the custom map folder
- Access the random map generator. Click **HERE** for detailed info on the Map Generator.
- Load a custom map from the custom map folder

Formation Purchase Screen
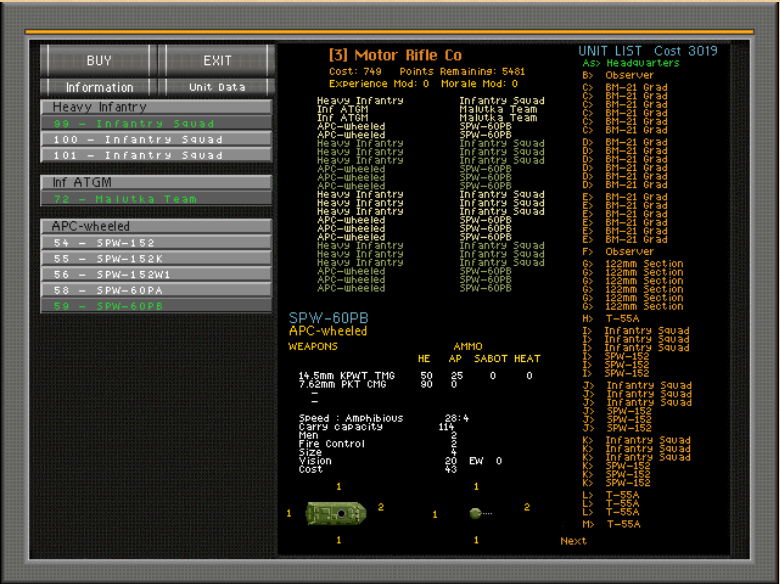
Select the available units from the list on the left, unit data will be shown **only** if there is room (some larger companies need much more room in the central column to list their items). The formation's title is shown at the top centre, and its cost in buy points, and how many pennies you have left, if it costs more than the remainder, then only as much as can be bought will be added to the unit list.

Note the 2 fields, **Morale mod** and **Experience mod**. Some formations (like guards units) will have positive values in these fields, better morale than average or better general experience, or both. These are **elite** formations, and naturally enough, will cost you more than the same equipment if bought for a line formation. Some formations will have **negative** values in these fields, such as reserve units. These will be poorer quality than average, and so will cost you less money. These numbers are applied as variations on the current army Base Experience.

Units actually purchased will vary both above and below this benchmark figure (see Force value above). So an army with BE of 70, and an elite unit of +10 experience will be about 80 experience level.

Aircraft when displayed may have a strafe number (S:N), this is the number of gun passes, a variable introduced for WW2 to allow aircraft with rifle calibre and .50 calibre MG to strafe, SP games only consider 20mm and above cannon rounds remaining for strafing, this overrides it for planes with small MG. Not required for planes with 20mm plus cannon, *but* some OOB designers may have entered the variable.

BUY	Buys the selected formation. Repeated presses of this key will buy duplicates.
EXIT	Returns you to the purchase screen.
Information	If present, additional information provided by the OB designer can be referenced.

Important note.

The game knows about 2 types of formation, companies and platoons. A company is a formation that can contain platoon type formations under its command, whereas a platoon is 'flat' and cannot have sub formations. Some OOB designers may have made formations they have *titled* 'platoon', but used a *company* type formation in order to have this allowed sub units which operate at distances from the HQ element, Recce units perhaps. Off map artillery is an example of the other way round, often a 'battalion' of artillery is 3 batteries in a platoon type formation. See the cross attachment section for more details.


Deployment Main Menu

Once you press done, you will see this screen (unless you chose computer deploy in the main battle generator screen!).

Your nation is displayed (in case you save and come back later on) at the top of the screen.

Auto deploy	The computer drops your pieces on the board. **Not** available in a **Scripted Campaign**, as the start line for the human player is variable at the designer's whim in these.
Human deploy	This is the recommended deployment option for human players!, takes you to the pre game deployment screen.
Quit deploy	Hit this when finished deploying (the pre game deploy process comes back to this screen once you are done deploying). Continue on to the actual battle.
Save game	Save the game at this (deployment) point, this is usually a very good idea in case of mistakes, in fact it is a good idea to save the game before you deploy anything at all, just in case you make a complete hash of the set up, and need to start over. Also save (just after completing deployment) to a separate save, so you can then come back and replay from the start if you desire.
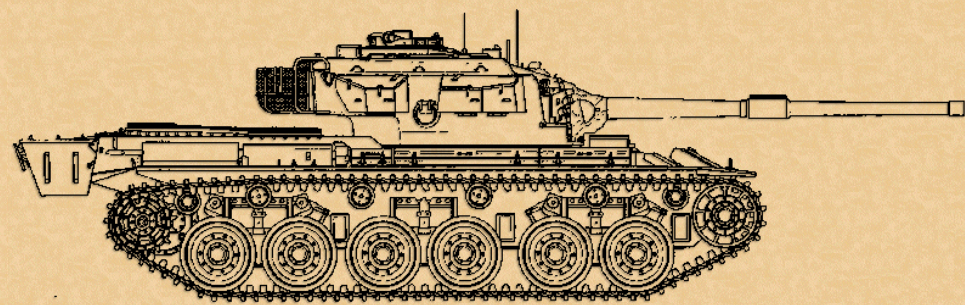
Setting up and deploying your units

In turn 0 of a game (but not a scenario, where the scenario designer has deployed your troops for you as well as planning any pre game bombardment for you) you deploy the forces allocated to you inside your deployment area, and plan any pre game bombardment missions, as well as plotting your artillery quick reaction fire hexes or 'gold spots'.

Your forces will be laid out in a line along your side of the map. Pick up and place your troops as desired, however, note that paratroop transport planes get stripped off the map immediately at the end of the deployment turn, so be sure you load those paratroops who will be jumping, or they will just be walking to battle!.

You may deploy from your map edge to the deployment line of darkened hexes.

Please note

Enter the bombardment screen to place artillery quick reaction fire points, you have up to 10 of these. Select a deployed quick reaction fire point a second time to delete it and then replace elsewhere if you change your mind.

Any artillery you plot here will drop in the initial turn, just after deployment (end of your turn 1 for some air missions, such as spotter planes or para drops). Note the delay key available for use when plotting pre game bombardment, you can delay the appearance of missions after the initial opportunity if desired, say if you want your para drop to arrive around turn 10. As many human players get into the habit of lining the roads in their deployment area with convoys of vehicles, in PBEM it is a good idea to liberally dose such obvious assembly areas with a deluge of artillery. The AI now also knows about this, so those of you new to MBT from SP2 where the AI never fired a pre game bombardment on assembly areas - you were warned!

Plotting your level bomber and para or glider missions in this phase is a good idea as these can have long delays if called for in an impromptu manner. NB - if plotting a para assault, leave your HQ (or an artillery spotter) on the ground if you mount all troops into gliders or transports. Use him to plot the air drop zones and only then, mount him into his plane.

If you are the defender, use the mines key to lay any mines, dragons teeth and fire trenches you desire using the fortification points you spent in the purchase phase now, or they will be wasted!. Use the X key to show current dug in states, troops do not get to dig in some places, like marshland hexes, and moving a unit may leave a 'phantom' fortification behind, on deployment end the game will automatically 'press' this for you in any case, marrying the dug in graphics with units. Remember that infantry who enter a slit trench hex get the benefit, vehicles which move from their initial dug in place can reoccupy these once they wait one full turn as well, they can get cover if driven into a fire trench, at the risk of becoming stuck in that hex.

Do any cross attaching of platoons in this phase, or reassignment of individual units to other platoons, as **you cannot change the command structure after the deployment turn.**

Note that you can now unload barges and amphibious transports into the water in the deployment phase of an amphibious assault mission. This allows you to move your troops into the desired carriers pre-game, should you prefer to do this (cross-decking, in naval parlance). Remember to ensure that all are actually in a boat before you finish deployment, troops left in the ocean will drown!

Also note the set range button, this can be useful in the deployment phase, especially if you are the second player and do not want your ambushes to give away their positions if defending or delaying.

Retreat / Rally Hex

New for WinSPMBTv3. These allow you to set a point for your troops to retreat towards. These can be set up for individual platoons or companies or the entire force. This new feature is accessed from the deploy screen or the main screen during game play and can be changed at any time

DEPLOY

After pressing the "Rally Hex" button you will be brought to a sub-screen with the following buttons

The four rows of buttons perform the following functions

- Zoom in
- Zoom out
- Find the Retreat/Rally hex for the current formation

- Find the current formations HQ unit
- Find the Previous formations HQ unit

- Find the Next formations HQ unit

- Clear this formations Retreat/Rally hex
- Apply this Retreat/Rally hex to the entire Company
- Apply this Retreat/Rally hex to the entire Force

- Clear dark hexes
- Show all hexes visible to the Unit in all directions
- Exit this subcreen

When you enter this screen you will be placing the retreat/ rally hex for the HQ unit of whatever formation you were last working with in the main screen. You the Retreat/Rally hex simply by clicking on the map. You will automatically be applying that Retreat/Rally hex to that platoon. If you wish to apply this Retreat/Rally hex to the entire company or your whole force click on the appropriate button. If you want to place a Retreat/Rally hex for the next formation press the Next formation button. If you wish to select an entirely new formation simply press the red up arrow exit button and you will be taken to the main battle screen. Find the new formation you wish to set a Retreat/Rally hex for then press the "Rally Hex" button again an you will automatically be brought to that platoons leader. Click on the map where you want your Retreat/Rally hex for that unit to be then move on to the next formation.

These Retreat/Rally hexes can be changed anytime during the game and can be placed anywhere on the map. Please note: These points do not increase the rate at which units rally. The only provide a point which you can have your units retreat towards once they have entered a retreat or rout condition. Units that are in "retreat" mode may hang around that point for a turn or two.Units in route mode will not stop at the points. If they regain normal status they can be brought back into the game. If they still retain their retreat or rout status **they will then begin moving towards YOUR MAP EDGE.** Please also note that these retreat hexes **DO NOT** affect the direction units retreat when fired upon during combat. In those cases the units will initially still retreat in the tradition "east" or "west" direction the game has always used. These new points only affect the direction of retreat for units that would normally, in the old system, be retreating or routing towards your map edge.

These points were added primarily to allow scenario designer better control of the general retreat direction of troops and vehicles in scenarios that may not use the regular "East - West" map orientation but they can also be used in regular games or campaigns as well

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Range Set Screen

(HotKey: **"Y"**)

You can now set the range from this screen for both individual units and whole platoons. The default is **UNITS** so if all you want to set is the range of the unit you clicked on, press either the 0-9 buttons on your screen or the 0-9 buttons on your numeric keyboard. If you wish to set this range for the entire platoon first press the **UNITS** button and it when it changes to **FORM** enter you new range and all the units in that platoon will be set to your new firing range. You can quickly set the range to 1/4. 1/2, 3/4 or maximum range on the screen or by pressing the **RANGE** button on the screen you will see a blue bar appear at the bottom of the screen and you can enter any range you like as in the example below

You can now deploy units stacked in the same hex in the deploy phase, should you so desire. Select the unit to place, then shift-click the mouse pointer onto the hex containing another unit in which you wish to stack with.

Special note about Scripted Campaigns and deployment, remember that a unit moved to the far right or far left rows will **exit the map**! Scripted Campaign maps are generated from *scenario* maps, which allow you to set up in the 2 grey exit rows (free deployment), **remember** to move any troops you deploy there into the main map area on turn 1 or they will depart the battle!. (You can do this with on map forces in order to save them in really bad situations as well)

We have made the game preferences button available in the deployment phase as this can be handy sometimes.

The **Help** (? key HotKey) will list the deployment basic help, including HotKeys.

DEPLOYMENT HotKeyS

HotKeys:	
A	Deploy all of the current formation close by the current unit.
B	Go to the bombardment menu screen to plot artillery.
C	Clear dark hexes and smoke (e.g. those created by a V action)
D	Load all loadable units into the NEAREST available transport (not necessarily units own transport), or unload all currently loaded units from transports (prompt).
E	Entrench your units (Assault or Defence only, less types entrench for assaulter). NB, you cannot entrench in water type hexes, e.g. marshes.
F	Find (go to) the current unit if on the map.
G	Go to the next formation's HQ unit, i.e. cycle through formations.
H	Go to the Unit Status list menu.
J	Rejoins gun or vehicle crews unloaded from transport aircraft during deployment
L	Load/Unload unit onto/from a transport. Must be in the same hex to load unless beside a barge.
M	Toggle Map Text on or off (map text is only found on scenario maps or loaded maps)
N	Select the next unit. In regular games, only on-map units - in the scenario editor, off map units are allowed to be selected, so you may edit their characteristics
P	Select the previous unit, opposite to N key. NB - N and P keys do not move the map to centre on the unit - use F to centre the map if the unit is off the current map section.
Q	Quit deploying.
S	Save the game to disk.
V	Show the hexes visible to the current unit in the facing it is currently pointing at, turn the unit by right clicking on a *clear* hex, then use this key again, to look all round, if desired.
W	Assign individual unit to another formation. Note that support units can be assigned only to support formations, and campaign core units can only be assigned to other core formations. Support units cannot be assigned to core formations and vice versa. You cannot assign away the **commander** of a company or platoon!.
X	Allows the defender (in an assault/defence game) to deploy mines and dragons teeth etc., provided that he spent build points on mines in the purchase menu.
Y	Set the maximum fire range for the unit. Useful mainly for defenders who do not wish their troops to fire at long ranges and hence give away their positions too soon.
?	Call up help screen.
- and +	Unzoom or zoom the map.
. (period)	Set game length in turns, (Player No 1 in a PBEM game only) from the **VIEW MAP** screen only - NB do NOT go over 80, as the code uses high 90's numbers to indicate end-of-game internally. 80+ any possible game extensions in length will work OK, but generally recommended to keep under about 70 turns
Space Bar	Shows the current unit's information screen. (Adjust aircraft height here, rename leaders etc.).
\	Toggle the victory hex display on or off (e.g. to see what the terrain in the hex under the flag looks like)
0 (Zero)	Accesses the Opfire filtering screen for holders of the extended CD version. Click **HERE** for more details
^	Rally Point
5	Shows unit detail (cd version only)
}	Unit view of all around LOS hexes
. (period)	Turns map hex grid on and off in the deployment and main game screens
M	Toggle Map Text on or off (map text is only found on scenario maps or loaded maps)
N	Select the next unit. In regular games, only on-map units - in the scenario editor, off map units are allowed to be selected, so you may edit their characteristics
P	Select the previous unit, opposite to N key. NB - N and P keys do not move the map to centre on the unit - use F to centre the map if the unit is off the current map section.
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V	Show the hexes visible to the current unit in the facing it is currently pointing at, turn the unit by right clicking on a *clear* hex, then use this key again, to look all round, if desired.
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Space Bar	Shows the current unit's information screen. (Adjust aircraft height here, rename leaders etc.).
****	Toggle the victory hex display on or off (e.g. to see what the terrain in the hex under the flag looks like)
0 (Zero)	Accesses the Opfire filtering screen for holders of the extended CD version. Click **HERE** for more details
^	Rally Point
5	Shows unit detail (cd version only)
[NEW!	Pressing [HotKey on your keyboard will show the victory hex values under the V hexes. Extended CD version only
] NEW!	Pressing] HotKey on you keyboard will force V hexes to the top of all building rubble so they cannot be hidden by rubble. Extended CD version only
. (period)	Turns map hex grid on and off in the deployment and main game screens

HotKey info can also be found by pressing the **?** key while playing. Note that there can be some differences in HotKeys between deployment and actually playing the game

Note: it is in the deploy screen where you set out your 10 pre planned artillery quick reaction fire target hexes (gold spots), and also any artillery plotted now will fall in turn 0, i.e. as a pre-game bombardment (or later if you use the delay key). Any such artillery fires, when complete can of course be fired with minimal delays even if adjusted, later on, select the firing unit on the bombard menu in game, then hit the appropriate ammo button and the battery will aim at the last spot fired on. Therefore, any pre game bombardment is a prime candidate for say a creeping barrage, adjusting each mission minimally and avoiding long delays for impromptu fire requests later. Use the **B** key to go to the bombardments menu and set these up. Use the **B** key to plot your air drops here, if you have bought transport planes, once they have been loaded, and also you can now time your barrage or air drop missions,- **see Artillery Bombardment Screens, including Air Unit Handling**

Note on loading and unloading : Select the unit to be transported, hit 'L', and **then** click on the unit to load onto is the best method to use. You **can** select the transport and hit L, then point at the unit to load as a passenger **but** this only works for **one** (1) transported unit! (as if you hit L on a loaded transport, it will firstly unload all its passengers, L is also the **unload** key for transports, recall!). Therefore, select the unit to load, then L, then point at the intended transport, as this allows multiple passenger units on a single transport, assuming that the intended transport has the lift capacity. Also, in the deploy menu, there is no distance checking from the loader to the transport, unlike in the game itself. Thus, in the deploy phase *only*, you do not need to place the unit to be transported into the same hex as the transport (alongside for barges and rafts).

> **WinSPMBT** introduces MAJOR changes to the way infantry and vehicles load and un-load. There is a MP penalty for both loading **and** unloading for **BOTH** vehicles **and** their passengers
>
> - Unloaded passengers are already charged for unloading (transport movement value is added) there is a charge of 1 Movement Point to passengers if the transport move is zero, i.e. min charge 1 MP to get out.
> - The Unloading vehicle is now charged 1/4 of its MP allowance to unload (whatever the passengers were).
> - Loading counts number of men + load cost so a 7 man 40mm AA gun with 7 crew costs 10 MP. Passengers are charged 1/2 their MP on loading up.
>
> This virtually eliminates the "train" effect where you could pass one infantry unit down a line of vehicles. It also means you need to revise the way you co-ordinate tanks and infantry carriers because now the carriers cannot hang back then charge across the open ground and dump the infantry right in the enemy positions quite like had been the case in the past. It also eliminates moving half way, getting out, having a look around then getting back in and charging into the attack. This change affects "tank riders" as well .

Load/Unload options

WinSPMBT extends the options available for the load and unload side screen. A button is provided to load (unload) for this hex only. All units/transports of the same formation (platoon) in the current hex will load or unload (L key). Another button is provided for a platoon load/unload operation (D key). This applies to the entire platoon. To load, the infantry must be in the same hex as a transport, and there must be room, during game play. **In the deployment phase only, range from passenger to transport is ignored**. This is a very handy way to mount your mech inf and Helicopter platoons!.

Cross Attaching Platoons
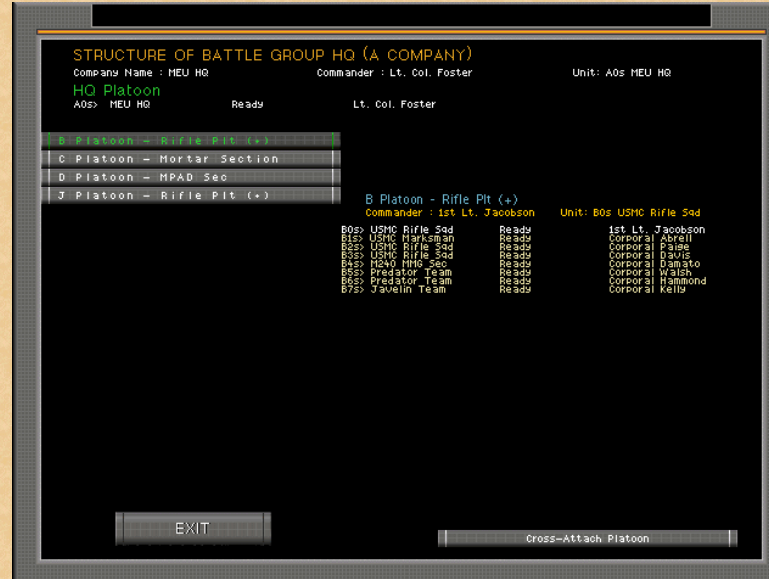
In the deployment turn, when you call up the company structure display, when selecting a platoon type formation (a platoon or a section formation class, not one merely with 'platoon' in its title, in other words, one which shows a 'P' in the HQ display page, not a 'C') you will be allowed to cross attach this platoon under a different company command group. Note that A0, your Battle Group commander, directly commands any independent platoons not currently under other company HQ commanders in his role as commander of the HQ company (A Company).

Main Map Window

Main Map Window, where the game action occurs, this can be zoomed (+ and, keyboard keys). Move mouse to edges of the screen to scroll this window.

Force Broken text message, if this appears at the top of the button screen, your force has suffered 50% casualties, or 50% are in retreat or rout, or a combination. Your command is in a bad way, and when force morale is broken, morale and rally chances are reduced.

Status window, the black window at the bottom of the Main Map, shows the basic data for the selected unit , shots left, maximum range setting, remaining move points, and how many enemy seen. Also printed here is the current game turn and length of the game (funnily enough, we get lots of queries as to 'how to find the game length' or 'what turn it is', here is this information that many players seem to miss..). Game maximum visibility level is also displayed here in hexes.

Info Window, at the top, usually red background, is used to post informational messages. Note that the value of an objective hex is also displayed by hovering the mouse over it.

Mini Map Window, Bottom right, shows an overview of the map area. Click on this map to move the main map window focus. If the map size is greater than 80 hexes in Y (North/South) and 100 Hexes in X (East/West), then click on the top 1/4 of the mini map to move up, the bottom 1/4 to move it down, the left 1/4 of the mini map to move left, the right 1/4 to move it right

<div style="border:1px solid">

NOTE

If you are viewing a map with a stream you may notice on the Mini map yellow flashing pixels at various parts of the stream. These are not "bugs" they are shallow fording points in the stream you can cross which have a greatly lessened chance of immobilizing your vehicle

</div>

Button Window, at the right hand side. Contains the game action buttons. Flag at the top tells you your nationality, and if an action replay is available from previous activity the LED beside the map turns green. If it is green, clicking it will run the replay. Not all game functions have buttons, and are provided or duplicated with HotKeys.

Unit Communications Status, On the unit information pane at the bottom of the screen, the unit's comms link status with its superior HQ is now noted. The selected unit shown is 'In Contact' and so will be able to be rallied by its HQ, however if it is out of contact (shown in red) then it can only be rallied by its own leader. Radio contact is OK, but the link is not 100% reliable!

Water Speed, Water speed in hexes is now shown in blue alongside normal movement points, as this avoids confusion when a unit with swim speed of say 4 hexes, and land speed of say 12 hexes 'stopped' in water, many users did not realise that swimming speed differs from normal. If swimming, points used for normal movement are considered first, so a unit running cross country 12 hexes to a river, with swim speed of 2 will not be able to cross as it has gone more than 2 hexes before meeting the water. It can move 2 hexes over the water obstacle next turn, provided that it does this as its first 2 MP expended. Units can ford some water hexes (-1 depth) at reduced rate, non swimming vehicles may however bog down. You may therefore be able to unload your assault barges in shallows in a beach assault without going right up to the water edge however the offloaded passengers may take some time to wade ashore!.

HotKeys:	
A	Selects the '**All Formation**' mode. This is very useful if you wish to set the targeting range of an entire formation with the '**Y**' key OR if you wish to move an entire formation to a specific point but it is VERY important to remember that you **cannot** undo a group move so **Remember** to toggle this off after the '**Y**' operation, or the next time you try to move a unit, the entire formation will move simultaneously under AI control and you will be stuck with that move
B	Go to the bombardment menu screen to plot artillery and air strikes.
D	Fire unit's smoke dischargers, if fitted and ammo left.
E	Go to the Encyclopaedia.
G	Go to the next formation's HQ unit, i.e. cycle through formations.
L	Load/Unload unit onto/from a transport. (See note on this in deployment above).
H	Go to the roster (clipboard) menu.
M	Toggle map text strings on or off (If a scenario designer has provided map text info)
N,P	Go to the **N**ext or **P**revious on map unit.
Q	End turn (current situation is **autosaved** to slot No. 1 if this is not a PBEM game)
R	Rally the current unit, provided it is capable.
S	Save the game to disk.
T	Select targets from those available.
U	Clear dark hexes and smoke. (Toggles, hit twice to get smoke back after clearing dark hexes)
W	Select a single weapon to fire. (From submenu), ignored for close assaults.
X	Fire a smoke round at the target hex.
Y	Set the maximum fire range for the unit. Useful mainly for defenders who do not wish their troops to fire at long ranges and hence give away their positions too soon.
Z	Fires suppressive or area fire at a hex. There is no requirement for a target to be located there so it can be used to "shoot up" an area of the map, a tree line for example or any other areas you think may be harbouring hidden enemy troop concentrations. This can be used during the player turn by any unit with a direct LOS to the target hex but also, on map indirect fire artillery units such as mortars, SP guns and howitzers as well as tripod mounted machine guns have the ability to fire through smoke or over tree lines (but NOT hills) to engage targets out of their LOS. This gives weapons like MMG's and HMG's the ability to create a "beaten zone" of area fire out of their own LOS to harass enemy troop movements
?	Call up help screen.
- or +	Unzoom or zoom the map.
>	Enable or disable the display of victory hexes.
@	For a vehicle or other crewed item, bail the crew out, mainly useful to rescue core crews in a campaign game.
Spacebar	Show the unit's information screen. (Here is where you set aircraft altitude, and rename leaders (click on the leaders name) etc. Also, click on a weapon and it toggles to red, and will not fire until toggled back on once again
right click	On an enemy unit to see basic information about it.
8	Reverses vehicles while keeping the vehicles front pointed towards the enemy. Reverse costs 3 times the value of going forwards into the hex.
J	Unit Clipboard
^	Set Rally Point

}	Unit view of all around LOS hexes
. (period)	Turns map hex grid on and off in the deployment and main game screens
5	Shows unit detail (cd version only)

For Loading and unloading, you **must** be in the **same hex as the transport**, unless it is a barge or raft which allow alongside loading, as they are typically in deep water.

Users often ask how to move a unit into the same hex as another. The answer is to firstly select the unit to be moved, then **shift-click** onto the hex with unit(s) in it which you want to move into.

Users often ask how to **turn a unit in place**, select the unit and right click in the desired direction on a clear hex and the unit will turn and the visible hexes for that unit will also be highlighted. (Right clicking on an enemy unit will bring up the statistics for that unit, hence right click on an empty hex or one containing friends only to turn or inspect the visible hex region for a unit). Note that we have removed the old 'cheat' whereby if you right clicked on a hex containing an *unspotted* enemy unit, your unit 'refused to turn', thus giving you 'free' information you should not have had. (**Hint**: forts can turn in the deployment turn, use this to set up crossing fires from your pillboxes and bunkers in turn 0)

Note also that the end turn button is now **BLUE** and end **GAME** is in **RED** in regular games, campaigns and scenarios. In a PBEM game, the **Blue** button will **END YOUR** *TURN* and autosave it in your PBEM slot in for you to send it to your opponent. In a PBEM game the **RED** button allows you to save your turn for you to **FINISH LATER**

We have gone back to the SP1 method of reporting firing ranges as so many yards, (or indirect fire) rather than so many hexes, as a lot of users have asked for this feature to be restored. Also, many new users did not seem to realise that '20 hexes' is a **kilometer** in this game, 2 hexes are about the length of a football field, though the units seem to be alongside. The reporting in hexes, metres or yards can be set in **GameOptions** under the **MISC** tab**.** For long range SAM and Artillery, ranges of 200 hexes and above are an *abstraction* of long range, a field gun with range 203 outranges a field gun of 201 hexes range in counterbattery fires. What 201 actually means in terms of actual range is irrelevant. 200 to 255 is the available spread for artillery allowed to be off map units, LR SAM, Anti Radiation Missiles, other long range air missiles allowed stand-off attacks etc. The game will report a range in metres or yards if the ini file setting is not set to 'hexes'.

Artillery Bombardment Screens, including Air Unit Handling

There have been **major** changes in the way aircraft are handled in WinSPMBT as opposed to the way SP2 for example treated them.

All air units, barring the helicopter classes are now **off map units** no longer moved as on map units one hex at a time by the player under 100% human control. Aircraft now belong to the Air Force or higher commands than yours, so are not available in campaign cores or as upgrades. Aircraft missions are therefore now requested from the expanded off map bombardment menu.

Note that transport parachute missions, bomber missions and gliders require a lot of pre battle planning, therefore if you do not plot these in the deployment phase you will find that the delays are rather **long** (though in no way as long as they should be in real terms!). So plot these before the game start!
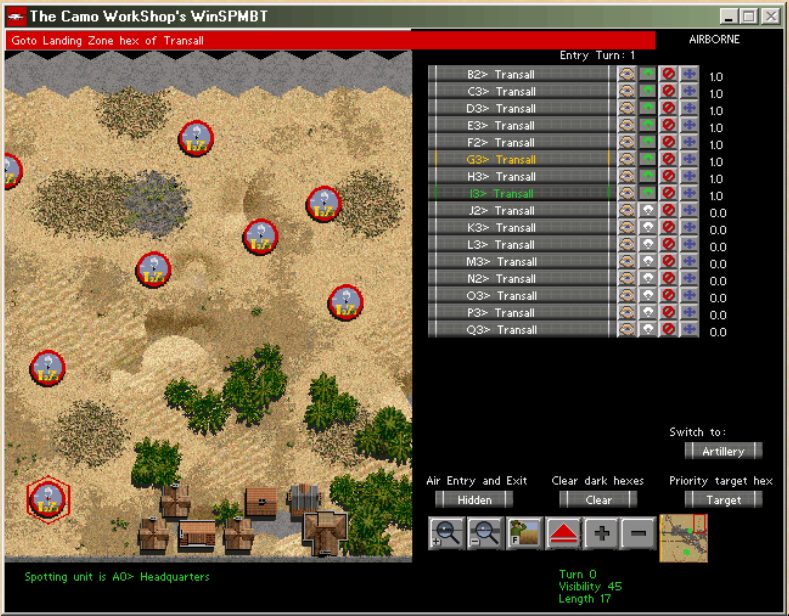
There is a new **Switch To:** button which is used to cycle through the various pages of the bombardment menu, there is no longer a single artillery page!

Artillery Page

For artillery, air strikes and the **Level Bomber** class and **SEAD** to plot fire missions with.

Plotting Fire Missions

See the Tutorial section on Artillery.

Spotter Page

Used to plot air observation plane missions. Set the binocular icon on the spot where you want the spotter plane to circle round, after setting the air entry and exit directions as required. Spotter planes enter after a short delay, as they are 'on call' and fly their mission at the start of your move, therefore any enemy units they spot will remain so during your move. They will fly to nearby the binocular symbol, then circle twice and fly off (if not killed). Note that if part of the circle takes them off map, that ends the current pass, so take care when plotting spotter missions near the map edges. Spotter planes remain available until they are shot down, or are damaged, or in some cases if enough AAA fire is received, they will "Return To Base" prematurely. Spotters will not fly before turn 1 of a game. Spotter planes can be propellor light planes in the early part of the era, or UAV icons in the 1990s or so onwards, all are the same to the game. Spotters are unarmed.

Airborne Page

This page is where you plot any air transport paratroop drops or glider landings. Remember to set the air entry and exit directions to your requirements before plotting a Landing Zone marker, and to load the troops onto the planes *in the deployment turn 0* as well, as unloaded transports are useless! Airborne missions are plotted from turn 1 onwards.

The Bombardment Delay Adjustment Buttons (+) and (-)

These 2 buttons will only appear on the pre game bombardment plot (Turn 0 of the game). They allow you to plot your artillery, air strikes, spotter planes, or airborne missions to come in on a turn *other* than turn 0 (1 for some air types).

For example, you may want to plot a large barrage of artillery onto a cross-roads that you think your enemy will reach on turn 3. To do this, hit the (+) key until delay is shown as turn 3 on the artillery page, then plot the appropriate batteries, which will now fall on that spot on turn 3, not turn 0 (with a small margin of error in timing e.g. for batteries with low experience).

Note: The delay modifier will apply to all missions of all types plotted after you increment it or decrement it. Therefore, for example, after plotting your turn 3 fire mission as outlined above, you may now want to plot some batteries for turn 1. If so, remember to hit the (-) key to reduce the delay back to 1 *before* plotting these missions.

This feature provides an important new tool for the scenario designer that allows for the creative use of fireplanning. One could, for example, reserve smoke screening until just the right moment before the attacking AI force needs it rather than firing on turn zero only.

Direct and General Artillery Support

General Support and **Direct Support** off-map artillery types have been added for off-map artillery purchase. **Direct Support** costs 75% of a full Under Command battery and **General Support** costs 50% of a full Under Command battery.

Direct Support is less responsive than normal arty, **General Support** even less so. The delay is longer for calls for fire, other than onto gold spots or as a pre game bombardment (their main use). Shifting fires costs a little more for these type of batteries and they are less likely to be in radio contact as they are theoretically shared with other formations than yours. As well, they are less likely to fire counter battery fires if left idle. Strike air types may be bought in general or direct support mode if desired.

A button on the purchase menu cycles between artillery types. If **General Support** or **Direct Support** purchase is active, then only the appropriate formations are filtered to show on the arty page <u>and</u> the miscellaneous page (for strike air). Cycle this back to Under Command artillery to see the filtered-out formations again. **General Support** and **Direct Support** off-map artillery cannot be purchased for your core in a campaign

Artillery Priority Hexes changes in V3

GPS and laser Range Finder have been integrated into the game for use by FOO officers and vehicles. When Artillery observers or FO vehicles are using a Laser RF and **IF** the target hex is in LOS the shell scatter will be less. A FOO with a Range Finder rating above 20 is considered to have a Laser Range finder. If the observer or FO vehicle is fitted with GPS the scatter will be less again. A FOO with an EW value of 15 has GPS. .

There have been changes to the way the artillery priority hexes are assigned. You no longer get 10 artillery priority hexes automatically. Here is the new system at a glance

- The are **NO** restrictions to the scenario designer in the scenario editor. There are still 10 available when designing scenarios
- In a meeting engagement, both sides get 1 Artillery priority hex. It is assumed in a meeting engagement the battlefield not surveyed but we will spot each side one in this case anyway
- If your mission is an assault, you get 5 to start
- If your mission is an advance (hasty attack) you get 3 to start
- If your mission is a delay, you get 2 to start
- if your mission is a defend you get 4 to start

We have not increased the number of priority hexes in the game. You will still get a maximum of 10 but you get an extra Artillery Priority hex for each FOO bought with the following exceptions

A meeting engagement will still only give one priority hex no matter how many FOO you buy EXCEPT if the year is >70 the following two points apply. (it is assumed to have FACE computer equipment after 1970)

- If the Forward Observer has a laser Rangefinder you get an additional Priority hex (A FOO with laser range finder has a RF of 20+ and is assumed to have modern computers)
- If the FOO has GPS you get an extra 2 for each such FOO (a FOO with GPS has an EW value of 15)

Here is an example of how this will work. Assume you are playing a Meeting engagement in any type of game but not a scenario and the year is 2007. If we assume you buy one Forward Observer equipped with a laser Range finder you will get 3 priority hexes. One for being a meeting engagement, one for it being after 1970 and one for the laser range finder. If you had bought a FOO equipped with GPS as well you would have five Priority hexes assigned. One for being a meeting engagement, one for it being after 1970 , one for the laser range finder and two for the GPS. **Remember, in a meeting engagement you do NOT get an extra Priority Hex for the FOO himself**

If the game had been an advance for you and once again the year is 2007 and if we assume you buy one Forward Observer equipped with a laser Range finder you will get 6 priority hexes. Three to start with for being an advance for you, one for the artillery observer, one for it being after 1970 and one for the laser range finder . If you had bought a FOO equipped with GPS as well you would have eight Priority hexes assigned. Three to start for being an advance for you, one for the artillery observer, one for it being after 1970, one for the laser range finder and two more for the GPS.

NOTE

Show Blast Radius

If you wish to view the maximum blast radius for aircraft and artillery weapons press "R" while in the bombardment plotting screen and you will see the maximum blast radius for each type of shell that lands during the game represented by a white circle. Press "R" again to turn this off. This is also available from the "Z" key (area fire) screen.

This screen shots shows the blast radius of a MLRS attack with the preferences set to " fast arty"
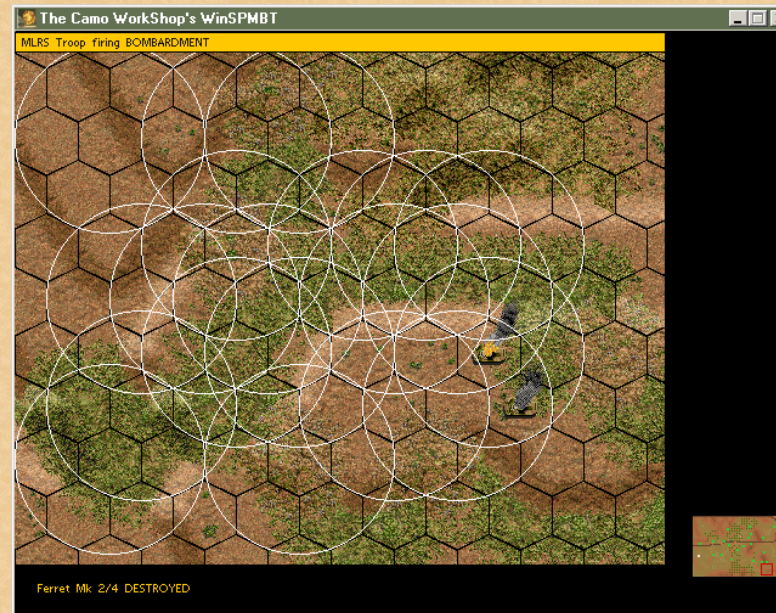
additionally, any **KNOWN** enemy units in the blast area that receive damage from the blast will be circled in yellow as shown here
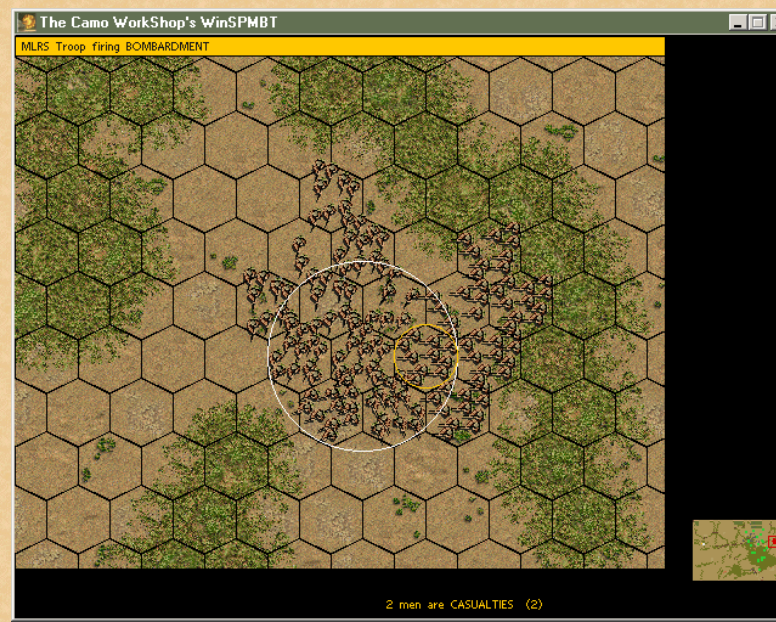
This function is controlled by the following line in the **CamoGame.ini** file found in the WinSPMBT\Game Data folder

```
;show or hide secondary blast areas 1=on, 0=off

 ShowBlastCircles=0
```

This sets the blast radius circles to be always **OFF** at game start and the player can turn them **ON** by pressing the "R" key while in the bombardment or "Z" key windows. If you always wish to see the blast radius circles each time you start the game change that to read

```
ShowBlastCircles=1
```

It is important to remember that even though the blast effect for some weapons like 2000 pound bombs may be quite large this does ****NOT**** mean that every hex and unit within the blast effect area is affected by the blast. This addition allows players who are interested to see just how the blast area works in the game. Blast effects are reduced by the distance from the impact hex, and by the usual effects of dug-in status, being in cover etc. Cluster munitions are more evenly distributed over the blast area than an HE round, so range effect is reduced for them. Armoured vehicles more than 1 hex from the impact will tend to be supressed by blast rather than be destroyed by fragments, except with cluster munitions.

Air Transports And Gliders

Transport aircraft and gliders are shown on map in turn 0 pre game deployment, so that you can load the passengers into them. After deployment is finished, **they will be stripped off map**, therefore remember to load up the appropriate troops, or you will **not** be able to in the game!

Note that we have provided some **'ready made'** glider and Airborne units with the appropriate aircraft included, these will be shown on the purchase screen as say 'Para Co. [G]' or 'Para Co. [A]' where [G} stands for glider borne and [A] for Airborne, and perhaps [H] for helicopter transport.

Any infantry unit can be put into a transport plane and dropped by parachute, however **unless** the unit is a **proper** paratrooper class (*class type*, **not** *unit name*, like 'Para Inf-AT'), then expect horrible casualties on landing as these are not properly parachute trained troops.

When plotting Para drops, try to drop your men in **clear open hexes**, not in woods, on slopes, or in deep water for example or casualties will be bad. Gliders will also prefer to land in wide open spaces as well. Remember that gliders, transport planes (and level bombers) will drift 'off target' depending on troop quality (experience) and particularly in low visibility, less than 2 KM, 40 hexes, getting worse down to dark night or fog type conditions (2 or 3). gliders are more likely to have a rough landing in poor conditions, or to crash land, and also recall that smoke is treated as fog, landing gliders blind into smoke is not a bright idea! gliders do not like to land in minefields, and treat dragons teeth as anti glider obstacles, which are rather fatal to them.

Parachute dropper planes, and bombers make **one pass** and then "Return To Base", gliders are considered destroyed after landing. Transport planes which are shot down may manage to get some paratroops out the doors, and aborts due to damage may simply drop the troops as they exit. Transports with multiple Para squads will not always drop these all in one 'stick, there may be a 'hang up' and therefore a gap.

Note : Air transport formations **do not** reduce the number of available air strikes, *but you will need at least 1 available air strike to buy them*. Therefore if all your air transports 'disappear' it is likely because you bought all the air strikes you were allocated as fighter bomber, spotter or bomber missions, *delete* one of these, then your transport plane units should return, finally when done, re purchase that last air strike!.

Summary of aircraft types:

Fighter Bomber, The default strike/attack aircraft. Able to use all air class weapons including stand-off missiles. Flies in, optionally releasing a long range missile from off map as a stand-off attack (and may be shot at before arriving by long range SAM, as a stand-off attack). Flies towards its target, tries to find an actual unit to attack, strafes and bombs this, and then flies off in the selected exit direction. Returns to base if damaged, or when it has run out of ammunition. can be armoured - if so, it is less vulnerable to small arms ammo, and light flak and smaller missiles than the regular planes.

Air OP Aircraft, A Small plane or RPV which enters in the entry direction, flies to its recce point, and then circles this while searching for enemy units, before flying off along the selected exit direction. Unarmed. Quicker reaction time when plotted than for strike planes. If the spotting circle takes it off map, the spotting run ends. NB - an RPV will have 1 (or more) "crew" as it is a unit, it needs crew, or is considered destroyed. Consider the "crew" of the RPV the "CPU" - as a flak hit which kills the "crew" will kill the plane even if the airframe is not damaged.

Paratroop Transport, Transport Aircraft, Large unarmed transport planes which fly in along the entry route and then drop paratroopers near the plotted DZ. They then fly off and return to base. If they exit the map before dropping the entire stick, they will tend to fly home with the undropped troops, so be careful when plotting too near the map edge!. If shot down, some paras may manage to jump out of the crashing plane.

Glider, an unpowered transport plane which flies to its designated landing zone and lands. Can be destroyed by crash landing on bad terrain, deep water etc. so try to plot the LZ in clear flat terrain.

SEAD aircraft (Wild Weasel), A new class formed to split off those air units armed with Anti Radiation Missiles from those strike aircraft not so equipped, mainly to aid the AI use of same, but also to help the human player. In the SP game engine aircraft equipped with ARM will automagically launch their ARM at any enemy on map AAA unit equipped with an AAA radar (FC 100 and above), even if the player plots them to attack any other target, then run in to strafe that AA unit. Splitting these off to an SEAD class ensures the AI does not fleet buy them, and helps end user select planes by type. Only this class should therefore have ARM, otherwise the user can become confused, as their strike planes drift off to attack AA units, rather than the MBT he targeted!. SEAD planes are assumed to have better radar warning, and training against SAM threats, and so are treated as better experienced when testing to avoid SAM. They are also sometimes able to spot more radar AA and SAM units (better area search capability than a straight attack aircraft). Hint, if buying SEAD planes, buy these before any other air strikes, as the bombardment starts from the top of the listing, therefore your SEAD planes will enter ahead of the strike planes if plotted together. SEAD planes will however do better against located enemy radar equipped AA units than if plotted 'blind'. [All AAA radars are assumed "lit up" in SP games]. If the enemy has no AAA radars, these are of limited use (e.g against say Mujadeen/Somali militiamen with manually-aimed 14.5mm 12.7 and perhaps a few SA-7).

Circling Gunship. This is armed with cannon and MG type weapons only. It circles the target hex in a similar manner to the spotter type, but area fires several times into the target hex (with some scatter) as it circles twice. It may shift

its target hex onto a spotted enemy unit, and it is less vehicle-centric than traditional SP strike planes. if it centres onto an enemy, it concentrates its fire on that hex (less area fire). Only of use against enemies with no serious AA defences!.

Level Bomber, COIN Level Bomber. This class goes to the area selected and then offloads its bombload and goes home. It does not select individual enemy ground units to target, it is an area weapon. It flies at very high altitude, above some light SAM, and AAA. Bombers only use iron bombs, napalm/FAE or CB type weapons with range of 1 hex . In other words, used for area fire only (arclight missions), bombers with PGM like JDAM would be normal attack aircraft (perhaps a COIN Fighter) in game terms.

COIN Fighter. This is exactly like a fighter bomber, but it is less "vehicle centric" in its targeting than its base type. Therefore, a more useful type for pointing at enemy infantry. Usually provided with antipersonnel loads by OOB designers, if provided in an OOB, and may be of less advanced type than the strike planes.

Unit Information Screen

This is the screen that comes up when you select one of your units, and then hit the space bar.

Green Text on this screen can be changed by players. Orange Text for weapons and smoke projectors can be turned on and off. Armour text when clicked on will show the values for Steel or HEAT armour

At the top in green is the unit ID, formation letter (s) followed by the unit's number in that formation. Then the unit's actual name, you can click on this and change to whatever you want. (NB, the name is what is reported to the other player in PBEM games, e.g. when a hidden unit of yours fires, so creative use of this facility can provide misinformation!, hint: the reported firing weapon info stays the same, so rename to something with a similar weapon).

Vision and Range finder turn Yellow when Thermal Imaging and Laser Range Finders is modeled

The '0' unit of a formation (platoon) is the commander, but in campaign cores, should the leader have been destroyed, a subordinate can take over, see the formation info screen and note the 'H' beside a unit for the HQ unit. A is the first formation, and A0 is the battle group commander, you!

Beside the name is a graphic representing his skill level, a set of 'corporals stripes' indicates that he is an average experience unit, sergeant stripes for veterans (80 experience) and USA type 'top sergeant' icon for elite units (100 experience).

In the columns below the unit name is some primary game information:

Status	Here shown as 'ready', can be retreating or routed or other nasties!
CHQ Link	**Absolutely vital**, so that superiors in the command chain can rally this unit, in addition to itself. Radio equipped units can operate anywhere, but the further from their leader unit they are (or if the leader has no radio, you need 2 to talk!) then there is a likelihood of not being in contact. Units without radios, (or whose radio is on the blink) which are over 5 hexes or so (250 yards) from a leader are usually out of contact, **not** good! Keep non radio units within 3-4 hexes of the unit commander. Units not in command contact lose morale (and can gain suppression points), as well as losing the benefits of being rallied by higher formation leaders if required.
Suppression	How badly suppressed this unit is. Suppression reduces morale, and also operating ability (e.g. a suppressed unit finds it harder to spot and to hit targets, and it can reduce number of shots available). Suppression comes from enemy fire, being out of command control, or having routing friends nearby, friendly tanks exploding around you, and so on. Rallying can reduce suppression.
Weapon info	The weapons this unit has (damaged weapons will get a '-'), and the ammunition status for each. Note that only weapon slot 1 can have special ammunition like sabot. Range is the maximum range this weapon can reach in 50 metre hexes. The weapon names are green, pressing a weapon name with the mouse toggles disabling (the name goes red) or re-enabling a particular weapon, should you want to hold ammo, say.

Smoke Ammo	Smoke ammo if available for the primary weapon, grenades for infantry types. If smoke dischargers are fitted, SD:NN is shown, with NN being the number of salvoes of smoke. If SD are fitted, pressing the green SD makes it red and vice versa. This allows you to instruct your vehicle *not* to fire its SD in reaction to incoming enemy fires, if you so desire!
Experience	This is one of the **most vital** variables in the entire game. It determines if you are 'green' cannon fodder, or an elite or veteran, who shoots more shots, and hits more often. 70 is about average.
Morale	Another key variable, this one affects rallying ability. 70 is about average.
Damage	For squads and crewed weapons, each point is 1 crew or squad member gone, for vehicles it is less related to crew size. Damage affects morale and therefore rally ability, can remove weapons, and damaged units tend to fire more slowly. Damage is **not** good news.
Speed	This is the unit's basic road speed in hexes, with any swim capacity shown as the second figure.
Men	Current crew size (after damage) or squad members left.
Radio	1 if you have one, 0 if not.
Fire Control	How good your optics etc. are, bigger is better. Values of 100 plus represent AA radars on AA type units, allowing engagement beyond visibility range at night or in smoke etc.
Size	Larger is easier to hit and to spot.
Cost	The value of this unit in game terms (buy and victory points)
Vision	If non-zero, the amount of hexes you can see in poor visibility. Values of 40 plus represent a thermal imager or a ground surveillance radar, these can see through smoke.
Range Finder	This improves the units' chance to hit, bigger is better, but it is far more effective at the halt, i.e. you did not move in this turn or the last one. A value of 14 or more is a laser range finder.
Carry Cost	An indication how heavy this thing is, how difficult to transport.
Carry Capacity ⚠️	An indication of how much this unit can carry. XX means it can only carry troops, 1XX means it can carry crewed weapons (guns, mortars etc), 2XX vehicles.

Here is a more detailed explanation:

 Vehicles and aircraft (including landing craft and barges) have **three** carry capacity ratings all built around the one byte code limit of 255

1/ A unit that shows a carry capacity **up to** 99 can carry foot passengers ONLY. If that vehicle / aircraft / barge has a "load cost" capacity rating of 34 it can load up to 34 troops (but NOT crewed guns and NOT vehicles)

2/ If that vehicle / aircraft / barge has a three digit carry capacity starting with a 1 then it can carry crewed guns and troops (but NOT vehicles)....so anything 1xx can carry men and guns up to the limit of xx. For example-- a unit with a 134 carry capacity can carry men AND guns (including mortars) up to the limit of 34 "load cost"...if it had a rating of 174 then it can carry up to 74 "load cost" including guns and mortars

3/ If it has a carry capacity rating starting with a 2 UP TO 255 (the largest number that can be entered) then it can carry vehicles, guns and men up to a limit of 255 "load cost" so to use the previous examples if a vehicle / aircraft / barge has a capacity rating of 234 then it can carry troops, guns AND vehicles up to the "load cost" limit of 34. |
Passenger	List of any transported units.
Turret Picture	Lists the steel armour for the turret sides, top armour if this is a non turreted unit. If values are shown in red, this unit is open topped, hence quite vulnerable to artillery fires, and to close assaults by infantry. If a vehicle is open topped, even pistol shots can go through if a top hit is scored!
Hull Picture	Armour diagram for the vehicle hull, lower hull for non-turreted designs.
Armour Type	The label is *green*, so it is *active,* it changes to yellow on selection with the mouse (see cursor in the above illustration). Press repeatedly to cycle through the armour types, plain steel, anti HEAT (spaced, Chobham etc.) and ERA. Note that ERA value decreases as ERA points are expended, for each individual facing hit.

The unit leader's name is shown under the picture, pressing on this with the mouse lets you rename the leader, if desired. Also shown is his statistics:

Rally	An indicator as to how good this leader is at *rallying unhappy subordinates*, or himself. This number will reduce during a turn as rallies occur, and be set to zero for the rest of the turn if the rally attempt fails.
Inf Command	A reflection of how good this leader is at infantry related tasks.

If he is performing an infantry function, or is near a subordinate he can sometimes influence their or his actions depending on this value. If he successfully throws a 'skill roll' **and** has a higher value in some skill than the subordinate then the subordinate will use his higher value for that skill.

The other skills, armour, artillery etc, work in a similar fashion. Therefore, having skilled leaders very close by (within 3 to 5 hexes or so) is good in SP series games.

Low here, this guy is a tanker! (Note, in a mixed formation, if the leader is a tanker and the majority of the subordinates are infantry, he will not be able to help them much). |
Art Command	How good this leader is at artillery related tasks, such as directing fires from a remote battery. A key variable for calling fires, naturally better for proper artillery units, or for artillery OP units. Again low as he is a tanker by trade.
Arm Command	This is high, as he is a armoured unit commander.
Kills	A tally of this unit's total kills, deleting an enemy unit is a kill, i.e. an entire squad, not 1 or 2 individuals.

If this unit is in a campaign core, these variables will tend to increase over time, or if the leader was destroyed, a new leader will be generated, or one of the subordinates will take over the formation command. Kills help experience to rise in a campaign, so it is worth 'blooding' even those units which normally live in the rear, if you find the opportunity in a campaign for them maybe to go forwards and sweep up a few stray crews etc. The first 5 kills are the most valuable at raising initial experience. NB, firing your weapons at a real enemy is a major help to experience increases, as is being shot at 'for real'. Campaign core units switched to a new specialty keep their old statistics, so a tank traded to an SPA 105mm indirect piece is less good at that job till it has tried it for some time.

Air unit height is shown for planes, you alter altitude for these items on this screen, for on map air units (helicopters) Changing altitude costs MP, so you may not have enough to climb.

Press **continue** to exit this screen.

Press **information** to go to the class information screen. This shows the generic information for units of this type, default ammunition loads, weapon data etc. as seen in the relevant **encyclopaedia** entry.

The Headquarters Screen (HQ Screen)

This screen gives you an overview of your force composition. A button is listed for each formation, pressing this or selecting on the list of units on the right shows basic formation data in the white panel on the left hand side of the screen. A button allows you to put certain formation types under computer AI control, should you so wish, and another allows you to assign waypoints for this formation to follow, if subsequently set to computer AI control.

Ignoring organisation of your forces is a common beginners mistake. New players sometimes wonder why their units run away a lot, and when you examine their forces, they have individual squads off a platoon spread randomly over the map, often kilometres apart!.

Remember that an SP hex is 50 metres, about half a football field. 20 hexes is a kilometre (about 1000 yards for the non-metric folks 😊. Units which have no radio will have to keep within 250 metres(yards) or so of their commander. Radios will work across the entire map, but are not 100% reliable. Remember that for radios to be useful communication aids that each party to the conversation requires a radio set!. (NB as time goes by in a campaign, your more experienced veterans will tend to pick up radios someone left lying about, even if radio chances are low for the unit in the OOB). Formation leaders get a higher chance of receiving a radio, as do artillery observers. In SP, radios can represent field telephones (in fortifications for example).

Keep your formations together, and keep your platoons close to their company HQ so that he can rally them if required. Consider moving the company HQ nearer to an ongoing battle to rally the troops better, or to provide leader skills to subordinates. Consider the same for the battle Group HQ unit as well as he can rally anyone else, or provide skill rating boosts to anyone else. Do not risk higher level HQ more than necessary, however.

The Central Pane

Formation Letter, Formation type	The formation ID letter(s) and its command type are listed at the top of the Central panel. A formation can be a company type (the battle group HQ, a Company or a Second Rate Company) or a platoon type (A platoon or a section) **H** is shown in **RED** on the RHS for the Battle Group Headquarters (BGHQ) or **C** in **YELLOW** for a Company element. **P** is shown in **BLUE** on the RHS panel alongside a platoon or section command element. Formation letters are assigned sequentially starting at A, so your BGHQ will always be formation A. Unit numbers are also assigned sequentially from 0, with the formation commander being assigned as the first unit, hence the 0 unit of a formation is usually the commander. This may change in a scenario, or in a campaign, or in any battle due to casualties. In a campaign, when a unit replaces a destroyed commander, it will become the new command unit, with a new ordinary unit replacing the previous commander. Therefore in campaign core forces the 0 unit will not always be the formation command. Whether or not this formation is under AI or human control is also noted here
React	The reaction turn is used in scenario design for AI forces. It is ignored otherwise.
Leader Name	Leader's name and rank here. Higher ranks tend to be better at rallying their troops, and have better leadership ratings. Names and rank titles come from the name and leader text files set up for a nation.
CHQ Link	Denotes if a unit is in contact with its higher HQ by radio or voice contact, or is out of contact. Formations in contact with a higher HQ can have rallies made by that higher HQ, those out of contact must rely entirely on their own leaders rally ability. Voice contact is good to 4 or 5 hexes, 200 to 250 metres. Radio links do not work 100% of the time.
Rally	The rally rating of that leader. Higher numbers are better. As rallies are done in a turn, this number will tend to decrease. Once a rally attempt fails this number will be set to zero for the remainder of the current turn, signifying that this leader cannot rally himself or subordinates any further this move. Leaders who are in retreat or rout states, can only rally themselves as and until they reach a better morale state. Individual units can only rally themselves, only leaders can rally their subordinates. Company HQ leaders can rally any leaders or units in their subordinated platoons. A0 can rally any troops in line of comms including company commanders.
Leadership Ratings	Leaders and units are rated for infantry, armour or artillery skills. These skill ratings can be used on subordinate troops, leaders close to and in contact with their own troops can replace or boost the subordinate unit's skill rating with their own, this tends to work best at 1 to 3 hexes in voice contact, not over the radio. This affects firing for example, or engineers removing mines. Units with high artillery skill are better spotters, observed fire by these will tend to drift less, and the time delay will be less. Delays are modified by the skill at each end of the chain, a skilled artillery observer controlling a skilled artillery firing unit will have a much quicker response than a skilled artillery observer controlling a conscript artillery unit with poor artillery skill.
Unit List	The list of units in that platoon. Company level leaders can have command of an HQ platoon of units directly under their command as well as commanding subordinated platoons. These units treat the CHQ as their platoon leader for rally etc.
Platoon Listing	The platoons assigned under this company commander's command. Truncated list if too many are present to fully display, see the Show Company Details Button
Show Company Details Button	Shows details of the platoon level formations under this company level commander's control. All platoons left under no particular company control will be brigaded under the battle group commander (A0) to form a headquarters company (A Company). See the section below for more details.
Exit	gets you out of the HQ Menu. [**Escape** key is a HotKey for this]
Force Value	The value of your force, may vary from the buy points used as individual units will vary in stats on purchase (some high, some low) or in a campaign as experience is gained, or lost by destruction or severe damage requiring extensive repairs to a core unit, or if the unit changed type or class when new kit was issued.

Unit Name Button	Pressing this button shows the formation data for it on the LHS pane. It also makes this formation's leader the currently selected unit on the map, which is handy for finding or reviewing your forces as the game map will centre on the unit last selected on exiting the HQ Screen.
Waypoints Button	Use to assign waypoints to this formation. Note that we have increased the waypoint count from 10 to 125. See the Waypoints section below.
Toggle Control	Use to change a formation between AI control or human control. Some artillery type units will not toggle control, but AI formations will assign these to fire missions if you leave them idle, and do not plot them yourself.

Right Hand Pane

This shows the details of the formations whose buttons are currently on the page. Shows a letter beside the leader unit showing his command level. Shows damage status for all units in formation. Use the next or previous buttons to scroll the listing. Click on a listed formation to make it the currently selected formation (show details in the LHS pane).

Waypoints

We have increased waypoint count from 10 to 125 per formation.

Waypoints are normally of more use to a scenario designer than a human player, as only formations under AI control follow the waypoint list.

However, a human player can sometimes find limited usage of AI control, and waypoints, useful.

Waypoints are useful for plotting long approach marches, for example in a winter assault when your leg units have a long march ahead of them before contact can be expected. Use of waypoints to march your units across a tedious approach and into a forming up area where you will take over control. This can be useful to save a lot of tedious unit shuffling.

They also can be useful to move a reserve formation across the back of your area sometimes in defence or attack. Or to set up a unit to "patrol" an area.

Waypoint usage

Toggle to computer control then set your waypoints for that formation

There are a few very important things to remember when setting waypoints

1] The AI will *GENERALLY* try to move your units over TWO waypoints and stop just before the third waypoint IF it has enough Movement points to cover that entire distance.

2] if you space the waypoints too far apart so that the AI is unable to fulfill all the requirements of 1] the AI will start the next turn by removing the next Waypoint from the route you have created then try to catch up to where it "should" be.

3] Do not spread the formation you are setting waypoints for all over the map !

4] ANY change to the formation structure of either side of a scenario **WILL** CANCEL **ALL** waypoints for both sides so waypoints must be the very last thing that is done. A change to even one unit of either side cancels ALL waypoints

5] When you initially set you waypoints the "first" waypoint to the game is the one right in front of your formation leader. When it moves, that first hex that will count as 1 waypoint crossed. However, tests have shown that the first turn does not always follow the "rules" so experiment on your own.

6] You can place more than one waypoint in a hex. The AI will "generally" count three waypoints per turn as "movement" so if you want a unit to stay in one place for a few turns before moving, a useful "rule of thumb" would be 3 waypoints per turn in one hex.

7] If enemy units are encountered along the route you have planned the AI **WILL** engage in combat rather than follow the waypoints. When the threat is over the formation will attempt to catch up.(See **2]** above). A long delay coupled with waypoints that are far apart may mean that your formation does not end up following the route you originally planned.

We are still finding out new things about the way waypoints are handled by the game so please experiment. We recently had a report that using waypoints spread three or four hexes apart using units with similar speeds worked very well when moving AI forces forward in a Scenario.

One thing to remember is that this system ensures that no two games will be exactly alike and this is a good thing as it keeps scenarios "fresh" longer when the same thing is not happening over and over.

For a much more detailed discussion about waypoints and their use click HERE

Show Company Details Screen

This screen shows the company organisation in more detail.

The company HQ platoon troops are shown at the top of the screen, with a button underneath for all platoons under the company's command.

Use the platoon buttons to show the details of that platoon on the RHS of the screen.

Platoon HQ leader units are highlighted in white. Unit current status is shown in coloured highlighting, red for bad states!.

Use the Exit button, or escape key to exit this screen.

The cross attachment button appears for any currently selected platoon which can be cross attached to another company commander if you so desire, but *only in game turn zero (deployment)*, hence, not in scenario games which are fought in the organisation as set up by the designer.

Cross Attachment Screen

A list of available company HQ to which this platoon can be transferred to is displayed (if any). Press the desired CHQ button to select as a target, then press the Assign to this CHQ button to transfer the currently selected platoon under command of the selected CHQ and automatically return to the company details screen.

Press the Exit button, or hit the escape key to exit without cross attaching the currently selected platoon.

Platoons that are part of your campaign core cannot be assigned under command of support troops CHQ, but support platoons can be attached to your core companies (for this battle only).

You cannot assign away the HQ platoon of a company.

Some Company designated formations (especially artillery) will be actually platoons for game purposes, but you may find some formations titled platoons that use a company structure, for example large recce platoons which need to operate widely spread in sub-units. These 'platoons' cannot be assigned under another company HQ as they are themselves companies in game terms, though their subordinate sections can be.

There is a limit of about 60 units in a formation in the OOB data, however this relates to the game build formation code (purchasing a company). You can cross attach any number of units under a company commander using this facility once actually inside the game.

Individual units can be also cross attached to other formations on the deployment turn zero as well, see the deployment screen for details. There is a limit of 10 items in a purchased platoon, but again, once inside the game you can attach individual units to a platoon beyond the 10 unit buy limitation, however it is highly not recommended as the platoon commander may have problems rallying that number of subunits if disaster happens!.
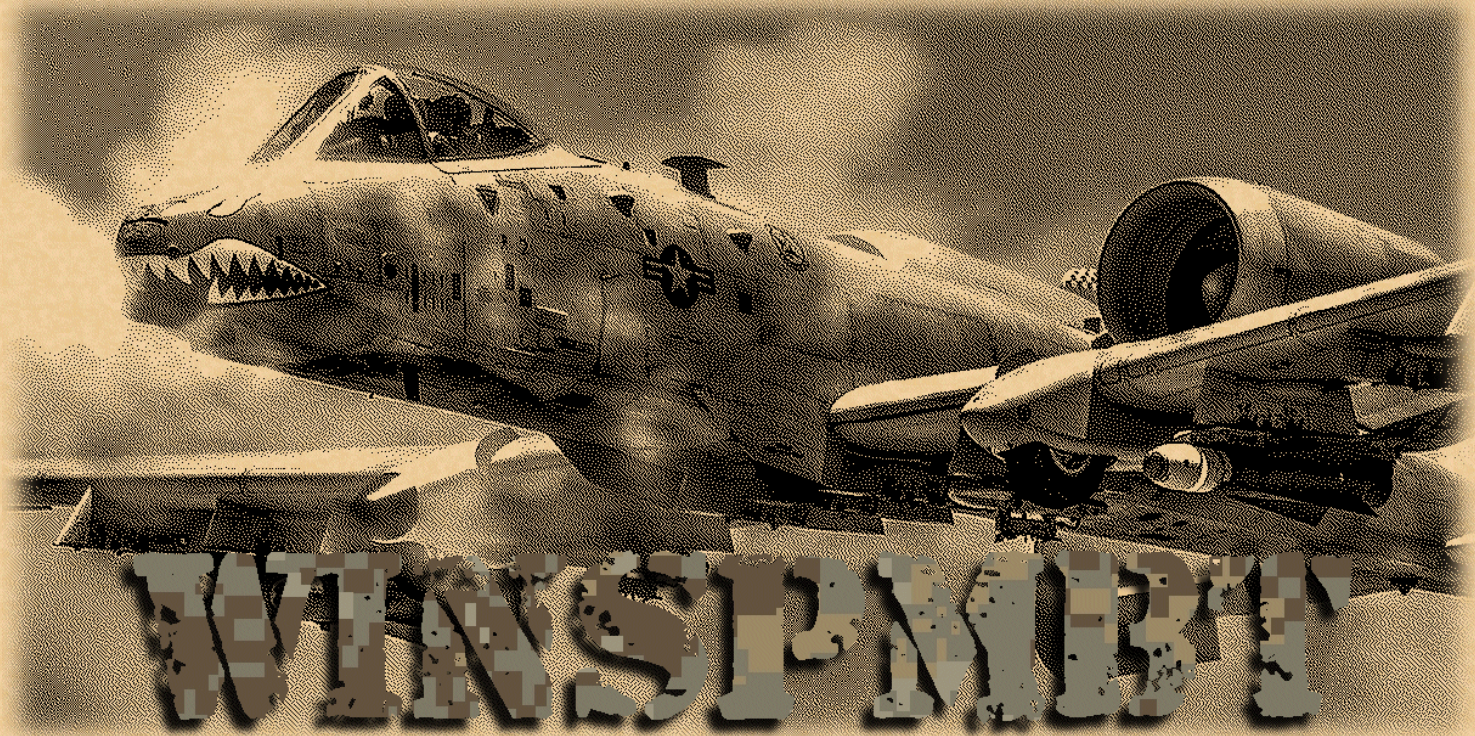
Unit Roster

ID	Name	Status	Move	Shots	Sup	HE : AP	Dam	Exp	Mor
A 0 s	Headquarters	Pinned	6	4:4	14	60 : 0	0	59	61
B 0 s	Rifle Squad	Ready,Dug In	6	6:6	4	80 : 0	0	56	56
B 1 s	Rifle Squad	Ready,Dug In	6	6:6	1	79 : 0	0	63	64
C 0 s	Rifle Squad	Pinned	6	3:3	16	77 : 0	2	62	56
C 1 s	Rifle Squad	Pinned	6	4:4	10	78 : 0	1	59	60
C 2 s	Rifle Squad	Routed	6	0:0	72	80 : 0	5	62	61
C 3 s	Rifle Section	Routed	6	0:0	32	80 : 0	0	62	59
C 4 s	Rifle Section	Destroyed	6	0:0	82	80 : 0	20	56	68
D 0 s	Rifle Squad	Ready	6	5:5	5	77 : 0	0	53	56
D 1 s	Rifle Squad	Retreating	6	0:0	27	79 : 0	4	62	64
D 2 s	Rifle Squad	Routed	6	0:0	75	80 : 0	5	54	57
D 3 s	Rifle Section	Ready	6	6:6	3	79 : 0	0	61	59
D 4 s	Rifle Section	Ready	6	6:6	1	78 : 0	0	54	62
E 0 s	Rifle Section	Retreating	6	0:0	18	80 : 0	0	59	52
E 1 s	Rifle Squad	Pinned	6	4:4	10	80 : 0	0	56	63
E 2 s	Rifle Squad	Pinned	6	5:5	9	80 : 0	0	67	65
E 3 s	Rifle Section	Ready	6	6:6	3	80 : 0	0	52	55
E 4 s	Rifle Section	Ready	6	6:6	1	80 : 0	0	59	65
F 0 s	T-55QM	Destroyed	18	0:0	10	20 : 0	92	64	64
F 1 s	T-55QM	Destroyed	18	0:0	31	20 : 0	92	62	61
F 2 s	Crew	Routed	6	0:0	71	6 : 0	3	64	64
G 0 s	T-55QM	Destroyed	18	0:0	28	20 : 0	92	54	57
G 1 s	T-55QM	Destroyed	18	0:0	36	20 : 0	92	54	66
G 2 s	T-55QM	Destroyed	18	0:0	12	20 : 0	92	58	55
H 0 s	T-55QM	Destroyed	18	0:0	14	20 : 0	92	58	54

| EXIT | | NEXT |

This screen is available from game turn 1 onwards. It is used to show current details of all units. Press the unit button to jump directly to it on the game map. Only weapon 1's data is shown here. Red is generally bad news or off map, yellow for warning and white for OK with green for passengers. Destroyed units show their full points value, which will be credited to your opponent as part of the Victory Point Calculation at end game.

Maps and Terrain Types

Steel Panthers Maps
 Please remember...WinSPMBT is an entirely different game. **No** other SP series game's data will be usable here, you **cannot** move maps from SP2 over to the new 15 level, 200x160 hexes format.

All WinSPWW2 and WinSPMBT maps are interchangeable. Any WinSPWW2 map can be brought over to WinSPMBT and WinSPMBT maps can be used in WinSPWW2

Terrain Types

Impassable	Is impassable to vehicles, is very difficult for infantry types, less so for commandos, rangers. Represents either extremely rough terrain, or extremely steep and/or scree-covered slopes or cliffs (truly impassable terrain is not implementable, as it gives the AI path finding routines severe fits).
Sand Dunes	Difficult going for vehicles and infantry, there is a high breakdown (sticking) possibility for vehicles, *especially* 2WD trucks. The code is set up to penalize for speed. If you charge into a soft sand hex at the end of your movement allowance (and therefore at top speed) you will have a **MUCH** higher chance of bogging down than if you only move one or two hexes at the start of your turn. **HINT:** Ignore the movement radius shown in Sand Dunes (aka Soft Sand). That tells you the **Maximum** number of hexes you can move *IF YOU'RE LUCKY!* You can move them all if you want to but if you do, chances are your luck will not hold out for long. Avoid Soft sand with 2WD trucks unless you're desperate and keep the speed of tracked and 4WD vehicles to under 1/2 of the movement radius shown and most times you will get through OK. This is a trap for the unwary and the hasty player. We could simple lower the sticking chance and the number of hexes allowed but this way we give the gamblers the chance to gamble and win....or lose. Soft Sand will also reduce artillery effects slightly
Snowdrifts	Ski troop types less affected by snowdrifts, but snowmobiles can get stuck in this type though at a lower chance than regular vehicles. Vehicle Immobilisations are much more likely, especially for wheeled vehicles. These are *deep* drifts that are true obstacles, not the stuff of that has blown over your driveway. (See **HINT** above regarding vehicles in Sand Dunes) Snowdrifts will also reduce artillery effects slightly
Trenches	Fire Trenches provide cover (even if you moved) as for being dug in. Major obstacle to vehicles, which can be ditched trying to cross these, they are meant to represent wide fire trenches, not foxholes. Due to the ditching possibilities these can also be seem as a form of AT ditch. Ordinary foxholes protect only infantry, who will be counted as dug in if they start the move in such. The vehicle revetments and gun positions issued at the start of a battle can NOW

	be reoccupied. (WinSPMBT v102)
	NB, Some forts and bunkers may have a carry capacity, and hence provide shelter for 'passengers'.
Hedgerows	Represent major hedge obstacles with a substantial base, as in the Normandy Bocage, though also found elsewhere. A major obstacle to vehicles, which can be bogged down (stuck) crossing these. Good protection to stationary infantry, dug in infantry in these can be very difficult to shift!. Hedgerows can be made taller in the Map Editor by laying them again and again along the same track. Each application will raise the height of the hedgerow.
Paddy Fields	Are treated similar to marshes. Flooded paddy fields are less bad going to amphibious vehicles, which are less likely to stick in them as well, but still not good vehicle terrain at all for these. Paddies are a serious obstacle for all ground units, and are best avoided as they are prime ambush terrain. You do not want to get caught out in the middle of a paddy. Paddies that are not flooded can be represented by Mud, Tall Grass or Dry Tall Grass terrain's, depending on the season and condition of the paddy. Paddy fields will also reduce artillery effects slightly .
Mud	Mud is a serious obstacle to all, and vehicles have a high chance of being bogged down. This is not your minor mud puddle by the side of the road. This is thoroughly water-soaked ground due to flooding, heavy snow melt, torrential rains, monsoons and etc.. This is the stuff that stopped the Germans in the Soviet Union in WW2. Mud will also reduce artillery effects slightly
Volcanic sand	Effects are similar to soft sand. Wheeled and track vehicles have an increased immobilisation chance. Although provided mainly for Iwo Jima in WW2, this terrain type has possibilities for usage as light scree elsewhere (collection of rocks, small stones and grit that accumulates at the foot of a cliff).
Railway Track	Rail Track is not very good going for vehicles, but affects foot less so. Rail Track does negate the underlying terrain (mud, rough or marshland, say), so viewing a rail line as a poor quality road. As with roads, if damaged by shell holes, it is less good going than if undamaged.
Tram Lines	Treated as paved roads, mainly cosmetic therefore to be used in city maps for flavour.
Clear Terrain **Earth Types** **Short Grass types**	Green Grassy Plain, Bare Earth,Grass type 2,Red Earth, Grass Type 3, Leaves, Yellow Sand Desert,Dry Grassy Plain, Red Sand Desert, Beach sand or Grey Sand Desert (all also

Ground Cover

Sand Types

known as "Clear") are not obstacles to Movement, per se, though the off-road movement cost is decidedly higher for some Classes of movement, such as the "Wheeled Class" (two-wheel drive vehicles).

These terrains are relatively flat, but they are not considered flat as a billiard table either. There are plenty of minor ground fluctuations, tufts of grass, short ground cover, nooks or crannies for a determined trooper to hide behind and in.

Snow

Plain white snow terrain maps adds extra MP's to cross **all** terrain, including road movement cost.

Roads

Roads are metalled (grey) or dirt (brown). In dust conditions (Visibility above 75, summer or desert terrain), travel over dirt roads produces dust more quickly than on metalled roads. Dirt roads need less vehicle movement through a hex to produce dust trails, the amount of vehicle movement through hexes for dust production is cumulative.

Swamp

Swamp, Frozen Swamp and Marsh Wetland hexes not good going for any type, but especially for vehicles which can become stuck. Defending units cannot dig in here.
Swamp will also reduce artillery effects slightly.

Tall Grass

Tall Grass and Dry Tall Grass provide some LOS blocking at a low level, some protection for infantry within such hexes. In jungle maps this can be rather tall, representing bamboo, elephant grass and the like. Can also be low-lying scrub of any kind. for 2017 we have added a Dark tall weeds / brush- Shrubland / bushland terrain set representing late fall & winter heavy grass and dark coloured weeds and light bush /brush.This has the same effects on sighting and movement as other tall grass types.

	Dark tall weeds / brush- Shrubland / Bushland terrain set representing late fall - winter dark coloured weeds and light bush /brush.This has the same effects on sighting and movement as other tall grass types
Shell Holes	Shell holes provide some cover, but increase movement costs in damaged hexes.
Buildings	Buildings provide cover, especially if of stone construction. Vehicles can drive through building hexes, but may become broken down as they collapse. Collapsing buildings may cause casualties to infantry etc, but a collapsed building (rubble) hex is quite good cover, again stone rubble is better.
Trees **Mixed forest types** **Coniferous Types**	Summer Trees , Autumn Tress and Winter Trees -- all Wooded hexes block LOS to varying degrees, provide good cover but cost more MP to traverse, especially for vehicles. - Dense Coniferous Forests. These represent dense stands of uncultivated evergreen pine / fir / spruce etc. and further reduce movement and visibility over and above standard mixed forest
Orchards **Vineyards** **Coconut plantations**	Orchards are lower height, lower density wooded areas, and block LOS less than regular woods. Can also be used for urban treed areas which are mostly cleared. -Vineyards are low height, low density areas which block LOS similar to tall grass but because vineyards make extensive use of wire these slow movement for vehicles and hamper infantry movement - Coconut plantations block LOS less than orchards as the obstructing foliage is higher up . Movement is slighly hampered
Frozen Ground **Very light snow over frozen ground**	

Light snow	Both light snow and Very light snow / frozen ground represent two varying degrees of early snowfall covering frozen ground. Both are treated like clear terrain for movement and sighting purposes. Mainly cosmetic

Water	
Shallow Water **Deep Water**	Full hexes of water can represent canals, lakes, wide rivers or the ocean. Where the height is shown as -1, troops may wade through such at increased move cost, though non amphibious vehicles may become ditched trying this. Barges (landing craft) may offload in shallow water, though then the passengers will then have to wade ashore. Vehicles (and infantry types) with swim ability traverse water at 1 hex per swim point.

Bridges	
	Bridges negate the terrain below them, usually water obstacles. Stone bridges are tougher than wooden ones, needing hits from larger calibre artillery or bombs etc. Dropping a bridge segment kills any elements currently stacked on it (enemy or friendly). Rail bridges cost a bit more than road in terms of move cost. In some lesser developed areas dirt roads may cross water by fords rather than wooden bridges. Occasionally the wooden bridge or ford may have been washed out, with areas of swamp etc around the ford.

Fields	
	All farm fields provide some low level LOS cover for infantry & etc, especially if standing wheat crops. Fields cost a few more move points to cross for vehicles. The types of fields are: Yellow Crops, Green Crops, Winter Field, Ploughed Field, Snow-Covered Field and Crop Stubble in Early/Late Winter. Bare Fields represent either freshly planted fields or freashly harvested ones and have no special movement of LOS restrictions

Rough	
	Rough terrain costs more MP to traverse, but provides excellent cover, especially for infantry. Represents broken or rock strewn terrain. You may find generated maps with dried up

river beds, chiefly of rough but sometimes with marshy spots. Desert maps can have Wadis, wide areas or gullies filled with rough terrain. There are rough terrain tiles for each of the different soil types represented in the game.

| **Paved** | Pavement, Stone cobblestones and Brick Cobblestones are found around buildings, also in city grids. Acts like road terrain. These three terrain types are **ONLY** available on ground level. They **CANNOT** be placed on hills |

| **Streams** | These represent drainage ditches or small linear water obstacles. Streams cost a lot of MP to cross, and are a ditching risk for vehicles. Streams may have muddy or marshy banks, such banks tend to be worse sticking risks. Streams may have more fordable parts, if you hover the mouse over a ford (-1 height river) it will tell you. Fords are deliberately not given a special terrain hex marker as they are generally difficult to find with exactitude on the ground. Movement cost is less through a ford, as is bogging down chance. Still, not a good idea to blast through at full speed!. |

| **Slopes** | Slope hexes cost 1 MP to traverse over the base terrain type when moving to a higher level. No cost is incured when moving to a lower level |

| **Fire** | Fires may start in some terrain types, this causes suppression especially to soft troops, and can cause casualties to infantry, guns etc. Large fires (e.g. caused by napalm or flame throwers) is worse than small fires. |

| **Wrecks** | Vehicle wrecks provide some LOS block, but they count like normal units to stacking costs, each unit or wreck in a traversed hex deducts 1 MP. |

| **Visibility** | If scenario visibility is high, then LOS can penetrate deeper into forests, grasslands, standing crops, light smoke and so forth. When visibility is high (above 75) in high summer months, or in desert or snow terrain, then vehicle movement can raise dust or disturbed snow trails. Low visibility under 10 or so hexes especially, affects air strike accuracy unless fitted with night vision, and causes more glider and paratroop landing accidents. |

With all bad terrain, the faster the vehicle has traveled before hitting this, or the more MP expended whilst in such terrain, the greater the sticking chance.

Aircraft ignore underlying terrain, except when helicopters try to offload passengers in some hexes, woods and buildings.

Helicopters expend MP to climb or descend.

Paratroops landing in terrain other than flat or easy going types tend to suffer more landing accident casualties than normal. Trained paratroopers (proper Para Unit Classes) suffer less accidental casualties on landing in any terrain than ordinary non para trained troops. Troops air landing in deep water tend to drown, as do gliders landing in deep water. Gliders landing in obstacle type terrain tend to get smashed up, destroying themselves and passengers, try not

to land gliders in woods, buildings and so on. Para and glider landing zones therefore should be plotted in large flat areas of open ground.

Terrain, hills and LOS

Each level of hill in the game is broken down into 10 units. Ground level terrain that is "5" high is midway to being a level 1 hill. Level 1 terrain that reports as being "15" high is midway to being a level 2 hill etc, etc to the top level (level 15)

The game does not block LOS behind a "bump" in the map until it gets to be 4 higher than the base height for that level (ground level would be 4, level 1 would be 14, level 2 would be 24 etc etc.). It will allow you to see over and behind any "bump" 3 and under so any terrain 3 and under above the level you are on will offer neither cover nor concealment.

For example.....

If a unit is at zero height directly behind a 4 high "bump" that is three hexes long , LOS will be blocked for 2 hexes behind the bump. If that 4 high bump is 4 hexes long, LOS will be blocked completely right across the map. If the bump is 5 high even one hex will totally block LOS.

We are currently considering that each unit of height roughly represents 24 inches or .6 meters. As a simple rule of thumb this would make each hill level represent roughly 20 feet or 6 meters of height

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Saving a Game and loading a Save game

If you partially play out a game you'll want to save it for later . Click on the save game button and you will be brought to this screen

Pick a slot and click on it. You will see a red rectangle appear (as above-- SaveGame-1 (empty)) you can backspace to remove some or all of the text that appears and enter in your own name for your save.

Below is the central game screen. The first button you see on the left side of the screen is the Saved Games button. This is where you load the games you have saved. In WinSPMBT this one button now servers three save game screens, each with a different purpose.
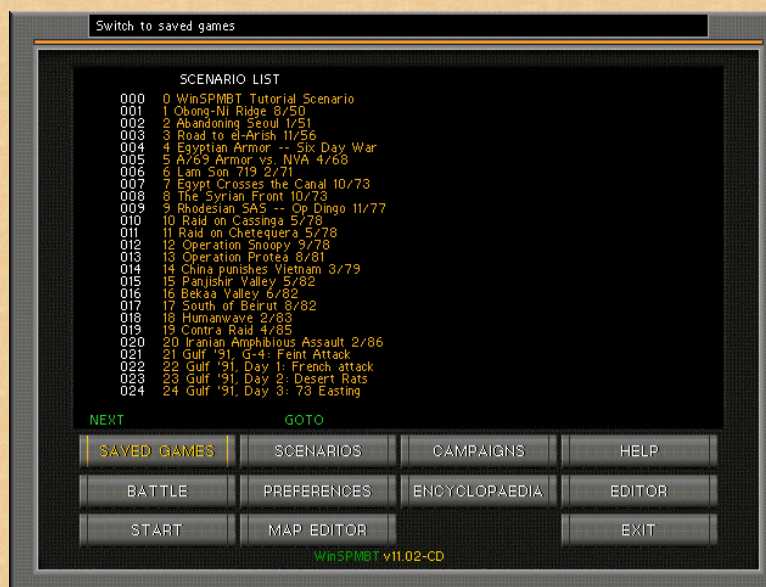
The first time you click on the Saved Games button from the Central screen you will see this:
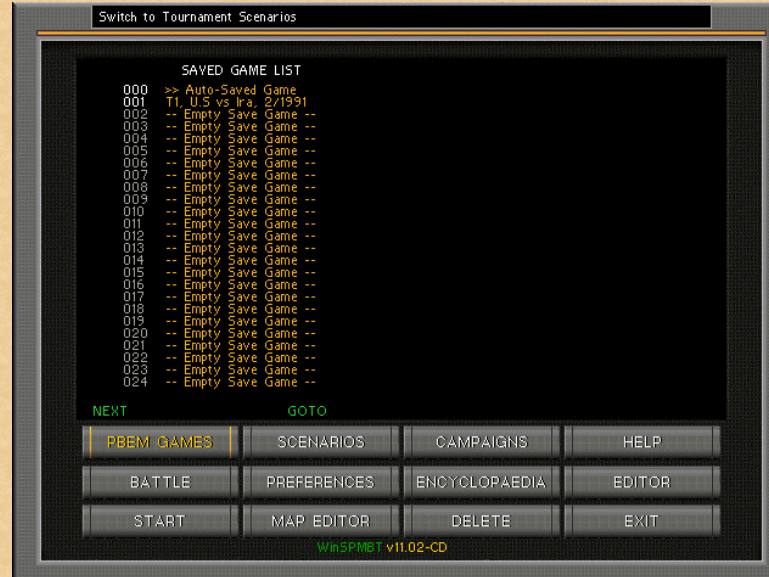
This is where you load the saved games of regular generated Battles, scenarios, campaigns or NON-Secure PBEM games .

NOTE: Regular games are now autosaved the the end of each turn in the 000 slot rather than in slot 005 as has been the case in the past

If you click on the "PBEM GAMES" button you will see this screen with the regular game
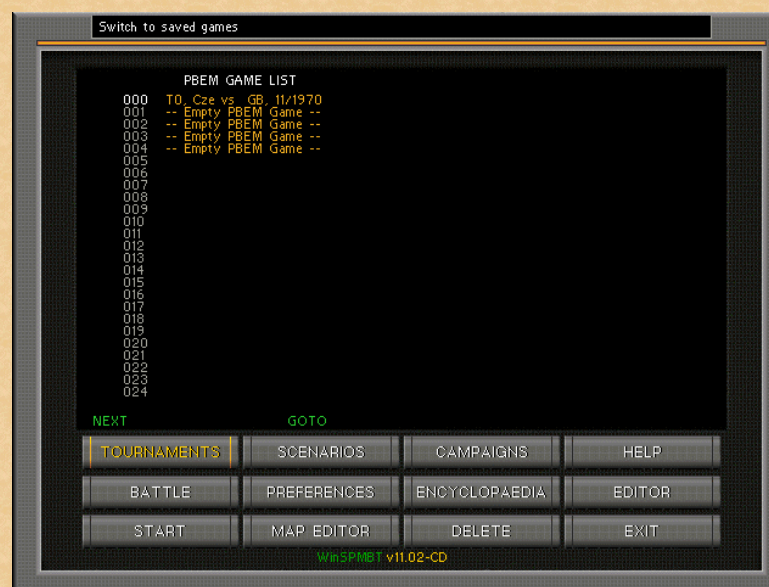
PLEASE NOTE IN THE FREE DOWNLOAD THERE ARE ONLY five secure PBEM slots .

This is where you load Secure PBEM games. All .Dat files saved here are encrypted to keep people from reading the contents of the .Dat file and thereby revealing the troops you have. Once you choose a save slot for secure PBEM, games are automatically saved to that slot after every turn

If you have the extended version of the game available on CD from Shrapnel Games you will see the button now reads "Tournaments".

Game Ending

The game ends at about the number of turns given for a game or scenario. Consider the number of game turns an **indicator** only, except for PBEM games and scenarios. The game will end early if one side is thoroughly routed, or completely destroyed, and the other side has gained all the victory hexes. The game (apart from PBEM games and scenarios) will end if the number of turns has been met, check the objectives held and grant victory, but it first makes an 'engagement check' to see if healthy forces of the enemy are reasonably close to any disputed hexes. If it decides the objective is in dispute, it can add extra turns onto the notional game length. This is an added feature, please do not write in reporting this as a bug, it is not, it is a design feature.

End Game Map Review

The added features we have coded into the game require new reports on the End Game screen for the 2013 release.

Players will now see the standard score as well as how many points, if any ,were accumulated for either artillery overload or time objective points and then they will see the total score in Gold which includes the totals of the standard score plus the artillery overload and/or time objective points.

The victory screen that appear at the very end of the game uses the total score to determine victory level but player could choose to simply record the standard score points to determine who won and my how much.

We have added an additional button to allow you to view the map as it stands at the end game, viewing both players' units.
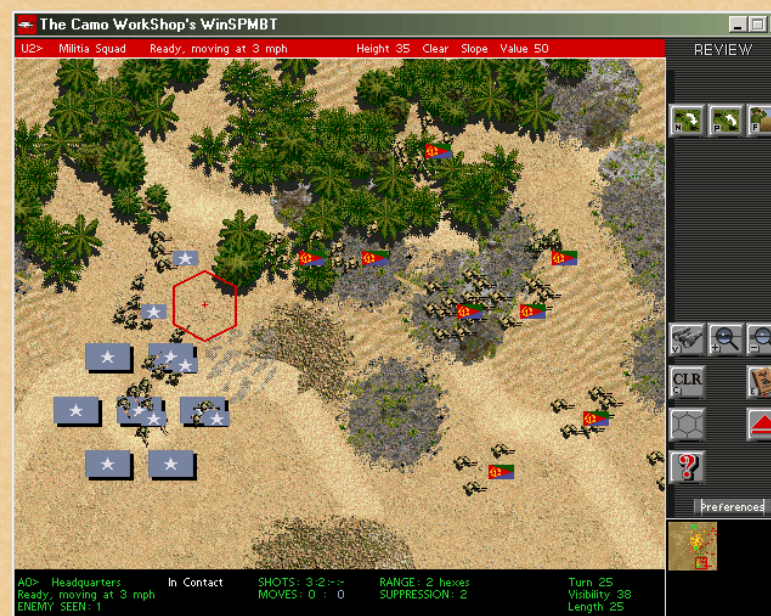
"REVIEW' is shown at the top of the map, your opponent's units and minefields are all now displayed (note the mass of red symbols on the right of the mini map). You can select enemy units and view their stats, the next and previous keys will cycle you through the side you have chosen, so if the Somali player here selects a Eritrea unit, it will cycle through the Eritreans as and until he re-selects another Somali unit.

If you open up a 'finished' save game you will be able to see the end game display, however if this is a PBEM game, please remember to zip up the game files and send to your opponent **before re-opening the save** game to gloat over it <G!>, as otherwise the game can 'forget' who was playing who for the purposes of the end game messages.

Scoring (winning and losing)

Your victory point score is calculated as: VP = (Total points from objectives) + (damage points scored on the enemy)

Your opponent gets the same calculation but obviously scores off your destroyed and damaged units, plus his victory hex points.

The 2 sets of VP are expressed as a ratio to determine victory. The victory result is then determined as follows

- **decisive victory** - your ratio of points is 8 times the enemy's or greater
- **minor victory** - your ratio of points is 2 times but less than 8 times the enemy's score
- **draw** - whenever either side scores less than 2 times against the other side.
- **minor loss** - your opponent scored a minor victory over you
- **decisive defeat** - your opponent scored a decisive victory over you

Please note that partially damaged units count, so if you do 23 points damage on a 100 point AFV, your score 23 for that damage.

The objective hexes are a bonus and are generally **NOT** the main source of victory points. They DO however help determine the early end of game in that a "broken" AI will tend to throw in the towel if you hold all of them.

Also please note that crews are shown as 0 value. This is for accounting purposes. They are worth the remaining value of their damaged vehicle. Crews are not "free scouts"! as losing the crew gifts any remaining points in the damaged unit they came from to your opponent.

Playing a Scenario

 A scenario is a pre made game, ready to play authored by someone else (it could be you!) in the Game Editor.

If you have not yet read how to play a normal game, refer to **In-Game Play** for how to play, and read all sections between there and here. Also, read the Tutorial section, and preferably, play through the tutorial scenario.

When you select the scenario page on the main menu (this is the default game entry) you will see a list of the available scenarios, there can be up to 999 of these, so use the next and previous buttons on the screen to scroll through them.

When a designer creates a scenario, he can produce an explanatory text for this, if so, it will be displayed to the right of the screen, and if there is a lot of text you will be able to scroll through the scenario description. Read this, as the scenario designer may have important information in there, for example he may have set the scenario up only to be played by one side as the human, the other always as the computer. Or he may have designed this scenario to be played between two humans, in this case the balance of the game will likely be poor if played with one side as the computer, as it has insufficient advantage over the human in terms of points, say. Or, he may have some suggestions as to which reality settings to use for this game, using different ones may destroy the scenario balance. (See the **preferences** screen for how to set preferences).

He may also note which version of the OOB files should be used, for example he may have designed using a custom set. **Important note**: using different OOB files from those the designer used can have unpredictable effects!

The designer may also give you some hints as to how to achieve victory conditions, as the maker of a scenario can alter the victory points achieved for taking objectives, or even the game pieces themselves. For example in a convoy scenario, do not be surprised if the designer has made your trucks worth say 300 victory points each, and not the regular 3 or 4 points, for these items will in this case be items to keep preserved from loss.

The designer of the scenario makes all the decisions about forces available for all sides, their placement, reinforcements and so forth. He can edit individual game pieces as well. Do not be surprised if the game starts with a pre game bombardment that he has programmed in, both artillery and air strikes.

Note also that the scenario designer decides the type of battle, just because your mission in a scenario is an 'advance', the scenario designer may have deployed the AI forces dug in.

Your input here is to choose sides, unless the designer has stated for the human not to play one particular side, and then play through the situation the designer has made for you.

Scenarios are available in many places on the net, such as at the Wargamer **www.wargamer.com** , or at the many other Steel Panthers and wargames sites available on the net, do a web search on 'Steel AND Panthers AND scenario' (read your search engine help to see how to do an AND search, otherwise you will get lots of sites on metallurgy!).

Playing a Campaign

In a **campaign**, you select a starting core force of units, and command these, with the help of support forces, through a series of battles. As you progress, your core troops will gain experience, and you may be able to purchase better equipment for them as time progresses, and success brings you purchase points to repair or upgrade your veteran troops.

In WinSPMBT there are now **3** campaign types.

The **campaign generator**. Here, you chose your nationality, up to 3 opponent nations, start time and number of battles, and terrain category. Although seemingly limited, this engine is good for a short campaign on a particular theme.

A **PBEM campaign** 🆕.This allows two players to PBEM a 3 - 21 game campaign. This feature is only available on the CD version of the game. Click **HERE** for further details

User designed linked scenario campaigns. Here a scenario designer links a series of scenario games to cover a specific campaign. In this game we provide a campaign editor, but unlike the one in SP3 , which was restricted to a dozen or so battles in a linear sequence, ours allows multiple campaign threads depending on the result of the last battle. Unlike in SP1 and SP2, where campaigns were written into the code, you can design campaigns of your own.
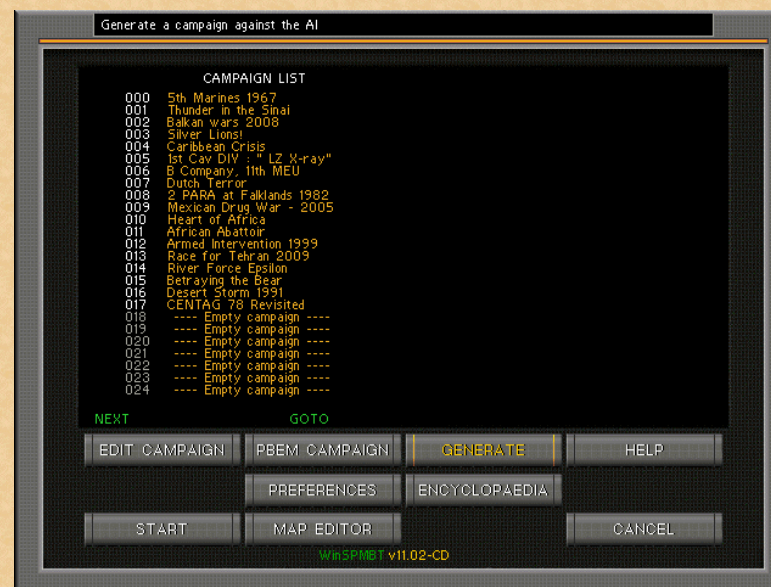
When you choose the campaigns button on the main screen the display changes to one as shown above.

Encyclopaedia will take you temporarily to the encyclopaedia screen.

Help will bring up the in game help text.

Preferences will take you to the preferences screen.

Cancel will return you to the main screen.

Generate will take you to the campaign generator screen

PBEM Campaign will take you to the PBEM Campaign screen if you have the CD version of the game

Edit Campaign will take you to the Scripted Campaign editor.

Start will run the selected user linked scenario campaign on the campaign list shown here. There can be up to 999 Scripted Campaigns in the list, these are linked scenario situations created by scenario designers, or yourself, via the campaign editor. Use the next and previous buttons to scroll the list. Explanatory text comes up in the centre of the screen.

Generate Campaign

This screen generates an SP2 type random campaign where you select the nation you wish to play, time frame, approximate number of battles and up to 3 historical opponents. Select **Default Map** to use the **Camo Workshop** generated battle locations for the appropriate opponent pairs, or one of the 'generic' terrain types if you wish say always to fight on the plains or in forests. Be careful not to use an enemy or friendly force beyond or before it historically appears. This generator does not perform much of a 'sanity check' as it is for what ifs or for fighting in a specific small sub section of the war, really, or to play 'what if' campaigns.

Player 2 will be your primary opponent, you will see more of that nation, less of player 3 and less battles against player 4. Player 2,3, and 4 can be the same or differ at your whim, but selecting out of area opponents will give you a ping pong type campaign where you may be say, fighting on the North German Plain one battle, and in deepest Vietnam the next (USSR with VC in your opponent list, say!).

Default, you can select only a terrain type of a limited type, but this is highly not recommended as the **Camo Workshop** battle location code is designed to generate different battle locations, for example, the USSR versus the Mujadeen between 1979 and 1988 will produce historically appropriate locations, taken from the chronology in Lester W Grau's book 'The Bear Went Over The Mountain', USA versus the Warsaw pact generates Southern German and Bavarian battle locations, UK vs the Warsaw Pact in Northern Germany.

Note that the number of battles selected for the time available affects the 'jump' between battle dates, selection say UK plays USA with start of 1946 and end date 2025 with 10 battles, will have skips of several years between battles more than likely, with the AI forces buying new up to date equipment each time, but your core having to upgrade antique kit from the buy points you earn. However, maybe 15 battles in a given single month long campaign would truly reflect a Warsaw Pact vs NATO hypothetical WW3 scenario!.

Campaign Difficulty Level setting. This toggles between various difficulty settings to allow you to set the campaign more to your liking, here it is set to **'harder'**, with a reduction in 10% to the amount of buy/repair points you will be allocated after a successful battle. (Does not apply to Scripted Campaigns as these are set by the designer of each such campaign)

Important Note, the date maxima and minima are 'locked' by the maximum and minimum date of the short timer nations, if any are selected as one of the 4 participants. For example, if one of the 4 is an OOB that stops in 1967, then the end date will not advance beyond 1967. The default pair of UK and USSR are both 'long timer' OOB, it is best to set your campaign time using 2 long timer nations so that all eras may be selected, and then, once you have determined the campaign date, select your opponents and player nation. National flags will turn on and off and change graphic as you change the date, if a flag is not present, you have gone beyond that short timer nation's start or end date.

NEW in WinSPMBT Version 3.0

The following line can be added to the CamoGame.ini if players wish to allow the AI to be given more or less points in a campaign

```
; Option to adjust the player 2 (AI) points allowed. 0 is ignored. 100 = 100% 200=doubled

AIAdjustPercent=100;
```

This **MUST** be copied exactly as you see here (two lines of code) **and it must be the last line of the INI**. This **MUST** be copied using a text editor like NOTEPAD

If the variable is not in the INI, or is 0, it is treated as 100% so is you do not enter this the game behaves normally

This allows campaign players the ability to adjust the AI force level by a percentage if they want. If it is set that to 125 you will get a 25% boost in the AI's points allocation, 50 and it is halved, 200 would be double the points for the AI This was prompted by a request by a player and this is to allow players such as him to make campaigns much harder if they so wish. This ONLY affects campaign games. It has no effect on regular battles.

HOW EXPERIENCE IS GAINED IN CAMPAIGNS

You get time-based experience for surviving a battle. Kill experience makes experience tend to go up faster (esp first 5 kills) is all. Simply having hit a target helps experience gain, as does merely having fired weapons at an enemy in the previous campaign game. "Kills" are simply gravy in the experience check and not the only thing considered.

You get experience for calling in arty fire - and your arty skill will go up, so you call fires faster and it is definately worth having core FOOS. Buying them just after the A0 as B0 makes it easier to find on the units screen, or a quick "N" when it becomes your turn, to move from the A0 and plot.

Playing Scripted Campaigns
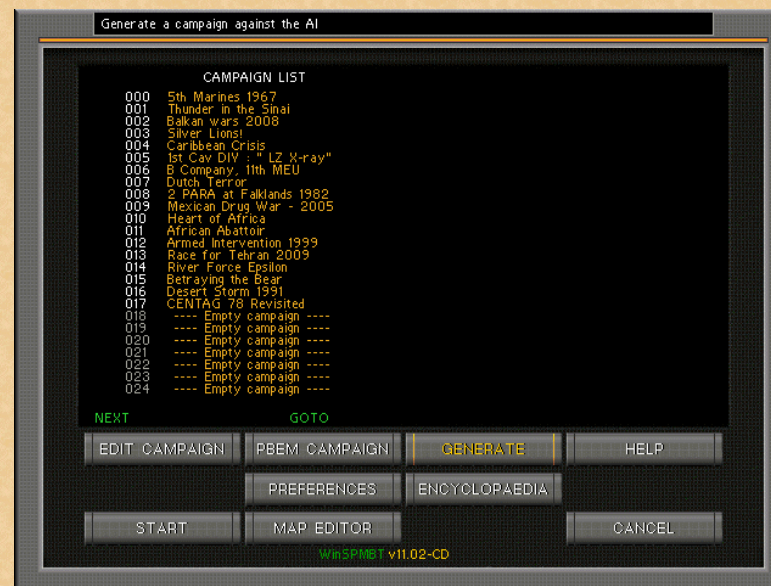
Select the desired Scripted Campaign from the list on the left, then press **start**, just like playing a scenario battle. You have no input as to force or nation selection, just in buying your core. Note that the designer can write a 'locked'

Scripted Campaign, where the upgrade and support and core points are not able to be overwritten by the user preferences you have set, he should make you aware of this fact in the campaign intro text that appears in the centre of the screen on selecting the campaign list item.

If the points are locked, this helps the designer to ensure that if he designed for say a 400 point core at the start, then users cannot ruin the campaign by deliberately starting with say a 2000 point core to have a 'cake walk' i.e. To deliberately wreck the campaign balance. (Since the scenario forces are fixed, unlike in the generated campaign games where the force is chosen per battle as a ratio of your core plus support troop points).

Note that the designer can write the messages on each exit condition for each battle, and introductory text for each scenario. Pay attention to these messages as they could convey useful information. Also note that in Scripted Campaigns, the victory points left remaining unspent at the campaign end may be part of the overall victory allocation as well as the number of decisive victories, drawn battles and so forth, to further reward skillful players who do not suffer massive losses that require massive repair, and who do not spend too much on upgrades or new forces. The scenario designer will note this in the introductory text for the campaign, if it applies.

Campaign Games, General Points

The repair and upgrade screen appears at the end of every completed battle, but it does not appear after special battles, counter attacks and so forth, which you must fight with your core in its battered condition, but special battles are better to win, your core troops gain more experience from these, and you get more buy points.

Now, in **The Camo Workshop** campaigns, you do not repair and upgrade your core forces at the end of the last battle unlike in SP1 and SP2, you upgrade and repair as part of the start process of the **new** battle. Thus, *unlike* before, you are buying kit which is in date for the battle, and not possibly having bought old stuff being transported forward in time with outdated stuff. (The WW2 long campaigns could jump over long inactive periods, e.g. Germany from France 40 to N Africa 41, less of a problem with the post war historic long campaigns, when implemented).

The repair screen has been upgraded. Your true force value is shown, remember that a veteran core force tiger 1 at say 110 experience will be worth *much* more than the book value of a tiger just bought at 70 experience points. The encyclopaedia points values are only valid for 70 experience crews!

The **time line** is shown on screen to give you an idea of when you are at in the war.

Fix all, fixes all units, as before, should you have enough repair points.

Fix, fixes units individually. Best used when you are high on casualties and low on repair points

Change, as before, but with enhancements. The upgrade paths for campaigns have been changed, and some troop types are allowed to 'cross over' the boundaries, unlike before. For example, a howitzer can become a SP gun, and an SP gun, being an armoured type, can be transformed to a tank. So a tank can become a SP gun, then an anti tank gun, should you so desire. Aircraft types are **not** allowed in cores. Helicopters are.

Review, this allows you to bring up the in game statistics screen for a unit so you can look at its data, and also change its leader's name and so on.

Expand Core, you can now spend repair points on buying new forces to expand your core. There is no longer any requirement to buy a load of cheap armoured cars or trucks etc, to hide in the rear and upgrade to 'real' combat units later. Buy a core that can contribute from battle 1, and add new recruits later.

Map/Preferences, Clicking this button allows you access to the preferences screen between games. This is where you can change the map siz you are using if find you want to play on a bigger or smaller map

Encyclopaedia, new, to let you refer to this in this phase.

One point that needs explaining, when you change a unit it tends to **lose** several valuable experience points as this equipment is considered new to it. If you change a unit several times in one session, you have sent it away on far too many conversion courses, and it will be dazed and confused by all those instructors, so lose experience several times! Moral : only change a unit once in this screen, do not run around changing your mind, you will also lose the buy points as well. Remember that experience gain is **not linear** in campaigns, low experience goes up relatively quickly, but higher experience is hard won. It can therefore be a very bad thing to upgrade your best troops after each and every battle, as they may not have regained the points lost in upgrading for several battles to come. If you are unsure about which troop types can change over (and the path) - save a game and simply experiment here, then return. However, we find the expand core function has removed the old need to radically change say 20 odds jeeps bought at start up into MBT, as in the original system you were locked to only the originally bought unit numbers. It is usually

easier to buy a new tank platoon, if you need tanks added to the core.

Special campaign battles, at the end of the game, you may be ordered to counterattack, and sometimes you are allowed to decline, sometimes you are not. Also, the enemy may counterattack you, and again you may not be given the option to avoid this. In a special battle, you do not get the opportunity to repair and upgrade, nor will you get as much support points. The gain in winning such a battle is that you get a larger handout of experience points and also build points at the successful conclusion of the special battle. The extra chance of experience can be vital if your core is mainly very high (100+) experience veterans, as these will usually progress upwards at a slower rate. But remember that you will have damaged units in play, you may wish to leave these 'cripples' on your base line perhaps so that they do not get wiped out, for example any rifle squads depleted down to 2 or 3 men, especially veterans.

Air strikes and battle points in scenarios, Air strike preference is totally ignored by all scenario games, and is determined internally, the air strike preference value is reset to XXX on starting any campaign type game (including continuing with a saved game). For non Scripted Campaign campaign games, the preferences buy points for player 1 are used as the total max buy for your initial core, and are then reset to XXX for both players before your support troop purchase in any campaign game set up. Therefore the AI buy is always in the correct ratio to the value of your core plus any support troops bought, you need not spend all the support points if you do not want to, for example in a defend scenario, every support point you spend will grant the AI 2.5 times the amount spent, a 200 point rifle company bought by you in support in the defence grants the compute 500 purchase points.

Scripted Campaign points are determined by the designer, he may 'lock down' the initial buy points, as well as determining the support points for and buy points rewarded for each battle scenario node. In a Scripted Campaign, air strike determination can be entirely decided by the designer, or left to use the normal determination.

Experience is hard won, protect your experienced men.

Continuing a Campaign

You save campaigns in normal save game slots. Simply open up a previously saved Campaign Game to continue from where you left off.
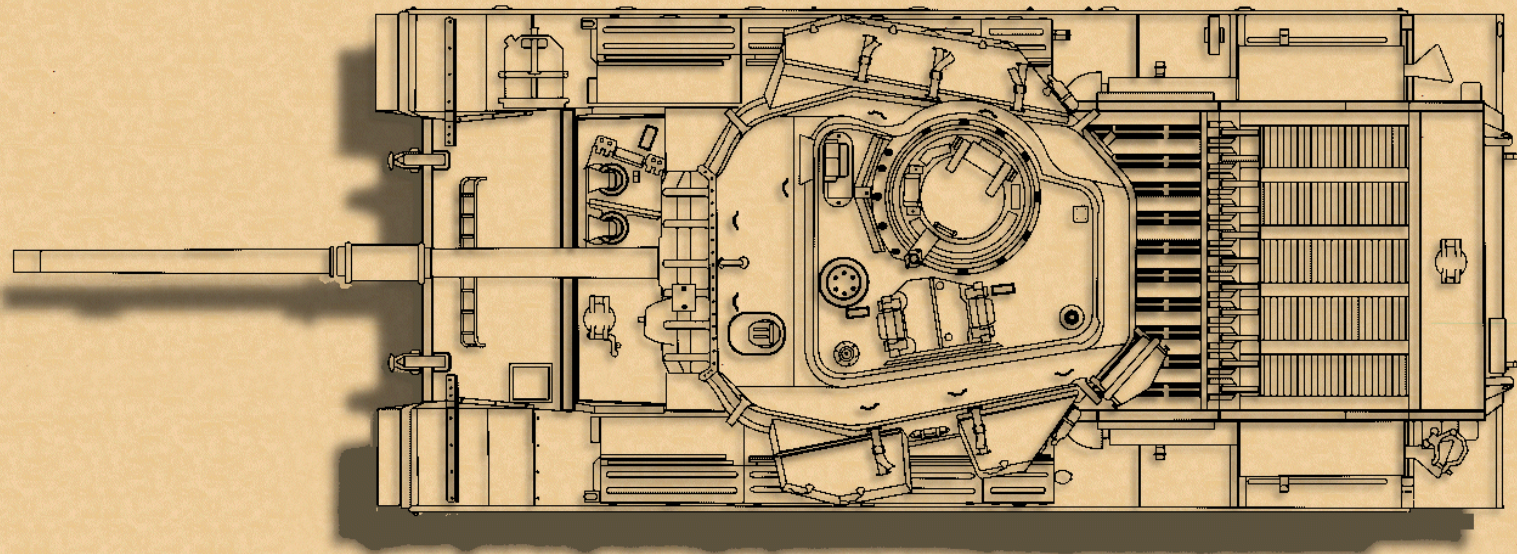
Playing By EMAIL (PBEM), or Against Another Human

You can play another human player, either remotely (via EMAIL) or on the same PC ('head to head' or 'hot seat' play).

There are **3** versions of PBEM, **Secure** , **BASIC secure** and **Unsecure**. The difference is that for a secure game, you **enter a security password**, and for an unsecure game, you do **not** enter a password. That is it, but a secure game has a few extra implications which we will touch upon later.

A secure game is used to play another person, usually remotely via an exchange of EMAIL, or is useful in a head to head game on the same PC if your friend and yourself need a 'no peek' game as the game is to be played over several visits to your place by your opponent. By using a password, the owner of the PC cannot sneak a look when his opponent has left.

An unsecured game, *without* a password, remember, is useful mainly for a local head to head session where the 2 players will be together through the entire session, e.g. a game done in one evening. Unsecured games can be sent via EMAIL as well, should you trust your opponent not to sneak a peek! An unsecured game can be saved in any of the regular game save slots. An unsecured game can be saved in several slots, should you so wish, just like a normal game against the AI. An unsecured game is similar to the original Steel Panthers II PBEM, where you can reload and replay turns to your heart's content, change preferences from the agreed settings and so forth. Unsecured games are really therefore only for use against someone you trust!.

PBEM pre-game negotiations

Both players should agree the "rules" beforehand. These usually relate to informal agreements not to buy certain items, or to restrict the buy of some item or other. For example you both may agree not to buy any aircraft. Or only to buy a maximum of say 3 tubes of indirect artillery per company HQ bought. Or to not buy any units with Thermal Imaging. Agree the use of the ALLIES or CAPTURED items and any limits on this feature. Or agree that anything goes.

Agree these things beforehand, or you may find yourself playing against an opponent who buys tons of artillery, some spotters, and hordes of infantry AT weapons and snipers or some other completely ahistorical and unbelievable mix.

Negotiate the 2 main opponents, the battle type, battle date, purchase point level, general visibility and general length of the battle. Player 1 will need to know this to set up the game.

Secure PBEM pre-game negotiations

The main point to note here is that in a secure PBEM session, (**BOTH regular AND Basic**) both players must use the **exact same** secure PBEM game slot. Therefore as part of the pre-game negotiations both of you need to agree the save slot to be used. Note that the downloaded game has only the original 5 secure PBEM save game slots, so If either player only has the downloaded version then the number of slot choices is restricted.

A secure PBEM game also saves and enforces the mutually agreed **preferences** for the game session. Part of the pre-game negotiation should be what preferences settings you will be using.

A regular secure PBEM game also requires that the exact same OOB files be used by both players. A Basic secure PBEM does not.This is mentioned below, in more detail.

<div style="border:1px solid #000;">

Online PBEM Clubs

One of the strengths of WinSPWW2 and WinSPMBT is the ability to play a PBEM game against another human.

The following online clubs support PBEM and include WinSPWW2/WinSPMBT active ladders.

The Blitz Wargaming Club **http://www.theblitz.org/**

As well you can find players for winSPWW2 PBEM at our Forum at Shrapnel Games **HERE** under the "Opponents Wanted" section

</div>

Transmission of Files to Your Opponent (Remote Games-Unsecured)

Non secure games are saved in the [WinSPMBT]\Saved Games folder. Secure games are stored in [WinSPMBT]\PBEM Games

Non Secure PBEM
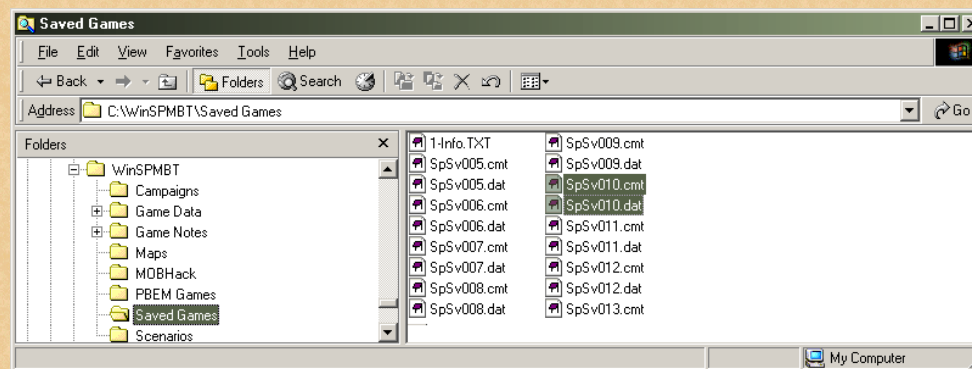
Each game consists of 2 files, spsvNNN.dat, spsvNNN.cmt. These files **MUST** be transmitted to your opponent **as a group**!

<div style="border:1px solid #000;">

PLEASE NOTE

DO NOT UNDER ANY CIRCUMSTANCES SEND YOUR OPPONENT THE FILE NAMED "PBEMRegistry.dat"

THAT IS YOUR COMPUTERS RECORD OF WHAT PBEM GAMES ARE BEING PLAYED IN THE VARIOUS SLOTS AVAILABLE !

</div>

It is best to open a windows explorer session and to navigate to the \save directory, ensure that you use 'view/arrange icons/by name', this will keep the files grouped together by filename, thus making your task of selecting the correct set of 3 easier.. Here we select game number 10 but, since the files are indexed from 0 (**zero**), this is the **11th** save game slot in the actual game, remember to **deduct** 1 from the number used by WinSPMBT. Ensure that explorer is set up to always show the extension of files as well.

Of course, it can be difficult to decide which game *is* the correct one, note that I have associated the cmt files with **notepad** using the normal windows procedure to do so. You can then simply open the **cmt** file by double clicking on it as it will contain the game title, **never edit this**, just look at it! (on the first time, if necessary, associate the cmt extension with Notepad in Windows when the program type dialogue comes up) Also, note that I have set explorer to show all

extensions, not to hide these, again, normal windows stuff, see your windows help file if unsure.
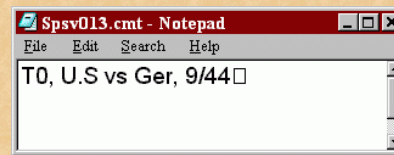
These 2 files are what we transfer to the other player, however, these can be rather large, and so it is best to zip these up using **WINZIP**, ensure that both of you **use the same file compression utility**, whichever you choose (negotiate this between yourselves as part of your battle setup emails). Winzip comes on the front cover CD ROMS of most decent computer magazines usually under the utilities section. It is the premier zip package, also at **www.winzip.com**. With winzip installed, there is a right mouse click extension to zip the files, select the 3, right click with mouse, select zip and enter a file name.

In case of crashes, it is a very good idea to keep **all** your zipped up moves for the entire game until it is completed, in case you find you require to retransmit a move to an opponent who has corrupted his move. Therefore, for each game it is useful to use a standardised zip file naming convention. I tend to use gamenameNNN.zip, where NNN is the move number, so DonUSAGE194400.zip would be my setup initial move, DonUSAGE194401.zip would be move number 1 after deployment and setup (the 0 move, remember!). I tend to put who I am playing, the 2 nations (player 1 on the left) and date in the name bit, to help tell the zips apart. I keep all the moves sent to me by my opponent as well to aid in any disaster recovery, as if I keep his then should he make a mistake (say he deleted one on his PC), I have the backup on mine. Once you have finished the game, then delete the zips.

PBEM (or Head to Head) Procedure

Set up a generated battle the following way:

This looks just like a normal battle versus a computer, but note that ALL the settings buttons are set to human player. (It is possible to set up with computer purchase etc, but in most human versus human play, both will want to buy and deploy without the computer's help). In any case, in a human plays human game, the setting for 'computer purchase' is *ignored* by the game for player number 2. So it really is best left at *human* for all of the 6 buttons.

For a **scenario** which one wants to play human versus human, just start the scenario and set both players as human, then continue as for a normal battle generator game, but there will be **no** purchase **or** deployment as this is already taken care of in the scenario design. You just exchange files for password (if secure) or start (if unsecure).

Player number 1 is responsible for setting the pre game settings, battle type, map size, number of turns, date and visibility and so on. In **especial**, he is responsible for setting up the **preferences** screen to what the 2 players have mutually agreed before the game. Is a secure game, the in-game preferences will be updated to those for the PBEM game just loaded. You may therefore need to reset these if you want to play another game in the same session ither manually, or by exiting and restarting. Unsecure games do not save the preferences settings, so the 2 players should take care to set these up properly, if they are different to what is normally set on the PC, before starting an unsecure PBEM game.

Player 1 now hits the **continue** button when he is satisfied with the set up parameters and continues to the normal buy screen where he now buys his toys. Once he has done this, he hits the **done** button in the purchase menu, just like for a game against the AI. However unlike a game against the computer, he now sees the password entry screen:

Enter a Security Password (+ENTER) THEN press Continue for a SECURE PBEM game

SECURITY MENU
Canada Player

Password

Continue

PASSWORD:

OK, this is where a secure and an unsecure game **diverge**.

A)- For a **secure** game, you **enter a password** here. Press the password button, then type in your desired game password and press 'enter'. Once a Password has been entered a new button will appear. "Full Security" is the default and if that is what you want press **Continue** now. If, however, your wish to play your PBEM with the new BASIC PBEM Security then press this button once and it will change to read "Basic Security". If that is what you want press **Continue.** (The password will be shown in the box at the base of the screen, it may be a good idea to write this down in case you later forget it!). If you do not like the password or made an error - pressing **password** again lets you edit it.

For more information on BASIC security click **HERE**

PBEM Security Mode is FULL - press to change

SECURITY MENU
Canada Player

Password

Full Security

Continue

PASSWORD: ????

or B), For an **unsecure** game, just press the **continue** button at this point and go on **without a password having been entered.**

It is this action by *player 1* which determines if the game will be **secure** or **unsecure**, if secure (player 1 entered a password) then player 2 will be presented with the password entry screen, if not, player 2 will **not** see the password entry screen.

Now, player 1 will see the save game screen.

If this is an **unsecure** game (you never entered a password, recall!), then you can use any of the normal save game, like a regular game. (Slot 1 is the **auto save** game slot, including non secured games. Do not save here!). As an unsecure game, you can save later saves to any legal slot, just like regular games. Or even into another copy of WinSPMBT on the same or a different computer. Unsecure games are regular save games stored in the normal [WinSPMBT]\Saved Games folder. Unsecure games operate just like normal games for saves and exits - you can exit out of the turn in mid-turn if you want to.

⚠️However, if this is a **secure** game (password was entered), then you will be provided with the save PBEM file menu at this point. Secured games encrypt the save game data, so your opponent cannot open this up in a hex editor and peek at things. In addition, secured games will autosave at the end of the game turn to that slot **only** (you have no choice to move a saved copy elsewhere), and also, the save game notes the **path** to the game as well, so **you cannot move a copy of your secure PBEM turn to another install of winSPMBT or winSPWW2------ it will not play.**

Secure games are saved in the [WinSPMBT]\PBEM Games directory, not in the regular save games folder. Also, when player 1 is saving the game for the first time, he MUST use the mutually-agreed save game slot number he negotiated with his opponent during the game set-up process. Recall that both players must use the exact same slot on their PCs.

NB - It is probably best to use a reasonably structured save game name such as perhaps "Eric (USA) v Fred (USSR) 5/1978" when you save the game for the first time.

This example shows the files for the second PBEM save slot being selected (remember, the slots are numbered from (0) ZERO and not (1)ONE.
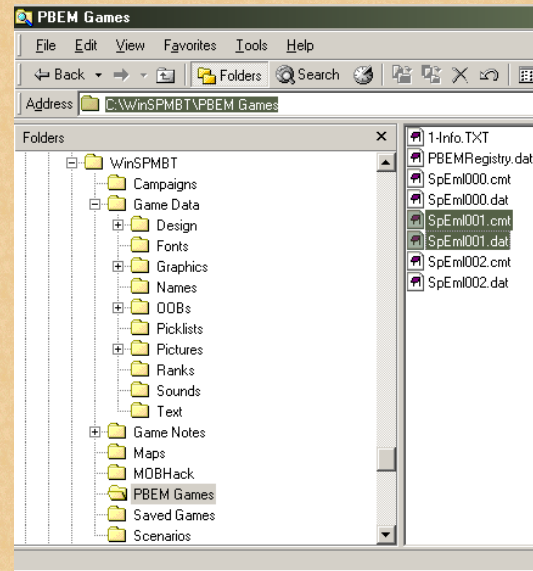
One thing that confuses some folks with *secured* PBEM is that, when playing a secured PBEM game the normal 'exit game' button (the **RED** one that points upwards) is now used to save your secured PBEM game at that point, in order to come back and complete it later. Recall that you must use the same save slot, this will store your game at the current point in play. It is **not**, repeat **not** an "end game" button, just a **pause and save my turn** button! But, we have found that *some* users are confused by this and used this button to as they thought, finish the turn off, then bundled the files and sent these to their opponent, whereby his game choked on the files, naturally enough, as they are a save of the first player's current point in the game uncompleted, and he is still the active player, not the opponent he sent the partially completed move to.

The exit game button in a secure PBEM auto-saves your *secure* pbem game for you to come back later and complete. It knows which slot to use, so there is no save game dialogue here. There is a text message explaining this which will display, and you will have to press any key to continue, this was added to remind users that the game is not yet ready to send to the opponent (turn is incomplete).

You use the **BLUE end turn** button to end your turn. I will repeat this, you use the **BLUE end turn** button to end a PBEM game move. Please press the **BLUE** button at the bottom of the buttons **to COMPLETE your turn**. Don't send your part move save off (**RED** upwards pointed button) to the other player, he cannot play it! (if secure PBEM - if *unsecured*, you just sent your current turn in progress to your opponent to look at, as he *can* open it !)

In a remote game, player 1 now sends the two zipped up files to player 2, who places the zip file somewhere safe (remember to keep all the zips in case of need to reload) and unzips the files contained in this to his [WinSPMBT]\Saved Games or [WinSPMBT]\PBEM Games (if secure) directory under windows.

He then starts the game, and goes to the regular 'saved games' screen, if this is an unsecured game, or to the 'Saved PBEM' screen if it is a secure game. There he loads the appropriate save game, and continues with play. In the setup, player 2 buys his forces, is presented with the password screen (if a secure game), and then he deploys his forces. On hitting the end turn button (red button!) at the end of the deployment, the following happens:

If this is a **secure** game, the game is automatically saved in the appropriate slot in the [WinSPMBT]\PBEM Games folder with no user action required to select a save slot as this is already known. Player 2 now exits to windows, and

zips up the 2 files for this game and transmits to player 1. **REMEMBER ALSO**, the secure encrypted game saves live in the[WinSPMBT]\PBEM Games directory, and **not**, repeat **not** in the [WinSPMBT]\Saved Gamesdirectory with all other game saves (including unsecured PBEM game saves)!

If this is an **unsecure** game, player 2 will see the normal save game menu screen, and can select any legal save slot. Player 2 now zips up the appropriate 2 files (as he can change the slot, he should remember which he used!) and transmits to player 1. In unsecure games, you must remember to save manually, unlike in secure games. When presented with your opponent's start screen, save and exit.

Player 1 now receives the zip file from player 2, unzips to his save (or email for secure games) directory and saves the zip file for backup purposes. He then starts the game, goes to the save games screen and selects the appropriate slot and starts the game. If a secure game, you get prompted for a password, if not, no password is asked for.

Player 1 now deploys and plays his first turn, on finishing his first turn (end turn, red, button!) he then zips the appropriate 3 files and transmits to player 2. This is now move 1, so he should name his zip file <name>001.zip. Remember to save all the zips in case you need to come back for disaster recovery!

Player 2 and player 1 now repeat the process of receiving, unzipping, playing, zipping and transmitting until the end of the game. (Though in PBEM games, often the 2 players decide at some point what the victory will be, and mutually end the game early with an agreed win or lose).

Important point for secured games, part of the anti cheat method is that *both* OOB files are checked to see if they have changed so your opponent cannot place an improved one in place with wonder weapons. This is for your protection against cheats, but what it means is that on **both** player's PCs the 2 OOB files **must not ever change during the lifetime of the game**. Any changed OOB file will result in a complaint about a corrupt OOB file from the security code. If you are playing a set of PBEM games, say for a competitive ladder, that use a set of modified OOB files, perhaps provided by the organiser, then it is best to install the entire game into a second directory and use this second copy of WinSPMBT (with the appropriately changed OOB files) for the competition games. This is the best way to handle games with user OB files, rather than say, trying to remember to load spob000 (original) to play 2 games, spob000 (competition) for 2 others, and spob000 (Fred's version) for the PBEM with Fred, who insists on his particular changed OB set. If either side uses allies or captured stuff then these OOBS will need to be provided as well, so it is probably best if using modified OOBS in PBEM to transmit the entire OOB set for safety as you will have no knowledge that your USSR (say) opponent will be buying Tanzanian (say) OOB Chinese light tanks.

Head to Head, is exactly as outlined above, but no file transfer is obviously needed as the same PC is being used. Player 2 just goes to the save game screen when required, as does player 1. But, after the initial deployment process, an unsecure head to head game on the same PC will not autosave, and will present the other player's start screen between moves, that is when you swap players. Save in unsecure is up to the current player. (**Remember**, player 2 goes to the **save game** list to open his first turn when playing on the same PC, some folks playing a scenario head to head were somewhat confused,as player 1 set up, then player 2 set up and saw player 1's start, because player 2 was trying to play the *scenario*, not the *saved game* generated by player 1, the game thought this was a brand new attempt to start this scenario!)

PLEASE NOTE !

<u>DO NOT</u> reload a PBEM turn after it's done!

This is a commonly reported newbie error when setting up PBEM the first few times that without fail goes something like this:

Player 2 Purchases and Deploys and then loads the turn again (by accident or to check that it's working) before sending it to player 1. When player 1 loads the turn, the deployment phase is gone.

PBEM Security Information

During turn execution in secured PBEM games, press the 1 key to see statistics on how many loads , quits and FAILS of the game were done by both sides. If you have a crash, and have to load the game turn again from the received zip, let your opponent know you had this problem, as the load counter will be increased and a FAIL number will appear. If the loads and quits are not equal, perhaps your opponent is having severe technical difficulties?, ask him about this. However, you should also be aware that one reason for getting fail messages is he is playing out a turn over and over to get a better result. If you play someone who's games give fail messages regularly and seems to do no wrong while playing the game I would suggest you find a new opponent! Game crashes in WinSPMBT are **VERY,VERY RARE.** The most likely reason for a FAIL number in this game now is your opponent is cheating. It **IS** possible to get confused and extract an old turns zip file and this is one very good reason to extract the zip when you get it and NOT save it in the PBEM folder!!

Loads quits and Fails

```
Player 1 (Cyprus): Loads: 002, Quits: 001 Fails: 000

Player 2 (Turkey): : Loads: 001, Quits: 001 Fails: 000
```

(This will appear on the bottom left of your screen when the game loads. **You can press "1" anytime to review these numbers**)

Loads is incremented each time you start your turn - including restarting a saved off turn in progress. Quits is incremented each time you press "end turn" OR when you press the up-arrow key to save a game in progress to continue later. if you save off a game in progress many times, this count will increment that many times. So if your opponent comes back with a high number of loads and quits for one turn, he is likely to be someone who plays the game in small "nibbles".

Your opponent's count of loads and quits should be equal. In your current turn, *your* load count will be 1 greater than the quit count, as you have not yet ended your turn or saved off to finish later.

The **Quits** counter will be less than the load count for your opponent if his game was stopped in mid execution of the program for some reason - a crash, power failure or whatever.

There is a third total - for Load **Fails**. If the game is reloaded and the code thinks this is the case, then the load failure count will be incremented. The load failure counter is the best check on reloads by your opponent. An occasional reason for this happening is likely to be a technical glitch. However, if this is happening continually, perhaps he is making multiple reload attempts to replay his turn. (a polite way of saying he's cheating)

A warning message is displayed if the game thought your opponent had a load failure. NB - this is not 100% reliable if you are playing a secure PBEM on the same machine as your opponent, in the same folder, due to file

inconsistencies. If you really need total security to play secure PBEM against someone on the exact same PC, it is therefore best to install another copy of the game in a differently-named folder (or on another hard drive). You each play in separate installations, with different file paths, and so the game code will find it easier to detect inconsistencies. In this case you will need to copy the game files from one installation to the other on change of player.

PBEM Misc

NOTE: If you find that you cannot complete a move in one sitting in secure (passworded) games you can save off the game with the **RED up-arrow button**. You will be asked " Save this turn now and finish it later? Y/N " Press " Y " and you will be able to complete your turn at a more convenient time, starting where you have left off. Remember that this is **not** a game completed turn button, that is the **BLUE** button!, **do not send a part completed move to your opponent**, it will cause security violations. This **RED** button is to save for **you** to come back and complete your turn later when convenient, is all!

Should both players want to see the action replay of the artillery, **both** sides must have **set fast artillery to 'off'** in their preferences screens, or no artillery replay info will be saved for a PBEM game. *Both* players, not just one or the other, *both* must have this setting set to off to see the guns fire in replay. If one of you has it off, then both remember to set it on, it can sometimes take a move or so to get in synch, so ensure this setting is set before the game on both player's PCs. Also, if the "fast artillery" control is ON you will NOT see any of the graphic animation's OR sound effects when you attack a hex with the " Z " key. (This is also true in any kind of game or scenario, Z key is area (artillery) fire). (In very large PBEM games, you may wish to set fast artillery on, as the artillery 'packets' compete with normal in game replay 'packets', you may go over the maximum limit, also, even if you do not overrun the replay buffer, switching fast artillery on can reduce the size of the data files you exchange, should you have problems with large files, e.g. if you use a European teleco which charges by the minute for connect time and/or you are on a slow dialup connection).

If your replay goes over the buffer size, that part onwards is lost. Replay is only of firing events, remember.

NB, for remote games, it is probably better to stick to a reasonable points value, remember that as games get bigger, the size of the save game data will expand in proportion, as the game replay is also stored, with up to 9 shots per piece, this gets big, quickly. It is the number of actual pieces that determines save game data size, not the points, 200 infantry squads will generate a much larger save game file than say 15 M1A2!

One last thing about PBEM: When the game ends, it will be with player 2. However, the result is phrased for player 1 so if player 2 did very well, he may be upset to find he has been "totally defeated". That is player ONE that has been totally defeated! If you were playing as the USSR. Player 2 gets the score, and can view the 2 force lists as per a normal game. The game ends THERE, the move is no use to player 1 if returned. Player 2 MUST write the scores down to report to player 1, and the result etc., this is the ONLY way player 1 finds out the result, as a written report from player 2.

PBEM or head to head secure games store the preferences set up by player 1 and overwrite the preferences on the received player's computer, this is deliberate. With unsecured games, you may need to remember to set the preferences to the agreed values before starting your turn.

One other thing about PBEM games that causes hiccups is that there is no replay of any pre-game artillery bombardment for player (1 ? 2 - needs checking TBD ADG) due to the way that the turns are interleaved, the one player does see the replay, but then has his turn 1 which of course, overwrites the turn 0 replay buffer with his turn 1 actions. There are various work-arounds to this.

1) Accept the fact you will not see pre-game bombardment results if player X [TBD]

2) Both players agree not to do a pre-game bombardment

3) When plotting bombardments pre-game, use the delay button to plot the shot fall for turn 1, and NOT turn 0, as turn 1 IS in the normal game sequence.

PBEM End Game Review

When the game ends, you will be able to review the map, as normal, however, for PBEM games now **immediately** after you exit the game, zip up your files as normal and **send to your opponent**, who can now review the end game data as well, **unlike before**. Once you exit the game, you can reopen its save game slot to review the end game, but before you do this, zip up the game files to send to your opponent for his end game review, or the end game video sequence can be put out of synch..

And Finally

Most players learn the secure PBEM sequence by trial and error by jumping in and trying to play another person, without ever having looked into the PBEM procedures. This other person is quite likely also new to the process as well, and so there can be problems with 2 players trying out an unfamiliar process.

Because PBEM is a complex interaction, it is really best to familiarise yourself with the process **before** ever challenging another human to an actual play-off!.

Simply play a secure PBEM against yourself "right hand" versus "left hand" on the same PC. Set the number of turns to some small number (say 3) when your "right hand" is setting up the game as player 1, to play your "left hand" as player 2. Go through the procedure, and as you are playing a throw-away test game against yourself if you make errors you simply learn from them and start over till you have the process down pat, without frustrating (or being frustrated by) another human player.

Basic secure PBEM

BASIC secure PBEM works much the same as regular secure PBEM with the following exceptions

- OOB's are not checked to see if they are the same version
- Loads and saves are not checked and reported if they differ
- Basic security PBEM games **CAN** be played on two different machines by the same player so someone can play on their laptop by day and desktop in the evening

Basic PBEM security was designed for people who, for one reason or the other, cannot complete a PBEM game without something causing a game halt be it altered OOB's or trying to play on two different machines or any number of other reasons we can only guess at. **We HIGHLY recommend that if you have no problem playing regular secure PBEM to please continue doing so !** However, if all you want is password protection to prevent your opponent from "accidentally" peeking at your deployment or if you want (or need) to be able to play on two machines or if you simply trust your opponent NOT to cheat then BASIC security may be for you. The procedures to set up a basic secure game are quite simple. Follow the same steps as a regular secure PBEM but after you enter your password a new button will appear. The default is **FULL SECURITY**. If you pess continue now you will get regular full security. If, however, you wish to play your PBEM with Basic security then press this button once and it will say **BASIC SECURITY.** Press Continue and follow the same steps choosing your PBEM slot as before. Basic PBEM security games have encrypted DAT files just as regular secure PBEM does so Basic security games have to be saved in the secure PBEM slots.
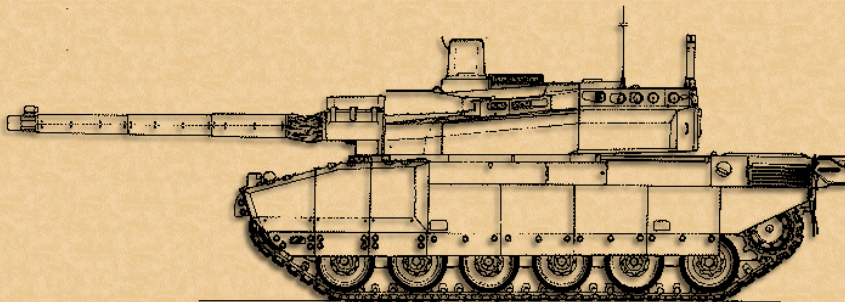
Preferences Screen
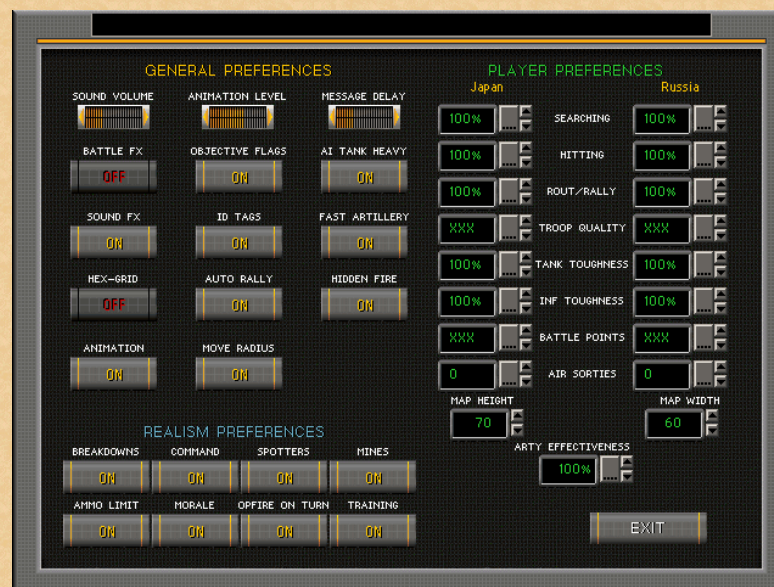
This game cannot be all things to all people. There are far too many differing opinions on what is 'realistic' and what makes a fun playable game. Satisfying one segment of gamers is sure to alienate another. Also, please define 'realistic', that is one of those 'how long is a piece of string' debates. To some folk, realism is micro details of millimetres of armour and exact slope angles, or how much extra water an Italian division needs to boil pasta (as factored in one actual cardboard wargame!), or the exact model of bolt action rifle carried. Generally, those who worry about micro details like armour angles and exact thickness in millimetres tend to be from the civilian 'armchair general' side of the fence. Those with real military experience tend to define realism in terms of command and control, and how much intelligence is given away for free, 'fog of war' factors. Military-experienced folk worry less about exact rifle type, and more about morale, training and leadership of their men. Armchair types worry about exact TO&E charts, and declare a game 'unrealistic' if the supplied formation is not to the exact field regs, and not at 100% strength. Military folk would be amazed to find a unit anywhere near 'paper' strength, and with all its vehicles present on the battlefield as 'runners' rather than being in the repair shop, broken down in a ditch on the approach march, or just plain lost or skiving!

During playtesting we encountered this on more than one occasion where some would say a game feature was too little, some would say too much and some would say it's just right. (We knew we had finally reached middle ground when 'angels on pin heads' type debates started).

When SSI originally released Steel Panthers 2 they included a Preferences Screen to allow the end user the ability to modify various elements of the game to suit individual tastes and abilities. We have noticed from our e-mails that many people quite simply do not understand the functions of this screen or how it can change the game to suit your particular style of play, or even that it exists, in some cases. We have had a multitude of "suggestions" (or in a couple of cases "bug" reports!) for code changes that can actually be made simply by adjusting a control in Player preferences.

We have made the preferences screen available from more points in the game now, this is both because it can be handy to turn some things, for example- individual unit ID tags, on or off, but also, some end users may just notice the new buttons :-> !

Reality settings are **your** call, not another person's. Tweak these settings until you get the game performing the way **you** like it, should you find the default settings unrealistic, or too easy or too hard. Of course, in a PBEM game, you may find you may need to discuss these matters with your prospective opponent!

General Preferences

BATTLE FX ON/OFF	This button allows you to turn the background battle FX on or off. If you do not want to listen to the Battle sounds during game play, set this control to OFF.
SOUND FX	Click the button ON to select the game sound effects, OFF to play in silence.
HEX GRID	Click the button to switch the Hex Grid overlay ON or OFF
ANIMATION	Click this button to turn ON or OFF animations like tracers, explosions or smoke.
OBJECTIVE FLAGS	Click this button ON or OFF to display the Victory Objectives flags. Usually you want this on all the time, but it can be useful to take the flags off to see the hexes terrain more clearly, then switch the flags back on.
AI TANK HEAVY	If set ON, the AI opponent will buy more tanks than normal. This was added to make those players happy that still consider this an "tank" game
UNIT ID TAGS	Click this button ON or OFF to display the small national flags beside each unit. This helps you identify who's who at higher zoom levels, and to spot which tanks are abandoned. Those more interested in realism often consider the ID flags to give away too much 'free' information, such as which tank is abandoned, or the flags may make you notice some riflemen hidden in smoke or dense terrain that you may not have noticed otherwise, and, therefore, play with this setting OFF. This is your call, as with all reality stuff.
MOVE RADIUS	Click this button ON or OFF to display (or not) the number of hexes a unit can move. The movement radius is shown in lighter hexes.
⚠️ **FAST ARTILLERY**	Clicking this button **ON** shows any indirect fire as one explosion per unit/battery. Click this OFF to show each shot arriving one at a time. And remember, when playing PBEM that **BOTH** sides need this setting to OFF to see the fall of artillery shots between moves on the action replay. **PLEASE NOTE :** When playing PBEM that **BOTH** sides need this setting to OFF to see the fall of artillery shots between moves on the action replay.
SOUND VOLUME	Click on the right side to increase the volume or click on the left side to decrease the volume.
⚠️ **ANIMATION LEVEL**	Click on the right side to increase the amount of animation displayed in the game and on the left side to decrease the amount of animation. The higher you have this set the more "detailed" the graphics will be.....lower settings let the game skip graphic sequences to speed up the game. This dates back to the beginnings of Steel Panthers when the game had to run on early 1990's era DOS computers and a high animation level would slow the game too much. For modern machines we recommend this be set to full on and make any fine tuning adjustments with the **Graphics Delay** setting in GameOptions / Misc
MESSAGE DELAY	This controls how long messages are displayed on the screen. Click on the right side to increase the length of the time and on the left side to decrease the amount of time messages are shown for.
HIDDEN FIRE	This one is **very** important. When this control is ON and a unit that has not previously been spotted fires, its actual position is rarely revealed after it's first shot. This makes ambushes more effective and realistic. We have also changed the way a pinned or retreating unit actually spots. If you are fired at and become pinned there is now a chance that a previously spotted unit will disappear unless another of your units has also spotted the enemy unit, it's difficult to spot someone when you are face down in the dirt. If you set this control to OFF then once a unit fires its position will immediately be revealed. **Recommended Setting: ON**, except for absolute beginners.
AUTO-RALLY	When this button is ON the computer will attempt to rally any of your troops that are suppressed at the end of your turn and can do so. If you have this set to OFF then all rallying is your responsibility. **Recommended Setting: ON**

Player Preferences

NOTE: These controls seem to be the most misunderstood and underused controls in the game. This is where you dial in what you feel suits your concept of game play and "reality". These controls allow you to alter settings and achieve the balance that suits you. Many people would like to leave these alone but these are the controls you need to use if the game 'feels' wrong to you. Right now our recommended setting for player preferences are the default settings but really, it is your decision to decide what works best for you. In addition, these are useful settings to use to adjust how the games AI plays, if you are new, then try lowering some of these values for the AI so as to have an easier time of it. If you are experienced, then try setting some values higher to get a 'tougher' computer opponent. The prime one to try for the AI opponent is the TROOP QUALITY setting. Set this 10 or more points above yours to give the AI better experienced troops which will spot better, shoot better, rally more often etc.

SEARCHING	This control's function has been misunderstood due to erroneous information in both the Steel Panthers 2 manual (where the control is called Spotting) and the Steel Panthers 3 manual. Both of these manuals state that this control adjusts the spotting accuracy for calling down artillery and air strikes. No, it does not. The primary effect on the game is to increase or decrease the range by which you spot other units on the map. In a series of tests involving advancing infantry in the desert with SEARCHING set to the default of 100% the advancing infantry was not spotted until turn 6 when it was 12 hexes away. With SEARCHING set to 250% the advancing infantry was first spotted on turn 4 and was 23 hexes away. With SEARCHING set to 30% the first unit was spotted advancing on turn 10 when it was only 4 hexes away. So, if you feel the units are being spotted too soon then turn this control DOWN. IF you feel the units are too difficult to spot then turn the control UP.
HITTING	This controls the direct fire accuracy. The default is 100%. If you feel that there are too few hits being scored then turn this up. If you feel that there are too many hits being made turn this down.
ROUT/RALLY	This controls how likely a unit is going to suffer morale loss and break and how easily they will rally. Once again the default is 100%. If you feel that the game causes units to break and run too easily then turn this up. If you feel that they stand and fight too long before retreating turn this down. To get a tougher AI opponent, try this setting at 10 or more points above yours.
TROOP QUALITY	This is used to override the default "Country Training" values we have built into the code. For this button to work you MUST have the COUNTRY TRAINING button in the REALISM PREFERENCE box OFF. When you see XXX in TROOP QUALITY that means you will get what we have determined best suits that particular country for that particular year. If you feel these are too high or too low then turn COUNTRY TRAINING OFF and pick a number you think works better. This is one of the **most important controls in the game**. Whenever you set this to a value, as you purchase troops their experience level is set to a number nearby the value you specify (a range spread around the value, but mainly below it). If you set it above the default 70, then your troops will cost you more buy points, and naturally if set under 70, you get cheaper units. Experience level is what determines whether the unit is anything from 'green' to 'veteran'. The troop quality level is shown when you select a unit on map . It is shown as a number, and also as the 'rank graphic'. Green troops have less experience, lower morale, lower rally numbers and other deleterious things apply, troops with low experience get less shots per move for one. Veterans naturally get better abilities to hit things, better morale values, better rally numbers, and at the very high levels, more shots per move. In a single battle this is important, but in a campaign game its vital, as your troops go through the campaign their experience gets better, so the survival of your 'core' troops is important for they will progress in experience.

	(They also will be 'pointed' more, losing a 120 experience veteran tank to the AI will give it more 'kill' victory points than a similar tank of 70 experience points. Also, the AI will get more buy points as you gain experience during the campaign, as your troops get more experience, their points value increases, and you will likely have upgraded the tanks as well, so double increase in value, more expensive tank with better crewmen). Remember that the points costs shown in the Encyclopaedia are based on the default 70 experience point level.
TANK TOUGHNESS	This controls how resilient a tank is to damage once a hit is scored. The default is 100%. At 100% the numbers we have assigned to the armour of the tanks are used. If you feel that tanks are being knocked out too easily then turn this up. If you feel there are too few kills being scored then turn this down.
INFANTRY TOUGHNESS	This controls how resilient your infantry is. If you feel the infantry in the game is too easily killed then turn this up. If you feel they are too tough then turn this down.
BATTLE POINTS	This is a **very** FF control! It controls the number of battle points issued in a game for the purposes of purchasing men and equipment. If you leave both sides to XXX the number of points is chosen randomly by the computer for Player 1 and player 2's points will become a ratio of Player 1's expended points. If you set Player 1's points to something other than XXX then Player 2's points will become a ratio of that number. Or you can set both sides to a specific number. If you do this and play the computer it will take all of the points you give it (one way to 'handicap' yourself as the human player). Also, when starting a campaign game, this value is what you get to buy your core with, if not set to XXX (unless the Scripted Campaign is a 'locked points' campaign where you cannot choose these factors). If you want to play PBEM with agreed points per side, **this** is the control to do so. If you set both sides to a specific number, then if player 1 does **not** use all his points, player 2 is **not** given a ratio depending on battle posture and the amount player 1 spent, he can happily spend right up to the given player 2 points, whatever player 1 did.
AIR SORTIES	This overrides the numbers we have placed in the code for the likelihood of airstrikes and the number of airstrikes assigned. If you do not want any airstrikes for one or both sides then set this to **ZERO**. If you want to specify how many airstrikes will be available to both sides then pick a number and enter it. If you want to take your chances then leave this set to XXX. An airstrike as far as this is concerned is **one** (1) air formation, a single spotter plane formation deducts one from this, as does a two plane strike element formation, or a multiple bomber formation. It is **not** a total of the number of planes allowed. It counts **formations**. Important AI note, the SP series games were designed on the premise that only one side would have air strikes. (This was before this button was implemented in a later version of SP2) and therefore only one side would have AA. In WinSPMBT air parity **is** allowed, it is quite possible that both sides may have a small number of strikes allocated. The WinSPMBT AI pick list process will also buy AA units even if granted air strikes now, but at a lower rate than when it is bereft of supporting air.
ARTY EFFECTIVENESS	This controls how hard artillery hits targets, if you feel indirect fire is too ineffective, turn it up, and if you feel the default value is far too effective, turn it down from the default 100%.

Realism Preferences

BREAKDOWNS	With this set to OFF you will be able to drive through buildings with tanks and APCs without the possibility of damage to the vehicle. You will be able to ford streams, mud, hedgerows, soft sand, snow drifts, trenches, and marshes without becoming stuck. If you set this to ON then there is a chance the vehicle will become trapped. It is really a vehicle sticking button, not as the title may suggest, a possibility of mechanical breakdowns due to poor maintenance. **Recommended Setting: OFF for random battles versus the AI. ON for everything else.**
AMMO LIMIT	ON sets the ammo loadout we have assigned to various units and vehicles. OFF gives you unlimited ammo. **Recommended Setting: ON**, except for beginners.
COMMAND	When this button is ON the normal command and control rules are in place, this effects things like rallying your troops. When OFF you are automatically given a permanent link to higher HQ and there are no penalties for not being in contact. **Recommended Setting: ON**, except for beginners.
MORALE	When this is ON the normal rules for unit and formation morale are in effect. If you set this to OFF the morale penalties are eliminated. **Recommended Setting: ON**.
SPOTTERS	When this button is ON only the formation HQ units (the "0" units) with a radio are capable of calling and spotting for indirect fire, and the specialist artillery observers. If you turn this control OFF then any unit can call and spot artillery. **Recommended Setting: ON.**
OPFIRE ON TURN	Units which manually turn to face a new hex _may_ now draw enemy opfire if this setting is ON. This affects both infantry and vehicles at different ranges and there are random variables that make it unpredictable**.** In hex infantry movement _could possibly_ attract opfire from enemy units up to 3 -5 hexes away and vehicles shifting hull or turrets around _could possibly_ attract opfire from enemy units up to 10 hexes away. If you just want to "look around" to check your LOS use the **}** HotKey otherwise you risk drawing unwanted attention to your unit _if the enemy is close_ .**Recommended Setting: ON.**
MINES	If this is set to OFF then mines will be disabled. If set to ON then Mines will behave normally. **Recommended Setting: ON.**
COUNTRY TRAINING	When this is ON the values we have in the code for troop quality will be in effect. If you wish to change this in the Player Preferences section then set this button to OFF. Recommended Setting: ON. However this one is a major personal preferences item. If you do not like the troop quality you get for a given nation and year, set it to OFF, or if you want to boost the AI's quality above yours, also set it OFF, then use the TROOP QUALITY selector(s), which are disabled if this is set ON.

Encyclopaedia Screen

This screen is used to inspect game unit data.

Select a new nation from those active at this date by pressing on the existing flag in the centre of the screen. You will be taken then to a screen with all the nations flags for that date. Select the nation you want then press the **CONTINUE** button.

You will be then taken back to the main encyclopaedia screen and a list of the available units is displayed on the right side of the screen. Hovering the mouse over each button will show the short data on the Left hand panel. Pressing the unit's button will show the full page data view for that unit.

The **EXIT** button will take you back out of this mode.

The **NEXT** and **PREVIOUS** buttons will cycle through the units available.

The **SORT** button is only available as an added extra on the CD. You can read about the functions of this button by clicking **HERE**

The blue line at the bottom of the page shows the **version information string** for the OB file loaded, this is very useful if you are in the habit of loading user edited OB data files, to ensure you have the correct one loaded, for example for a PBEM game or a scenario which requires a specific OB file set to be loaded.

The red backlit section at the top shows the unit name, and if as here the GameOptions "Show ID numbers" option is ON you will see the OB slot number for the unit. In the Israeli example two screen shots back, the Merkava 2b is showing the OB slot number as "60". This is very handy for debug purposes! Refer to the section on the GameOptions.exe if you are a OB designer and need this info. Regular users can ignore as the debug flag will normally be off.

Data items on this page, shown when the mouse is hovered over the unit's button are:

Unit name ('Merkava Mk 2b' here)	
OB slot number the "60" in ('Merkava Mk 2b 60' here)	You must be running "Show ID Number" - **YES** in the Misc tab in the GameOptions screen that appears when you start the game to see these numbers
Unit Type ('Main Battle Tank here)	Refer to Appendix D for a list of classes
Weapon List	The 4 weapon slots contents, or '-' if none fitted in that slot
Speed	Shown as (Normal : Swim) in hexes
Men	Vehicle's crew or squad size
Fire Control	Refer to next page.
Size	0 is smallest (Snipers etc.) upwards. Bigger size equals easier to spot and to hit.
Vision	Night and poor visibility vision enhancement sights (hexes)
Cost	The book price for one of these, with average experience (70)
Availability	First month and year to last month and year available
Armour Icons	Top is turret (upper hull for non turreted), lower is hull armour versus normal AP shot, in CM (approximate) adjusted for slope.
Icon	The individual icon Number.

The second page shows more unit data,

If the OB designer has produced descriptive text for a unit, this is displayed under the unit picture.

Weapon

Name	What this weapon is called
ACC	Accuracy, larger is better
Kill	HE kill factor:AP kill factor, effect on soft targets. Bigger is better.
PEN	Basic penetration of steel armour at HE shell (any range):AP shell (point blank range) in CM
HEAT	Basic penetration of the High Explosive Anti Tank round at any range in CM
APCR	Basic AP penetration of the APCR ('sabot') round at the muzzle in CM. See note below.
Range	maximum fire range in hexes for all shells bar sabot: sabot ammo (NB, sabot range can also be used for minimum range e.g. for ATGM)
Warhead	The size of the shot. Larger HE shells inflict more damage to soft targets, larger AP ammo hits harder than a gun with same penetration, but smaller warhead, and larger shot size is more effective at longer ranges as it loses less energy than smaller shot. Larger HEAT ammo also can penetrate better than a weapon with the same basic HEAT penetration but smaller Warhead size.
Ammo Loadout	Number of rounds (bursts for smaller weapons) carried by this unit. Note that only the slot 1 weapon may be issued HEAT or sabot ammo. However, some weapons which appear further

	down the list with AP ammo, actually have HEAT ammo such as bazookas, but this is a special AP code only visible in Mobhack (222 penetration code).
Armour listing	
(A)rmour	Basic steel armour value listed in CM adjusted for slope (and extra can be added by the designer to represent say face hardened steel), Hull and turret **F**ront, **S**ide, **R**ear and **T**op
(H)EAT Armour	If the unit has spaced or special armour to defeat HEAT ammo, the increased values used when struck by HEAT plasma jets are listed here.
Smoke Discharger	If fitted, this is noted here, the number of salvos is listed after the smoke main gun ammo in the in-game info display in the form SD:N. SD can also represent the British 2 inch or Israeli 60mm smoke mortars
Survivability	Applies to vehicles only. This number, if greater than zero, indicates both how well the vehicle will survive a penetrating hit but also how likely the crew is to survive and successfully bail out, or bail with less crew killed, when the vehicle is penetrated and destroyed. Larger is better with the maximum number being 6 in winSPWW2 and 7 in winSPMBT where MRAP vehicles are modeled. There is no effect on units that do not have bailing crew (squads, aircraft etc.) but will affect things like bunkers which are crewed
Rate of fire	Maximum number of shots the unit can fire from main weapons (MG are automatically calculated if not in slot #1), for a unit with maximum experience. Less experienced crews mean less shots available before moving, i.e. If a unit has ROF of 9, an experience 70 crew will typically get 6 shots allocated. Damage received reduces ROF, and small crews. Movement and current suppression state can reduce shots.
Fire Control	This variable acts a little like range finder, below, but not so much, in allowing the unit to engage with better to-hit percentages at longer ranges. High FC values will add to the crew experience, so can generate 1 more shot sometimes than if it were not there. Primary use of this variable is in engaging moving targets, but if you move, the effect is drastically reduced. Values of 100 up are used for AA fire control radars on AA capable units.
Range Finder	This variable represents better fire control optics, sights, and proper range finding gear such as optical range finders, or post WW2, ranging HMG, lasers, and ballistic computing equipment. Naturally enough a unit with RF can engage targets at longer ranges with better success than a unit with the same weapon, but less RF. 14 is typically used for a laser range Finder.
EW	For AA vehicles and units, and planes defending against them, the ratio between firer and target plane EW is very important. If the target electronic defences 'win' then the firer hit chance will be reduced. This field is used for anti missile countermeasures in modern non-AA vehicles as well, some may have special smoke dischargers and/or IR countermeasures (collectively termed VIRSS), and Soviet bloc vehicles may have the ARENA active anti missile system which can shoot down incoming missiles (Arena also stands for the similar Drozd System).
Vision	If fitted, enhanced night vision equipment,with a value of 40 or greater representing a Thermal Imager or a Ground Surveillance Radar (TI or GSR). If game visibility is say 3 hexes, and you have a vision capacity of 12, you can see 9 hexes further than unaided units, which can be vital and devastating. TI and GSR can see through smoke as well, another vital advantage when the opponent lacks this capability, and hence reflected in the points cost of any unit so equipped.
Stabiliser	If non zero, a stabiliser is fitted. A stabiliser allows a vehicle to move and keep target lock (the firing solution) on an already engaged target which is a great advantage, so long as the LOS between the firer and that target is not broken. Units with stabilisers can travel some distance with reduced self movement penalty to the to-hit values. Do not expect a stabiliser to help if running over rough terrain much though!. Missiles do not like to move and fire, stabiliser or not, so try to take missile shots stationary.
Lift capacity	Roughly, one man equals one lift point. However, some guns, mortar teams and so on cost more to lift (guns will have a '*' or '**' to indicate heavy weight). Vehicles with lift of 1XX can carry heavy units, 2XX really heavy units (look at say barges, which carry MBT etc.).
Load cost	This is the bit that says something is heavier than average, 0 for squads means only the men are factored, but say a .50 MMG section with Load cost of 1, will cost roughly 12 lift points, and tanks with load cost in the 24 ton class, need barges to carry. A 57mm AT gun with load Cost of 2 requires a vehicle with a 1XX Lift Capacity, and a 3 inch AT gun with Load Cost 3 needs a fair sized truck to tow it. (The best way to find out what caries what is by experience, set out a test game buy a full set of various transports and loads, and then experiment in the deploy phase to see what is allowed by loading and unloading the combinations, then exit the test game.)
Size	An indication of how easy the thing is to spot, and to hit. Smaller is sneakier, larger is more easily seen.
Cost	Buy cost, if experience is average 70, if less experienced crews then the unit costs less, and more experienced crews and hence more effective units naturally cost more.
ERA	**ERA** = Explosive Reactive Armour, or active armour. These are blocks of high explosives placed on a vehicle which explode when a HEAT jet passes through them and are designed to disrupt the shaped charge jet a HEAT warhead produces. ERA exists in the game in ordinary and advanced forms with advanced ERA sometimes able to defeat incoming AP rounds as well. Vehicles with ERA are not given a carry capacity as it is distinctly unhealthy for troops to be sitting on such a vehicle!. Higher numbers mean a greater chance to disrupt a HEAT round. Numbers from 1 to 10 on a facing are ordinary ERA. Numbers from 11 to 20 are Advanced ERA such as Soviet Kontakt. Each ERA explosion, whether or not it defeats the incoming round, reduces the ERA number for that face. Once 0 is reached, or if the ERA fails, then the AP or HEAT round will attack the underlying anti-HEAT or steel armour as normal. Multi charge ATGM have a much higher chance of defeating ERA than regular HEAT warheads. Note that cluster bomblets are considered HEAT rounds for ERA.

NB, the 'sabot' round in WW2 was normally Armour Piercing Composite Rigid (APCR) (Also known as HVAP, High Velocity Armour Piercing), but can also represent true sabot rounds, APDS (Armour Piercing Discarding Sabot) where the sabot (=shoe) surrounding the sub calibre penetrator is dropped after exit from the muzzle, which improves drag coefficient no end, only Britain used true sabot (APDS) ammo in WW2.

For the British, sabot tends to be APDS from 1946 on, the USA only adopting proper APDS ammo instead of the inferior HVAP in the 105mm L7 British designed NATO standard tank gun in the M60 series (105mm M68 gun when in US Service).

The AP round can represent APDS ammo in some units, with the sabot round being used to represent some form of uprated shot in lesser supply, perhaps. For example, a tank with APFSDS main load, with some sabot ammo representing a few APFSDS(DU).

Mines and Field Engineering

Mines, Dragons Teeth, Fire trenches and Barbed Wire are bought by the defender, if he pays for engineering points in his purchase set up.

All mines in SP series games are dual-purpose minefields (both anti personnel and AT mines are in the field).

All minefields are "hidden" minefields. SP ignores the Geneva convention which requires marked minefields(so there are no dummy minefields either 😊.)

The more mine points spent on mining a hex, the more densely mined that hex will be, hence more dangerous to cross (more likelihood of standing on one).

The faster a unit has moved on entering a mined hex, the greater the chance of tripping a mine. So if you suspect mines, move SLOWLY. Engineers and engineer vehicles are better than other troops in detecting mines. If they enter a mined hex, you may well get an "Engineer detects minefield" message, rather than an explosion. The engineer unit is then stuck in the minefield, but it will clear this faster than ordinary troops.

Artillery-dropped mines can be laid - these are usually spotted when they fall. In modern times, it is a good idea to have some engineering equipment in reserve, even in a meeting engagement..

- Dragons teeth represent anti-vehicle obstacles of a substantial nature (such as piles of logs perhaps), used as an anti vehicle barrier, or as road blocks etc. They are ONLY cleared by engineer types. They stop all (non-flying) vehicles, but are only an obstacle to foot troops.

- Barbed wire has been introduced for WinSPMBT for defensive battles. It's bought in the same way and appears in the same menus as mines, dragons teeth and trenches. Wire CAN immobilize vehicles including tanks (though it is rare, wire can foul running gear) The effect is greater on wheeled vehicles. As a quick rule of thumb the lighter the vehicle the more chance it will be hung up by wire. Tanks can flatten wire, Engineer tanks can flatten and clear wire. Infantry can move through wire but only slowly. Typically you would move up to a wire hex and go no further that turn. The next turn you would enter the hex and go no further. The third turn you could move out but with a MP penalty so moving through wire is not a piece of cake Engineers and regular infantry clear wire just like they do mines. Engineers clear it by facing the wire hex and regular infantry have get in the hex to take it down (and they are slower). If the units trying to clear wire are under fire this slows things down just like mine clearing ."Flattening" wire is a random thing just like mines. How many mines in a Hex?? Well that just depends.....you'll know for sure when they are gone. The same idea applies to wire. When it's clear the graphic will disappear. Artillery does NOT remove wire. Everyone found that out 90 years ago. As well, entering wire can cause casualties and add suppression to infantry.

> ⚠️ **TWO IMPORTANT POINTS REGARDING THE USE OF BARBED WIRE**
>
> 1. Wire and mines cannot co-exist in the same hex. We are at the limit of some coding issues and the result of that is you cannot have both wire and mines in the same hex together so this isn't a "bug" . It's what we had to do to make this work.
> 2. You CANNOT place wire in building hexes . This is not a code restriction . It's a design decision

- Large fire trenches can be bought and laid as part of the field defences. These shelter all ground troop types (even if they moved), including vehicles. They are a major obstacle to vehicle movement, and vehicles may get stuck in them, so this field defence can be used as an anti-tank ditch as well.

There are no bridging engineer assets modeled in WinSPMBT.

Notes

1] A "mine" is not "1 mine" but a random small number of mines. It is a symbol for a mined area and may be 2 mines or it may be 8 mines. (or 3 or 5.....) If there are more than one "mine" symbols then there are PROBABLY more "mines" in that hex but if the random number generated hit's low for a three symbol cluster that hex MAY ONLY have three mines in it and if it hits high a 1 symbol mined area may have 8 mines. Those random numbers are there to eliminate the certainty of mine clearing.

2] Regular infantry squads will only clear mines if they are IN the minefield. Engineer units (including mine clearing tanks) will also clear mines from "outside" the field, if pointed at (facing) that hex.

3] Engineer infantry and vehicles clear mines faster than regular infantry. Because there are random numbers of mines and random numbers generated for mine clearing itself it is not possible to say definitively that "engineers clear mines 3x faster than infantry" because there are many factors built into the game to REMOVE the certainty that X action will take Y amount of time. If the unit removing mines moves that turn it can reduce the number of mines that can be removed on THAT turn. If they fire it slows down mine clearing. If they are fired on it slows down (or halts altogether) mine clearing. However, all things being equal the engineer type units WILL clear a given number of mines faster than a regular infantry unit.

4] Regular infantry, because they ONLY (slowly) clear mines from the hex they are in, can face in any direction while they do it. Engineer and mine clearing vehicles MUST face toward the hex they are the clearing mines from, if clearing from the hex alongside. If you face them away from a mined area or obstacle they will NOT clear it.

5] If there is a message ...... "XXX CLEARS 2 MINES " then 2 of the random number of mines in that mined area have been removed. When the message reads "XXX CLEARS A PATH THROUGH THE MINES" means all mines in that hex have been removed.

6] Experience plays a very important part in how fast a unit will clear a mined area. In one experiment, 4 engineer units with 30 experience and 4 engineer units with 120 experience were each placed in front of a mined hex. The expert units cleared their mined areas in 1-2 turns. The 4 green engineers took 7-9 turns to clear all four of their mined areas.

Notes on Deploying Mines in Scenarios

A design trick follows. Sometimes you will want minefields to be visible to both opponents. Basically, three things have to happen to make mines visible to both sides:

1) units have to be purchased as well as mines for the defender

2) the DONE button must be used to exit the Purchase Screen

3) the mines ****MUST**** be deployed before entering the attacking side's Purchase screen If the mines are re-deployed after entering the attacker's purchase screen, they will become invisible to the attacker until he finds them normally.

Game Play Notes

This section is intended as a guide for new players. It is a mix of general tactics and techniques, and some game mechanics.

"The battlefield is a scene of constant chaos. The winner will be the one who controls that chaos, both his own and the enemies.", Napoleon

"Chaos is inherent in all compounded things. Strive on with diligence.", Buddha : Last Words

"The way to avoid what is strong is to strike what is weak.", Sun Tzu

One main point to note is the game scale, which is 50 metres (yards) per hex. That is half the average football field, and just because a tank or squad looks 'very close' that is just the scale of the unit icon. 2 units even in the same hex can be well over 30 yards (metres) apart, nowhere near point blank! Look at 2 tanks in adjacent hexes in the game, they *appear* to be 'side by side', however, place them about 10 hexes away from each other to see what the actual 1/1 scale of 2 vehicles 50 metres apart looks more like! 2 units in the same hex can be 50 yards apart, not necessarily at hand to hand combat ranges. Players often get confused since the vehicle scale and the ground scale differ.

In the SP series games, you are organised into units (called **formations** in this game) of **platoon** strength, or sub platoon **sections** of detached tanks or support weapons acting as a platoon for our purposes. The commander of this unit is the **'0'** unit of that formation (In campaign games if the original leader dies, this is not always the case, look for the 'H' telltale in the unit list screen). This leader provides rally opportunities for his subordinates but when 'command' is set to on in the preferences (and only absolute beginners turn this reality setting off!) then he must be **in contact** with his subordinate in order to command him. For units with a radio, this can be anywhere on the map. *Provided* the radio is working at that point in time. All radios have a chance not to be in contact, and so are never as reliable as voice range communications.

Some units (especially infantry) have no radios and must keep *voice contact*, this is only reliable to 3 or 4 hexes (200 metres). A common fault many players have is to spread their units in a platoon formation kilometres apart, they are then out of command control, and if they get a reverse, they will then tend to run away a lot. Therefore, keep your leaders closed up to the men as much as is possible,

"A piece of spaghetti, like a military unit, must be lead from the front.", General George S. Patton

Frontage for a leg infantry platoon (or tank platoon without radios) when advancing would be 150 to 200 metres (3 to 4 hexes), a tank platoon (with radios) might stretch to 400 to 500 metres (8 to 10 hexes). Keep to these sorts of frontages and you will be better off. Also, bar the Russians who tended to advance a complete company in a single line, platoons would tend to advance either '1 up' or '2 up' in UK parlance, though 2 up is normally kept for the assault.

With a typical UK platoon of 3 rifle sections ('squads' in the US) and the platoon HQ group, '1 up' means that the point section is at the tip of a triangle pointing at the enemy (the axis of advance of the platoon runs through this unit), the other 2 at the base of the triangle, sides of the triangle about 300 to 400 metres long, platoon HQ in the centre of the triangle, behind the point section. This is a good formation for the phase of the battle known as the 'Advance to Contact', as if the lead section comes under fire, the platoon commander, who is following behind, but not too close as to become involved in the fire fight has 2 uncommitted sections in reserve to bring up to the firing line, or outflank the enemy with as he sees fit. Also, the front section might put a 2 man patrol scouting 150 metres or so ahead of itself, these guys could come from the point section, but most likely from one of the held back sections in order not to reduce the strength of the point unit. (In SP terms, buy a patrol or scout unit as we cannot split sections)

⚠️ **GAME PLAY HINT**

<u>**The most important about scouts**</u> **is to use them as scouts** NOT small attack sections !!!

One tactic is to disable all the weapons so the scout unit cannot opfire and another technique is to set their range to 0 (or sometimes 1) so they only fire when the enemy is almost on top of them. Scouts are not mini squads. It's not their main function to fight battles. A typical British rifle squad in 2006 has 8 men and costs anywhere from 17 - 20 points. Fighting enemy infantry is THEIR job! . A typical British scout team for 2006 has four men and costs 26 points. You don't fight infantry battles with your infantry SAM teams so DO NOT fight infantry battles with your scouts either. Their function is to SCOUT not fight. You really don't want your

2 up is the reverse of this with 2 sections out front, the platoon HQ behind the centre of these, and one section behind the platoon HQ as the reserve. This formation is the normal assault formation used to fight through an enemy position, more firepower to the front, but the platoon HQ and rear section available as reserves. In the actual formal assault, as opposed to more open battle, the platoon frontage would be 100 metres or so (2 hexes) but the platoon HQ would hang back 100 to 200 (2 to 4 hexes) metres from the front sections, the reserve section a similar distance behind the platoon HQ section.

Platoons are put together under the command of a **company**. This is an HQ unit (which is itself a platoon formation in game terms, but which cannot be cross attached), and the company commander, if in contact with platoon units, can also rally these if required. Organising yourself in companies, rather than buying lots of individual platoons, is therefore a good thing. Now that MBT allows you to cross attach platoons in the deployment turn, you should utilise this to assign a reasonable company structure, lots of independent platoons under the A0 will have problems if many of them need rallying, as they have no company commander to provide rally before calling on A0.

Again, UK companies of 3 platoons tended to advance in a triangular formation of platoons '1 up' if advancing to contact, 2 up if fighting through a position. Distance between rifle platoons could be 300 to 500 metres (6 to 10 hexes). Company HQ again central to the triangle, any support weapons attached would be deployed as required where their weapons would give the best cover. Tank squadrons (companies in USA terms) would tend to have more troops (platoons in USA) and these tended to operate paired up, A troop would hold still to cover B troop advancing, then A troop would 'bound' through (or by) B troop's new position while B troop returned the favour by halting and providing covering fire (if required) but at least 'overwatch' (reaction fires in SP terms). Tank squadrons would therefore advance as a parallel set of moving paired troops, any spare troop(s) and the Squadron HQ following behind, at a distance close enough to provide support, but not get involved in the initial firefight when the front troops bounced the enemy.

Rifle sections in a rifle platoon would bound forward covered by the rest of the platoon at the halt as well.

This is what the military call 'fire and movement', where one (or more) stationary subunit covers the movement of another subunit, either by being ready to fire, or in an engagement, by actual fire. If the formation adds something a bit more 'fancy' to this mix, like using the fire and movement together to aid the placement of an assault (or flanking fire) sub unit off to an enemy flank, you then have 'fire and manoeuvre', where the fire and movement is used to gain some form of positional advantage (usually to the flank and or rear) of the enemy, rather than merely closing straight at him.

Back to game detail, still on command and control here. Your commander must be in a fit state to rally subordinates, if he is retreating or worse, then he has **no** command influence, so you may need to rally him first! Also, before you do rally subordinates, check the commander's status, as if he fails a rally on a subordinate, that is all his rally chances gone for this turn, it can be embarrassing to have rallied all your men back to 'ready' status, and be about to move forwards to find the platoon (or company!) commander is 'pinned' because you forgot to rally him a little in the process. Do not just select units and hit the 'R' key is the motto really, look at all the subunits of a formation, and their current state and plan your rallying. Also note that rallying comes from the top down, hitting the R key on a squad will use the Company Commander's rally attempts then the Platoon Commander's before trying the squad sergeant's. This may not be what you wanted, again, think a bit before poking that R key. When a unit fails to rally itself or its subordinate, its rally chance statistic is set to 0 until next turn, this confused some end users who thought the unit was a hopeless rally case, no, zero just means that it has **failed** a rally attempt, and so cannot rally again this turn. The number returns at the beginning of the next move.

The **A0 unit represents you**, it is the Battle Group Commander. A0 can rally any subordinates in the chain of command if in contact, just like a company commander. You may therefore want to keep your HQ close to the main action, without exposing him to too much danger to add heart to the key part of the fight. If you buy too many independent platoon sized units, apart from their own platoon HQ units, then A0 will be the only source of rally (if in contact), and will soon run out of rallies, another good reason to buy companies as these have the company commander in the chain of command (and usually nearby) to provide rally opportunities. Marry up most independent platoons under any company commanders you have by cross attachment in the deployment turn, or AO will run out of rally fast.

I mentioned fire and movement up above, and the fact that the cover unit would be at the halt. In WW2, with primitive fire control equipment compared to today and no real stabilisation systems that were any benefit to moving tanks, firing from a halt as almost a necessity if you wanted to hit your target (unless the gunner was very, VERY good). Even with modern stabilisers firer movement severely penalises chances to hit, if you move too far. If you want to hit, especially at long ranges (over 1500 to 2000 metres, 30 to 40 hexes) then you should fire from the short halt (having moved the move before, not this one), and if you really want to hit, fire from the full halt (having been stationary the **entire** previous move **as well as** being stationary in the current move). In WinSPMBT, you are considered fully stationary only if you neither moved this turn, nor the previous game turn (in technical terms, if you expend >= half your MP in a previous turn, a 'moving fast' flag is set, you need to spend a complete turn not having expended half or more MP to reset this flag). Movement will also break any fire control solution you have made on the target ('target lock') unless you have a tank with a stabiliser, which can move whilst keeping target lock, so long as the LOS between the firer and the previously engaged target is not broken.

Charging to point blank range (1 hex or 0 hexes) can help, but do not expect some sort of 'gun to the head' shot, your chance will be better, but you will have movement deductions, and if the target tank itself was moving fast then the speed of his travel is taken account as well (even if the target appears to you to be 'in the same hex' for your entire move, if he was trundling along at 30 MPH at the end of his turn, he is still considered to be doing 30 MPH. If you closed on him at 20 MPH, then the speed difference calculates at 50 MPH, a fast passing shot even if at 'point blank'). Also, since movement takes fire opportunities (and vice versa), you could end up with but 1 or 2 shots at close range and end up stranded with no MP left, and your opponent can repeat the medicine on your tank.

However, if no enemy is expected, then you can operate a 'travelling overwatch' where the 2 units merely move relatively slowly, thus leaving some shots for opportunity fire if the enemy reveals himself. Leave full speed (half or more MP expended) travel for when out of contact with the enemy, as it severely reduces shots, and accuracy too and makes infantry more vulnerable to shell or direct fires. In combat, everybody slows down and becomes more cautious about movement.

This is especially true for your infantry, for,unlike vehicles, infantry travelling fast are more vulnerable than those at the halt (who are considered most protected, by taking use of the available cover, and going prone), or at least travelling prudently (1 hex or less). When needing to advance infantry under fire, or you expect at any point that hidden enemy will likely open up, do not move over 1 hex if you can possibly avoid this. Do not run around with your infantry at full speed when being indirectly shelled either, fast moving infantry is more vulnerable to HE fires. Slow down to 1 hex in shelling, if you must move at all. Moving 1 hex covers both a short quick dash, or a cautious creep, in game terms. In especial, note that troops who have just dismounted from a transport are considered to be bunched up, and moving fast, especially if the transport has moved a lot. An enemy burst which hits a squad dismounting in a hurry will tend to do a lot of damage, so it is best to dismount in a covered location from fire, and close in on foot with the APC providing close cover. Only do a charge and dismount into an area you can **guarantee** (as much as anyone can in warfare) that there is no real enemy resistance! If your APC has smoke dischargers, consider using these before dismounting.

If you need to advance infantry under enemy fire, to close or to retire or whatever, then you should **first** use (hopefully) stationary squads (or better yet AFV in close support) to fire covering fire at all known enemy infantry and MG, in the hopes you will shut these down, before you move the squad. Even if you do not pin the enemy or worse, the added suppression all makes it more difficult for him to hit the squad(s) you later intend to move. Use the Z key to fire suppressive fires into hexes you suspect have unlocated enemy infantry in them, **if** you have shots to spare (it is not very effective). If you have MMG or HMG, then when advancing, wait till these are set up and ready, and try to keep them outside rifle range whilst using them to hose down any located enemy (or leave with some unexpended shots for opportunity fires on enemy firing in their turn).

Infantry do better at close quarters combat, 1 hex or hand grenade range, but the problem is getting them there when advancing, especially if the enemy infantry is dug in. Simply walking up to an enemy defence line tends not to work that well, as WW1 proved. To advance against an enemy line, you must gain fire superiority over him, 'winning the firefight', or use a small force to pin him while some others approach by an indirect route round a covered flank, say. Or use smoke as a form of human made cover. If your opponent is a human, surprising him can be very good as it can demoralise him (your human opponent), the AI is not subject to emotions. (Human players can be fooled too, try dropping smoke and artillery on a spot you do NOT intend to attack a human opponent at, and maybe a 'feint' probe to back the deception up, then once he is focused on the wrong location, come in from elsewhere with the main strength).

The British army uses a rule of 3 when it considers what can advance on what, if all is equal (in other words before you throw in massive doses of supporting artillery, and factor in a supporting platoon of MBT, say). Thus a single enemy section (squad) is what a rifle platoon of 3 sections is expected to be able to take out, an enemy platoon therefore requires a company to remove, and an enemy company defending is a battalion level target.

So, to advance against 1 defending enemy squad, you will need roughly 3 of yours in the firing line pumping away at it (if this is a pure rifles versus rifles battle, 1 supporting tank in the mix, if the enemy has no effective AT helps the attack marvellously, this is what tanks are for in reality). However, assuming no support or little, form a firing line at about 400 metres (8 hexes) and start shooting, and inch 1 squad one or two hexes forwards at a time as the enemy allows, and repeat till the firing line has advanced 1 hex. Repeat this process until you have closed with the enemy squad and then assault it, or it runs away, or your troops all get pinned down if the enemy had a good battle and not you. If the enemy is isolated, perhaps fire on him with the base firing line whilst moving one section round his flank if there is cover to eventually close assault him with bayonet and grenades. With an enemy platoon in the defence, you will need a rifle company.

Consider a tank troop (platoon) about half a rifle company if it is acting in close support and there is no enemy AT defence, but only if the tanks keep their distance from the enemy, or they may get brewed up. This especially the case when longer ranged infantry AT weapons like the RPG became commonplace, prior to the introduction of Chobham and ERA type armours. In this case, dismounted infantry support is a must for your armour, and you should try not to approach your tanks or APC within about 5 hexes (250 metres) of healthy unsupressed enemy riflemen equipped with RPG or Carl Gustav type AT launchers.

In real life, for a platoon to eject 1 enemy squad from its position can be expected to take 20 to 30 minutes (10 to 15 turns), and an hour if it does not go too well. In WinSPMBT, this will not take quite as long.

Modern armies have more APC available than was the case in WW2, just remember that the main thing an APC brings to the infantry is increased mobility, and some protection against bullets and shell splinters. APC are not MBT, and if hit by serious AT weapons they will brew up and the passengers will be roasted. APC should try to advance via covered routes as much as possible, and if used for fire support, keep beyond effective enemy infantry hand held AT weapon ranges if possible (>5 hexes). APC are very useful in the defence if you use shoot and scoot tactics, firing on the advancing enemy and then breaking the contact and motoring off to a new position further back.

When defending or delaying, if your infantry have APC mobility then consider advancing into no-mans land in the initial phase of the battle and setting up ambushes there, if the terrain and/or visibility permits, then using delaying fall back tactics to win time, after all, time is the key thing in defending, try to slow the attacker down as far away from the objectives as possible. When attacking, use this mobility to avoid and bypass the defence as much as possible, try to get into the enemy rear and then fight your battle as a defence of the objectives you have now taken.

"There is one kind of robber whom the law does not strike at, and who steals what is most precious to men: time. ", Napoleon.

"Go Sir, gallop and don't forget that the world was made in six days. You can ask me for anything but not time.", Napoleon.

"Time is everything. Five minutes makes the difference between victory and defeat.", Nelson.

Tanks should take out enemy MG positions and bunkers first if they can. This is of course what the tank was invented for in the first world war, and it is the same in AD2000. The tank's part of the job is firstly to neutralise the infantry killing weapons, while staying clear of the AT guns. The infantry side of the bargain is to neutralise the AT weapons like ATGM and RPG. They also provide close cover for the tanks against infantry assaults. In close country, infantry should move first, and keep a hex in front of the close support tanks. Use artillery to plaster all suspected enemy long range AT weapon firing areas, or place smoke between these and your troops provided the enemy has no access to TI sights.

Tanks tend to attract fire. If you ever see pictures of infantry huddling close behind an AFV for its cover, then these are likely to be inexperienced troops (or conversely the experienced sort who know exactly when a tank is useful to use as cover, and exactly when to not go too close to the thing!). On the battlefield, tanks are very visible things, and everyone pops off at them. They also tend to draw indirect fires, which is a very good reason for supporting infantry not to bunch up close to the things. In SP terms, 'collateral damage' gets handed out to units in the same hex as a target, both extra suppression, and also casualties. It is therefore not a good idea for a squad to try to cohabit the same hex as another unit, especially an AFV. It is also not a good idea to stack squads on top of each other either. If a miss occurs, then there can be a near miss situation where the weapon 'sparkler' goes off in an adjacent hex to the intended target, and this causes collateral damage to any squad in that hex. Collateral damage is mostly on soft targets like trucks and squads, but the occasional hit may button up an AFV not directly targeted.

Pure tank units can do reasonably well in wide open desert or plains country, especially if enemy infantry obliges by moving around so they can be more easily spotted. However, tanks charging around where the infantry is waiting for them will tend to suffer, even a squad with hand grenades can manage to get on top of a tank and drop some where it hurts! Infantry with RPG type AT weapons can mince pure armoured units up for breakfast, especially in close terrain like cities and woods. Even if the tanks have ERA or Chobham type armours, the infantry will eventually break tank treads or shoot into weak spots, like into the top armour.

Even if you are a 'tankie' you will need some infantry about to help you out in the close stuff, and to help find infantry ambushes. A tank with an infantry squad spots better with the extra eyes provided by the riders, and if it does blunder into an ambush then the riders may be able to defuse the close assault, by acting as a form of 'reactive armour', but usually at a severe price to the riders, who are an easy target bunched together on top of an AFV. Any hit on the AFV, especially an artillery or aircraft strafing attack, is very unhealthy for the infantry dangling off it. Infantry are only given protection by proper APC type classes of vehicle, riding a tank or SP gun, they are outside waiting to be turned into 'people pate' by any stray HE round or MG burst.

Infantry is your main arm of decision, and artillery is the second. Armour is just self propelled close support or AT artillery, after all. Your tanks are there primarily to help the infantry take and hold their objectives, by removing any enemy armoured threat, then beating up the infantry killing weapons with main gun HE and MG fires. A tank with no main gun HE is an extremely limited item, as the British found out in the Second World War with no HE ammo issued for their earlier vehicles. This is especially the case if the enemy in question does not oblige by bringing armoured vehicles along to the party, and relies mainly on light infantry.

Armour however comes into its own as a weapon of exploitation. Tanks real targets are the soft and juicy rear echelon troops found deep in the rear of the enemy lines, after the armour has exploited a breach in the enemy defence to run riot as much as possible. Again, these tend to be soft targets, so any MBT with no HE round is limited use, though HEAT and AP can kill soft vehicles. If your opponent allows you to loop an armoured force round his flank then you should utilise that opportunity to overrun his artillery lines, destroy his ammo dumps and trucks etc, before attacking into the objectives from the rear.

Mobility is a prime asset of armour, just like the horsed cavalry of olden days. Stationary horsed cavalry was useless cavalry, and in modern era, stationary tanks will tend to find themselves plastered by the enemy artillery, which in the later part of the era will have armour piercing bomblet type rounds as well.

If your enemy operates tanks which are significantly better than yours in the tank killing area then you should not plan to fight his tanks head to head with yours. Use other means, such as dropping large quantities of indirect fire on his armoured formations, both to get some effect on his tanks, but mainly to drive away the important pieces, his supporting infantry. Once his infantry has been separated from his tanks, they become vulnerable to close infantry assault from yours.. Cover him with smoke if he has no TI, and close with engineers or AT equipped infantry, even squads with no decent AT capability can make tanks unhappy (retreat) with unsuccessful close assaults.

Meanwhile your lesser armour can utilise the indirect approach, most tanks have weak side armour, so manoeuvre or tempt him into defensive 'fire sacks' where you can engage him in the flank or rear, preferably at close quarters. . If your infantry assaults cause enemy tanks to flee, you will often find this opens his rear arcs to parting shots from your overwatching armour. If all else fails, pour lots of non penetrating shots onto him, this can cause his tank to run away, and if you get a disabling track hit, a crew with bad morale will often bail out when the tracks are shot away.

When planning a breakthrough assault, the Soviets use one gun tube per **metre** of frontage as their 'norm' for an effective level of artillery neutralisation of the enemy defences, and this would be over a front of 4 to 10 kilometres. That is 50 howitzers or mortars per WinSPMBT hex! However, these 50 tubes would not all fire on the one target hex, as there would be a mix of fire blows on enemy positions and suspected positions or forming up areas, as well as a barrage on the front itself.

The British would consider a defending enemy rifle platoon a battery level target, that is 2 troops (platoons), and would plan on at least 5 minutes, but more like 10 of fire before considering the target neutralised. Therefore, assuming the platoon is all inside the artillery battery's fire zone (say a 200 metre circle, 4 or 5 hexes) plan on one battery of 6 to 8 guns, firing for effect (ie on target!) for 3 to 6 turns or so to neutralise (not destroy, just neutralise, reduce in combat efficiency by 50-75%) the enemy before sending the infantry in to sweep the mess up. Of course, the assaulting infantry has to be able to get in within a move or so, so needs to be close to the falling shells. In war, safety distances are less than in peacetime, be prepared to take some 'friendly fire'. Naturally, mechanised infantry or tank riders can attack from further out, but will suffer if not all the enemy in the target area are neutralised (in game terms, pinned or worse). If the enemy is dug in, budget in a factor of 3, either 3 times as many guns (i.e. a British Artillery Regiment (battalion to other armies) of 3 batteries), or 3 times the time of fire preparation for the same result.

In other words, where artillery is concerned, quantity is what counts. Artillery is a brutal, club like weapon, and if you have it, lay it on thick if you want a useful effect. Dropping one SP howitzer on one spot and another on another spot 300 yards away, and so on, through an entire M109 battery of 6, is only going to provide harassing levels of fire. If the target is worth shooting at, drop all 6 M109 on the same target hex. Mortar sections of 2 or 3 tubes are not therefore killing weapons, but can be useful especially if the fire is observed, to pin an individual squad, or annoy enemy ATGM teams.

Once ATGM become common, your artillery becomes a prime method of neutralising these weapons, especially if primarily infantry types fired on foot, but ATGM vehicles tend to be lighter armoured and so more vulnerable to HE fire, and get slaughtered by AT bomblets. Do not bother to wait for these to fire, identify likely good firing positions for long range AT weapons, and smoke these off from your advancing troops or shell likely firing positions as policy.

In WinSPMBT, observed fire will drift less off target, Observed means the directing officer can see the impact hex, so try to have observers in the correct position to overwatch the fall of shot. Observer teams and FO vehicles also have shorter artillery delays when calling for fires, and their high skill in artillery means the scatter will be less than an armoured platoon commander would when controlling the fire.

> **NEW for WinSPMBT** is an improvement to the AI. It has been given the ability to target "events" exactly the same way as a human player has been able to. For example, when Barbed Wire or mines or Dragons teeth are cleared by the enemy the human player will be warned with a message telling him this has happened. In the past, the Human player could target artillery at those hexes to disrupt the AI's attempts to dismantle them. Now the AI can target it's artillery when **YOU** do this as well. Another example is infantry popping smoke. If you were playing the AI in the past and forced him to pop smoke you could then target that area with mortars or artillery knowing there were units in that area. Now the AI will as well. This applies to **any** smoke signature . In the past if the AI fired an ATGM at you the smoke trace from firing was visible and you could target artillery on it's location. Now the AI will as well. This evens the playing field a bit more when playing the AI. If you can see it, the AI can now as well

When you get access to ATGM, these outrange the old WW2 AT guns considerably. In the advance, use these to overwatch the defending armour and pick them off at long ranges. In the defence, pick off enemy armour at long ranges. Do not tie yourself to one position, as the enemy will eventually bring indirect fires in on you. Use shoot and scoot type tactics, provide APC or even jeeps to relocate foot ATGM teams to new firing positions, or use light vehicle ATGM units (and helos are just extremely fast ATGM equipped tank destroyers). ATGM supply is limited, so consider ammo resupply units up near the front line to cycle ATGM missile units through for replenishment. Later MBT with Chobham armour or ERA and so forth reduce ATGM effectiveness considerably, but advanced top attack ATGM and double charge ATGM redress the balance somewhat.

When fighting against a human, assume he has ammo trucks somewhere behind his ATGM line, or near to his gun lines, and plaster around these with artillery, as an exploding ammo unit is a satisfactory thing to see, and the collateral damage may take out units alongside them whilst in the process of recharging their ammo.

"The power of an air force is terrific when there is nothing to oppose it.", Winston Churchill: The Gathering storm, 1948.

Just remember that planes are flying artillery, quantity is a big factor here as with tube artillery. Having a flight of 2 planes will not tend to tip the balance much, but 12 flights can be dangerous, especially if you bring them in in large wave style attacks to reduce AAA factors, do not use planes in penny packets except to annoy another human player, or to gain recon information from the pass.

Aircraft with cluster bomblet ammunition can be extremely devastating, provided you select the right sort of bunched up group target. Hold these in reserve till you identify a bunched target array, try not to waste them on individual targets surrounded by open space. Modern aircraft with missiles can be very dangerous indeed. All air strikes increase in lethality with little or no credible enemy AA weapons, e.g. guerilla type armies were severely outclassed by small COIN type planes, until shoulder fired SAM became more readily available.

Modern anti air guided missiles can be very dangerous to your planes, so plan on suppression of enemy air defences (SEAD) as the first few missions flown, try to locate his SAM and remove these, if you have time, use artillery to shoot into areas where enemy SAM were located or suspected, to keep their heads down before flying more missions. Use scout planes, helos nosing around the battlefield and on map ground recce units to try to spot the enemy air defence. The best anti SAM weapon is a tank overrunning its position, just like the best AA weapon is a tank parked on the enemy runway!. LR SAM ammo tends to be limited, so as with any other weapon, assume the enemy human player has invested in ammo trucks to reload these, and has them handy, so search around the position with artillery barrages, looking for secondary explosions as these blow up.

Consider holding back your fixed wing air in a game till later on , when ground troops, artillery and helo units have reduced the SAM threat for your air force. Attack helos, or troop carrying helo units used properly are very effective anti SAM assets. Of course, a human opponent may assign some rifle units (and perhaps shoulder fired MANPADS) to guard his rear area artillery park against helo desant tactics!.

If the enemy is weak in AA defences, you may have a field day with your planes.

"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat.", Sun Tzu

"A good plan violently executed now is better than a perfect plan executed next week.", George S. Patton, Jr.

Your most effective weapon is **always** your battle plan. Any player with no plan, who just dumps things on the board and pushes them about is merely reacting to events, see what Sun Tzu had to say about that several thousand years BC in the quotation above!. A player who has a plan can impose his shaping of the battle onto anyone without one.

You **require** a plan, even a simple one like 'I will go around the left flank, then down the objective line', or you are putting yourself at a severe disadvantage even against the AI, which does have a rudimentary plan of its own.

"Thus, what is of supreme importance in war is to attack the enemy's strategy.", Sun Tzu

Attempting to ascertain the enemy's strategy, and then foiling this is a primary way to win especially against the human opponent, the AI has a very simplistic 'plan' if it can so be labeled at all !. A few units running loose in the human enemy's rear zones can cause severe distraction, with this perhaps dislocating some or all of his strategy, should he not have prepared a reserve for such an eventuality. Doing the unexpected to human players can put them in 'shock' which you can then exploit. A good ambush deployed forwards in 'no mans land' ahead of your front line in turns 1 or 2 when delaying or defending is good for this as many human opponents will consider that area 'free passage' and charge along at full speed in it.

"Passivity is fatal to us. Our goal is to make the enemy passive.", Mao Tse-Tung

Against a human player especially, try to impose your plan onto his, in order to make him reactive to your actions, in other words you get inside his "Decision Cycle". Being reactive instead of active is not good, the AI is a good example of a mainly reactive player. However players who defend by simply sitting dumbly in place and not manoeuvring will become passive even to the AI, which will start to gain advantage from this, by bypassing your positions, and ranging its artillery in onto your immobile forces.

Always keep a reserve of about 1/4 to 1/3 of your force held back and uncommitted, hopefully a reserve of mobile hard hitting stuff, this is a good tasking for tanks, especially fast 'cavalry' tanks like the Soviet ones. Use the reserve to exploit any gap your front line forces create, as a counter stroke to any unforeseen enemy action, to counter attack, or to flank around the main battle and come in from an undefended direction. Try not to commit the reserve too early in the battle, wait till the enemy is fully engaged and cannot easily move to counter it. If you do use the reserve, try to pull another formation back to create a new one. Against human opponents, invest in some cheap dismounted rifle units to provide security by guarding your rear area artillery and SAM parks from enemy helicopter desants, or fast forces running loose after outflanking your troops.

"The general who wins the battle makes many calculations in his temple before the battle is fought. The general who loses makes but few calculations beforehand.", Sun Tzu

Above all, never fall into the trap of under-rating the enemy in your mind, even the lowly AI can pull an occasional rabbit out of the hat. A human opponent may deliberately be playing dumb at game start, in order to lull you into a sense of superiority that he intends to take advantage of later. A human PBEM opponent is quite capable of playing a few battles against you in 'dumb' mode, simply in order to learn your style, without giving his own away. When playing in a competitive league or ladder, consider registering as a second 'persona' and playing this one as a 'newbie' against regular league players before the next ladder starts. Play at that level, to learn their styles, rather than to win. Use that knowledge when the league or ladder is started. Unfair?, recall Sun Tzu says that all war is based on deception. One person I knew playing SPWW2 PBEM would rename say his Nashorns as 'Tiger 2' as these both had 88 L71 guns, so when firing from a hidden location and still unspotted, false ID was given to his opponent!.

"Despise the enemy strategically, but take him seriously tactically.", Mao Tse-Tung

Strategy for taking out big AT guns (and other nasty things like that...)

Although based on the modern US Army their field manuals are available, and useful references < **Army Field Manuals>**

ATG that cannot see you cannot kill you. So deny them LOS.

The best way to ensure that the ATG cannot see you is to smoke them off or perform a night/fog assault, and/or make your attack through a wood/town/city/large village or a defile.

ATG are vulnerable to infantry fire, sniper fire and long-range MMG fires. Above all, they are vulnerable to shellfire. So your best antidote to ATG is artillery, and the second best is infantry weapons.

If you are assaulting/advancing then your artillery is your primary weapon system. Allow one battery per company, and one section of mortars per rifle company as a minimum.

You will need a minimum of a batallion of arty (18 tubes)for the barrage group and another for the hammer group. More is better - "Quantity has a quality all of its own" (Iosef Stalin) .

Smoke off the enemy front line to cover your approach, and drop HE on suspected enemy positions as you approach your break-in point. Blow the poo out of the approach path to your chosen breakthrough point with the barrage arty group while it is not yet time to fire the creeping barrage mission. Against a human defender - consider firing a fake barrage away from the intended point of attack as you approach.

Arrange a walking barrage (use the arty screen to shift fires incrementally to make the creeping barrage) on a small front (say 10-15 hexes) where you will be breaking into the enemy positions, and make the barrage depth about 3-500 metres deep, though with most guns firing on the main barrage line - the deeper guns are to pin troops, and murder any retreaters. Dismount your infantry at your edge of the creeping barrage, apcs to follow and tanks about 5 hexes behind, and then follow close behind the barrage into the enemy position. The infantry deal with any stunned (hopefully)enemy found in the beaten zone, with the tanks there to support. You walk behind the barrage at infantry pace (2 hexes per turn), nice and slow so the barrage has a decent dwell time on each lift. Artillery has a better neutralising effect if applied to the treated area for at least 2-3 turns

If your breakthrough zone has open flanks (you dont have a village or wood to screen say) - then drop smoke along the edges of your penetration to screen it off.

HE fire will also cause obscuration - so HE bombardment will cause some obscuration of enemy LOS as well as keeping the enemy heads down.

HE fire will also cause obscuration - so HE bombardment will cause some obscuration of enemy LOS as well as keeping the enemy heads down.

Assaulting through close terrain, with your infantry leading will find any enemy ATG etc at close range and confronted with troops the ATG don't like dealing with (grunts) while screening your tanks with both the terrain and the leading grunts.

Another good place too attack through is a narrow valley (defile) as then the ATG outside the defile cannot see to shoot at you. A defile gives you flank security on both sides, so all you have to do is march the barrage through it, and clear the valley sides.

Assign about half your arty to counterbattery of any on-map arty found firing at you, and if some does shoot - assign the whole lot as a "fireblow" on one revealed arty battery position at a time - don't sprinkle it about in penny-packets. That also includes any ATG that reveal themselves - even if you have not got the exact location, smoke off the LOS and drop the hammer on them with the entire CB allocation, that usually discourages them somewhat!. The CB group should contain some long-range offmap arty (with higher than average skill levels) to stay silent in order to fire CB on off-map enemy arty, if you can spare 2 or 3 of these batteries (good use for any core arty that has gained loads of experience in a campaign). These reserved batteries are a good way of holding some ammo in hand in case of shortages later in the battle.

Once you have deployed your troops behind the rolling barrage and have begun marching through the beaten zone, then use the CB bunch to drop fire-blows in the depth of the direction your walking barrage will be going through (essentially a second barrage wave preceding the main one by perhaps 10-15 hexes, perhaps spread to twice the width to pre-prepare the corridor) or to pound the flanks of your penetration corridor for security or to discourage or disrupt counter-attacks (especially if playing a human). If more arty or ATG appear then pull the CB group off the deep fire mission and mallet these, then return to deep/supporting fires as necessary.

Go for one objective cluster, deal with that, leave a covering force to hold it and then rinse and repeat the process for the remaining clusters. (against a human player probably make some feints with lighter/reserve forces against the others to ensure he keeps forces there rather than drawing them off to deal with the breakthrough).

Naturally - not all your troops will be immediately behind the barrage. a company of infantry will do as "beaters" with tank support (a company perhaps), the rest of the force should be in column behind ready to feed fresh troops as required, guard against flank counter-attacks etc.

MRL - if you have them - are best used on troops moving in the open, so are much better weapons for the defender than the attacker. MRL are a wonderful "assault breaker", and a perfect antidote to the above strategy of the narrow-front insertion behind a barrage, if you are a human defender vs a human attacker trying the above. A few MRL just behind the barrage line should annoy the tight pack of troops there !.

Naturally as an attacker in such a scenario - any defenders MRL that reveal themselves are a prime target for your CB hammer group. If you are an attacker, then a few MRL can be useful to break up any counter attacks by the defender. However - since refilling them takes time, then they are definitely an auxiliary weapon.

MRL are a wonderful counter battery/counter mortar toy for both sides (especially if the enemy is not dug in, or is using ammo trucks or dumps alongside or near the battery position).

As the attacker - use any MRL in your CB group for CB fires and depth fireblows. They are too inaccurate to use in the barrage line, as the danger-close zone for these is so big that if you do this you will suffer too many friendly casualties from the inevitable drop-shorts. Also, MRL fire in "burps" as the reloading takes time, and the point of the barrage is continuous fire. If you want to use MRL in the rolling barrage - then fire them in waves, some firing, some retiring to the ammo zone to reload etc, so some fraction of the battery is available to shoot each move.

Only use MRL in close support if your troops are dug in, and the enemy is mingled inside your defensive positions while in the open. Otherwise, never drop MRL within 10 hexes (500m) of friendlies I would say, or 5 hexes if you have an observer with "eyes on" the target hex.

MRL tend to draw CB fires - so move them about.

Your infantry mortars can be added to the barrage (in which case use them in the depth of the beaten zone, as pinners and retreater killers rather than in the main barrage line), or to CB (especially counter-mortar) tasks if long enough range - but in the early stages they are best used as screening smoke layers. Sections of mortars are useful to annoy any small units of enemy found that don't warrant the full hammer-blow of your CB&strike arty group. If playing a human defender they are useful to fire in "pepper pot" mode sprinkled randomly along any routes you think that he is moving troops up to counter-attack you, or as "murderers" if you think there is a mass rout of enemy infantry - drop them deep behind to chase and harass the retreat further.

MRL are an excellent murder weapon on routers and retreaters - so if you think there is a rout in progress, drop them behind the contact line to execute the runaways, like mortars. They can be quite good as "pepper pot" weapons as well.

Also - firing the on-map mortars while withholding any on-map MRL/Arty for later use may tempt him to reveal his arty positions if he fires CB on them.

If you can - move your on-map arty about to avoid enemy CB fires. If you have access to self-propelled kit, this makes it easier to do.

So - that is the basic tactic for the assault. If you have a ridiculous amount of arty (USSR, BCE USA etc) then you might allow yourself 2 penetration points (or a wider penetration).

The advantage of the creeping barrage method is that you really only have to decide on the right place to attack. As it will be done at walking pace then there is no real need for open terrain. In fact close terrain is better as it lessens the need for smoke shoots. You do not really have to analyse possible enemy placements, since the barrage will be used to "mow the lawn" of any defenders placed ahead of your attack, and the screening terrain and/or smoke will blind the remainder. No need for any recce either ! - use any light recce to watch for counterattacks etc from an overwatch position.

"Pretend inferiority and encourage his arrogance.", Sun Tzu.

VARIOUS MILITARY QUOTATIONS

"If a man says he is not afraid of dying, he is either lying or is a Gurkha." – Field Marshall Sam Manekshaw.

"No sir, I will not abandon my tank. My gun is still working and I will get these bastards." – Lt. Arun Khetarpal PVC

"It is a good thing for an uneducated man to read books of quotations", Winston Churchill: My Early Life (1930) ch. 9.

"Engines of war have long since reached their limits, and I see no further hope of any improvement in the art.", Frontinus, 90 AD

"Goddam it, you'll never get the Purple Heart hiding in a foxhole! Follow me" -- Henry P. Crowe

"The principles of war, not merely one principle, can be condensed into a single word--`concentration.' But for truth this needs to be amplified as the `concentration of strength against weakness.'. . . Here we have a fundamental principle whose understanding may prevent the fundamental error (and the most common)--that of giving your opponent freedom and time to concentrate to meet your concentration.", Liddell Hart - The British Way in Warfare (1932)

"Choose the line (or course) of least expectation.

Exploit the line of least resistance.

Take a line of operations which offers alternative objectives.

Ensure that both plan and dispositions are elastic, or adaptable.

Don't lunge whilst your opponent can parry.

Don't renew an attack along the same line (or in the same form) after it has once failed.", Liddell Hart's maxims

"It is right to be taught, even by an enemy.", Ovid

"Adherence to dogmas has destroyed more armies and cost more battles than anything in war.", J. F. C. Fuller

"Every art has its rules and maxims. One must study them: theory facilitates practice. The lifetime of one man is not long enough to enable him to acquire perfect knowledge and experience. Theory helps to supplement it; it provides a youth with premature experience and makes him skilful also through the mistakes of others. In the profession of war the rules of the art are never violated without drawing punishment from the enemy, who is delighted to find us at fault.", Frederick the Great

"Man is the fundamental instrument in war; other instruments may change, but he remains relatively constant. . . . In spite of the advances in technology, the worth of the individual man is still decisive. The open order of combat accentuates his importance.", US Army Field Manual 100-5

"Man is the fundamental instrument in battle. Nothing can wisely be prescribed for an army . . . without exact knowledge of the fundamental instrument, man and his state of mind, his morale, at the instant of combat.", Ardant du Picq

"The human heart in the supreme moment of battle is the basic factor ", Ardant du Picq

"They fail to consider as a factor in the problem, man confronted by danger. Facts are incredibly different from all theories.", Ardant du Picq

"War is not an affair of chance. A great deal of knowledge, study, and meditation is necessary to conduct it well.", Frederick the Great

"The difference between the professional and the conscript-based army is that the former half-train their officers and then give them to a highly-trained sergeant to finish off officer training. The latter, lacking in long-service sergeants, train their officers to the point where they can train the sergeants.", N°113, August 1996, p.94. British Army Review

"No state has an inherent right to survive through conscript troops and in the long run no state ever has. Roman matrons used to say to their sons: "Come back with your shield or on it." Later on, this custom declined. So did Rome.", Robert Heinlein

"The patriot volunteer, fighting for country and his rights, makes the most reliable soldier on earth.", Stonewall Jackson

"It is impossible for Westerners to understand the force of the people's will to resist, and to continue to resist. The struggle of the people exceeds the imagination. It has astonished us too.", Pham Van Dong

"Men are seldom born brave but they acquire courage through training and discipline, a handful of men inured to war proceed to certain victory; while on the contrary numerous armies of raw and undisciplined troops are but multitudes of men dragged to the slaughter.", Vegetius (3rd c. AD)

"No plan survives contact with the enemy.", Field Marshal Helmuth von Moltke.

"[Blitzkrieg is] The art of concentrating strength at one point, forcing a breakthrough, rolling up and securing the flanks on either side, and then penetrating like lightning deep into his rear, before the enemy has time to react.", Erwin Rommel

"Tanks are easily identified, easily engaged, much-feared targets which attract all the fire on the battlefield. When all is said and done, a tank is a small steel box crammed with inflammable or explosive substances which is easily converted into a mobile crematorium for its highly skilled crew.", Brigadier Shelford Bidwell

"All action takes place, so to speak, in a kind of twilight, which like a fog or moonlight, often tends to make things seem grotesque and larger than they really are.", Carl von Clausewitz.

"Everything in war is simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war.", Carl von Clausewitz.

"The difficulty of accurate recognition constitutes one of the most serious sources of friction in war... War has a way of masking the stage with scenery crudely daubed with fearsome apparitions.", Carl von Clausewitz.

"The military machine--the army and everything related to it-- is basically very simple and therefore seems easy to manage. But we should bear in mind that none of its components is of one piece: each piece is composed of individuals, every one of whom retains his potential of friction. ... A battalion is made up of individuals, the least important of whom may chance to delay things or somehow make them go wrong.", Carl von Clausewitz.

"Many intelligence reports in war are contradictory; even more are false, and most are uncertain.", Carl von Clausewitz.

"It is even better to act quickly and err than to hesitate until the time of action is past.", Carl von Clausewitz.

"The art of war consists, with a numerically inferior army, in always having larger forces than the enemy at the point which is to be attacked or defended. But this art can be learned neither from books nor from practice:

it is an intuitive way of acting which properly constitutes the genius of war.", Napoleon

"Intuition is often crucial in combat, and survivors learn not to ignore it.", Col F.F. Parry, USMC (Ret.)

"Intuitive decision-making and mastering this profession are one in the same.", Lt. General Van Riper, USMC.

"The enemy resembles us. Therefore, he needs to be approached not as an assembly of 'targets' to be destroyed one by one; but as a living, intelligent entity capable of acting and reacting.", Martin Van Creveld

"The inevitable never happens. It is the unexpected, always.", Lord Keynes

"Nine-tenths of tactics are certain and taught in books: but the irrational tenth is like the kingfisher flashing across the pond and that is the test of generals. It can only be ensured by instinct, sharpened by thought practising the stroke so often at the crisis it is as natural as a reflex.", T.E. Lawrence: The Science of Guerrilla Warfare.

"No matter how enmeshed a commander becomes in the elaboration of his own thoughts, it is sometimes necessary to take the enemy into account.", Winston Churchill

"When the enemy advances, withdraw; when he stops, harass; when he tires, strike; when he retreats, pursue.", Mao Tse-Tung

"Hit hard, hit first, hit often.", Admiral Halsey

"If your bayonet breaks, strike with the stock. If the stock gives way, hit him with your fists. If your fists are hurt, bite him with your teeth", General Mikhail I. Dragomirov

"New weapons require new tactics. Never put new wine into old bottles.", Guderian

"Whether in attacking, counterattacking, or defensive tactics, the idea of attacking should remain central, to always keep the initiative.", Nguyen Giap

"In all honesty, we didn't achieve our main objective. As for making an impact on the United States, it had not been our intention-- but it turned out to be a fortunate result.", (General Tran Do, on the 1968 Tet Offensive)

"A piece of paper makes you an officer, a radio makes you a commander.", General Omar Bradley

"The common soldier's blood makes the general great." - Italian Proverb

"It takes 15,000 casualties to train a major general." - Marshall Ferdinand Foch

"The terms leadership and command are often used as interchangeably, which does disservice to the understanding of each concept. Command is a functional process and, therefore, unemotional, calculating and analytical. Leadership on the other hand, is a lot like love, because it deals with personal relationships, and these must be lived to be developed. Command is not an art or personal style, but a military science and process, a synergistic and cerebral application of equipment, tactics, weapons and men to achieve a defined military aim. Leadership, on the other hand, could be expressed as visibility and contact. A platoon commander is 95% leadership and 5% commander; he should really be called a platoon leader. A company commander is still highly visible and in direct man-contact, but he also has command tasks such as organising fire support, co-operating with tanks, controlling logistics, reporting to higher headquarters, etc. Let's say he is 50% leader and 50% commander. A battalion commander has restricted opportunity for direct leadership of men, but he is certainly a visible authority. Let's say he is 20% leader and 80% commander. Above this level, leadership is less than 5%.", Major-General N.G. Wilson-Smith, PPCLI (paraphrased)

"Ubi concordia, ibi victoria" [Where is the unity, there is the victory.], Roman proverb

"Never lose contact with the enemy! An objective, at junior combat level is usually a geographic feature that tactically is advantageous to own. In attack, when captured, it is not a resting place for tired, frightened soldiers. It is a base from which to exploit the success of the assault. By continuing movement toward the enemy, he is compelled to disclose his reserve defensive position and the pattern of his defensive fire. Such knowledge is essential to higher commanders if your initial success is to exploited. If contact with the enemy is not maintained, a program of patrolling to find him must be developed and a long drawn-out and costly process that is. It was most apparent in Korea where "bug-outs" rather than "planned withdrawals" were the order of the day.", Colonel J.R. Stone, DSO and Bar, MC, CO of The Loyal Edmonton Regiment in World War II and CO of 2 PPCLI at Kapyong

"Never lead forth a soldier to a general engagement except when you see that he expects victory.", Vegetius

MESSAGE FROM THE DUKE OF WELLINGTON TO THE BRITISH FOREIGN OFFICE IN LONDON,- written from Central Spain, August 1812 "Gentlemen, Whilst marching from Portugal to a position which commands the approach to Madrid and the French forces, my officers have been diligently complying with your requests which have been sent by H.M. ship from London to Lisbon and thence by dispatch to our headquarters. We have enumerated our saddles, bridles, tents and tent poles, and all manner of sundry items for which His Majesty's Government holds me accountable. I have dispatched reports on the character, wit, and spleen of every officer. Each item and every farthing has been accounted for, with two regrettable exceptions for which I beg your indulgence. Unfortunately the sum of one shilling and ninepence remains unaccounted for in one infantry battalion's petty cash and there has been a hideous confusion as to the number of jars of raspberry jam issued to one cavalry regiment during a sandstorm in western Spain. This reprehensible carelessness may be related to the pressure of circumstance, since we are at war with France, a fact which may come as a bit of a surprise to you gentlemen in Whitehall. This brings me to my present purpose, which is to request elucidation of my instructions from His Majesty's Government so that I may better understand why I am dragging an army over these barren plains. I construe that perforce it must be one of two alternative duties, as given below. I shall pursue either one with the best of my ability, but I cannot do both: 1. To train an army of uniformed British clerks in Spain for the benefit of the accountants and copy-boys in London or perchance, 2. To see to it that the forces of Napoleon are driven out of Spain. Your most obedient servant Wellington"

"A risk is a chance you take; if it fails you can recover. A gamble is a chance taken; if it fails, recovery is impossible.", Field Marshall Erwin Rommel

"He, general or mere captain, who employs every one in the storming of a position can be sure of seeing it retaken by an organised counterattack of four men and a corporal.", Colonel Ardant du Picq

"Gentlemen, you may be sure that of the three courses open to the enemy, he will always choose the fourth.", Field Marshall Helmuth von Moltke to his staff

"Never interrupt the enemy when he is doing something wrong.", Erwin Rommel

"All right, they're on our left, they're on our right, they're in front of us, they're behind us... they can't get away this time" -- Lieutenant General Lewis B."Chesty" Puller (when surrounded by 8 enemy divisions)

"What difference does it make if you have two tanks to my one, when you spread them out and let me smash them in detail?", Erwin Rommel, to a captured British officer in Libya, November 1941

"When the situation is obscure, attack.", Guderian

"Only study of the past can give us a sense of reality, and show us how the soldier will fight in the future", Ardant du Picq 1870.

"The study of history lies at the foundation of all sound military conclusions and practice", Alfred Thayer Mahan 1914.

"Theoretical knowledge is of no use if it is not supplemented by positive practice. You must train yourself to select terrain and make dispositions; you must reflect on this subject; and then theory, reduced to practice, makes all of these operations skilful and easy.", Frederick

"The important thing is to see the opportunity and to know how to use it.", de Saxe

"If we come to a minefield, our infantry attacks exactly as it were not there." - Marshall Geogi Zhukov

"Tactics, the evolutions, the science of the engineer and the artillerist can be learned in treatises much like geometry, but the knowledge of the higher spheres of war is only acquired through the study of the wars and battles of the Great Captains and by experience. It has no precise, fixed rules. Everything depends on the character that nature has given to the general, on his qualities, on his faults, on the nature of the troops, on the range of weapons, on the season and on a thousand circumstances which are never the same.", Napoleon

"History is a catalogue of mistakes. It is our duty to profit by them.", Liddell Hart

"The purpose of history, is to learn how human beings react when exposed to the danger of wounds or death, and how high ranking individuals react when submitted to the onerous responsibility of conducting war or the preparations for war. The acquisition of knowledge concerning the dates or places on which certain events transpired is immaterial . ", Patton

"History is a fable commonly agreed upon.", Napoleon.

"To learn that Napoleon in 1796 and 20,000 men beat combined forces of 30,000 by something called `economy of force' or `operating on interior lines' is a mere waste of time. If you can understand *how* a young, unknown man inspired a half-starved, ragged, rather Bolshie crowd; how he filled their bellies, how he out-marched, out-witted, out-bluffed, and defeated men who had studied war all their lives and waged it according to the text books of the time, you will have learnt something worth knowing.", Field Marshal Earl Wavell

"For heaven's sake don't treat the so-called principles of war as holy writ, like the Ten Commandments, to be learned by heart, and as having by their repetition some magic, like the incantations of savage priests. They are merely a set of common sense maxims, like `cut your coat according to your cloth.' `a rolling stone gathers no moss,' `honesty is the best policy,' and so forth.", Field Marshal Earl Wavell

"Ut visum, quo diligentius assuefacti sumus, eo manus modo ordinata nunc est reordinanda. Senior cum essem censui nos rebus mutatis semper reordinandos. Atque mirabile visu est tantis processibus effectis secutum nihil iusti ac bene morati exercitus et cum perturbatione irrita." [We trained hard, but it seemed that every time we were beginning to form up into teams we would be reorganised. I was to learn later in life that we tend to meet any new situation by reorganising; and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralisation.] Attr Petronius Arbiter, 210 B.C.

"You have never lived until you have almost died, and for those who chose to fight, life has a special flavour the protected will never know!" -Capt R Subramanium Kirti Chakra

Customising WinSPMBT
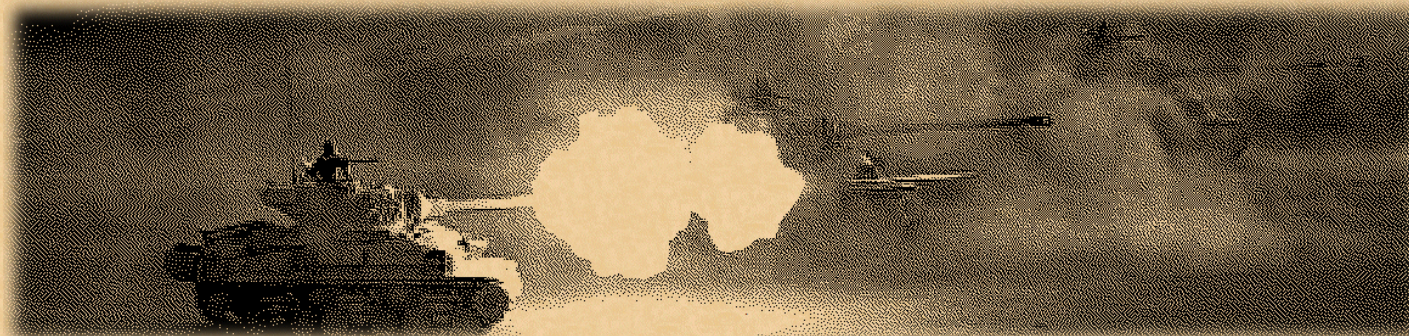
A Word about OB Customising

The WinSPMBT OB editor is Mobhack, and it is provided with the release. Please see the help files for that utility for details of producing custom OB files.

Mobhack lives in the Mobhack sub directory of your game.

Just remember the following about custom OB files:

1) In a PBEM game the 2 OBs must remain **identical** throughout the life of the PBEM game, therefore do NOT change OB files if you are playing someone in PBEM at that time.
2) Changing OB data can result in strange things happening in scenario games as these save all the game data **except** for weapons data, to which a reference to originating OB number and weapon number in that OB is stored. Therefore if you load a custom OB, and the OB designer decided to overwrite the G3 rifle with say a 155mm artillery piece, then all your German infantry will now tend to have 155mm howitzers. The OB designer can use weapons from other OBs than the 2 you thought he had used, so there can be these effects if you change an OB file you never thought had any relevance. (Say the OB designer loaded up USSR, and then issued some German squads with AK47s..). OOB file changes to units can also have strange effects on any existing scenario. Scenarios are therefore best designed using the official **The Camo Workshop** OOBS only.
3) Changing OB data mid game can have the same effects on your saved games as 2 above.

Basically, change the OB files at some point where all your games are finished. Check any scenarios for odd weapons appearing, if so, contact the OB or Scenario designer, not **The Camo Workshop**, unless these are **The Camo Workshop** products!.

You can now use the OOB manager in the **GameOptions Programme** to set up your game before starting a session that needs a particular OOB set - but it is up to you to remember to do this!.

Editable Player Files

A few enhancements have been made which will allow the player some flexibility in specific game areas.

CamoGame.ini

This file stores all the info you set on the GameOption screen that appears when you click on the start game Icon. It is not necessary nor recommended that this file be edited by hand

LdrXX.dat files

These live in the \data\NAMES directory of your game. Each XX relates to the OB number. They contain the unit leader names table for each Spob If deleted, a standard set is used, i.e. these tables override the defaults. The list of countries and their corresponding numbers can be found on the front page of the Mobhack editor.

If your name is Bloggs, you can now have unit leaders called Bloggs in the game.

They are straight text files delimited by a cr/lf as in Notepad. Leader name maximum character limit is 15, **do not** make these longer. Usually longer names will be truncated, but sometimes unpleasant side effects occur. So be careful with name length. **Do not use a word processor to edit**, use a proper text only editor like **notepad**, which will not fill the files with word processing format garbage extra characters!. If you live in a country which uses 'double byte' text, change to USA ASCII single byte. Do not use foreign characters like umlauts and cedillas. Be careful with punctuation marks like "&" as C may interpret these as string format characters.

You must **not** add a name to the end of the list. The program is set up to pick a name at random from a fixed number of names. Do not increase the number beyond what is already on the lists. If you wish to add your name to a particular country list you will need to overwrite an existing name. Do not **delete** a name either, as this will cause problems as well. There must be **exactly** 100 name 'lines' in the file, no more and no less.

RankXX.dat files

These live in the \data\RANKS directory of the game. The game uses the following series of ranks:
Private
Corporal
Lance Corporal
Sergeant
2nd Lt.,
1st Lt.
Captain
Major
Lt. Col.
Colonel
Brigadier General

But in an abbreviated format.
Again the XX relates to the mob number. If a RankXX.dat exists for a nation, then those names are used to replace the game defaults. There is no benefit from renaming a lower rank to a higher one. Limit is 8 characters per name.

NOTE: We have provided abbreviations of national ranks as best we can given the limitations of 8 characters. If you wish to go back to the original ranks used in the SP series, simply rename the file folder RANKS to XRANKS. The program will ignore these new lists and run off of the defaults written in the code. If at some point in the future you wish to use these new lists all you need do is remove the "X". As with the leaderXX files, there must be **exactly** eleven data lines or problems will occur. As with other text files, **Do not use a word processor to edit**. Do not use non USA ASCII characters such as Umlauts. Be careful with punctuation marks like "&" as C may interpret these as string format characters.

Other Text Files

In the data\text directory you will find encyclopaedia text files and the in game help files. These use the normal SP series format characters, see scenario editing section for the details. When making these, as with the Scenario

introduction text, you will have to experiment with the text as it sometimes lays the text out quite oddly, practice makes perfect!.

etNNNIII.txt, the **encyclopaedia t**ext entries for each unit in OB NNN and unit slot number III. Note that the code is not very good at deciding the right side cut off for text on screens, so you will probably need to try several times until the right side cut-off is correct.

ftNNNIII.txt, the **f**ormation information **t**ext files that appear in the purchases screen, OB NNN and formation OB slot number III., NB leading zeros used to pad these items for both et and ft text file names. I.E. France is 006 for the NNN part of the file name, formation slot number 12 would be 012 for the III part.

HelpNNN.txt, the in game help screen files which come up in the game itself when the ? button or key is used. Help000.txt is the main help file, others cover other help sub topics by number.

Scenario Editor

The scenario editor is where you design scenarios for the end user to play. We will cover here the basics of scenario editing and design.

Important note to scenario designers, remember that any scenario you design should be with the human as player 1 (the one on the left in the picture below) and the AI (computer) player as player number 2 (on the right).

Basic scenario design process is to firstly design your map, this is the most important element of any scenario, and you should therefore make this element first, and above all, save it off separately from any other scenario work. Having the map saved off separately means that you can easily reuse this element for other scenarios using the same terrain, or simply to start over if the design was a wash out! Once happy with your map, then buy and deploy the required troops. Have an idea of what you want to do as well, research the scenario from historical documentation if it is a historically based one, rather than a 'what if'.

The main editor page is where you make some critical design decisions. Underneath it live the map editor, and the scenario deployment sub routines. As mentioned above, make your map first, and save it off somewhere safe well before you start dropping troops onto it to create a scenario.

One major point to consider at the outset is if you are designing a game where the player takes on the AI, or one where a human can play either side. In the former, the AI needs to be given consideration, and it will need to be given advantages of force size, or position, or more likely both. Or the game length can be reduced so the human must make a quick rush at it. Scenarios designed for the computer to play one side should **not** be played by the human as the other side, it will be a walk over for that player. Therefore, advise the player in your introductory text not to play the computer side. Scenarios designed for 2 humans to play will be usually very difficult for the AI to win, so again state up front that a scenario is designed for 2 humans to play each other head to head. A rare minority of scenarios can be playable by the AI as both sides, or give a human player a challenge if he plays the non-default set. In nearly all circumstances, the human player should be the player No 1 in a scenario, unless you are an experienced designer.

And we may as well take some time here to note some points about scenario purchase and design, your scenario will be reported to the end user as whatever mode it last was in (advance, say). this does not mean that you require to *edit* the scenario in that mode. For example you may want to set up a meeting engagement, but you need to entrench some units, or buy a pillbox. Fine, build the scenario as an assault, dig the defender in and buy pillboxes, then switch to a meeting engagement. Then buy the second player troops, or they may get the dug in status that you get as an assaulter in a regular battle! Changing the battle type in creative ways during the design can be a useful tool for the experienced designer. For example, to get rafts for a non assault battle. Or simply to get the user off on the wrong foot, dig the defenders in and tell the user it is a mere advance mission, he may not expect mines lying about then..

The **date** of the battle determines the 2 sides involved. Note that it is perfectly possible to use a different date, should whatever you want not be available at that point, enter the desired date and buy troops at that point in time, then reset the date to the scenario date later. Only the **last** date used during the design process is the one reported by the scenario, so you could try a what if of 1940 French versus Germans with 1945 equipment, Just whizz the date to 1940, buy the required French kit, whizz the date to 1945 and buy the German stuff. Mainly this is of use in special circumstances for a scenario, the introduction dates of equipment in the OB files tend towards 'general service' dates, if you have a historical scenario where say some pre-production Tigers were used this is how to get them (and also to surprise the human player who may not expect to meet tigers before the 'encyclopaedia date' <G!>).

The map editor is reached via the **edit** button, but before you hop off and start editing, select the map size from the button on the left. (You can come back later, and select a larger map size, and then add stuff to the South part, or a smaller map size to 'crop' it into a narrower strip in the North, but it is better to start off with the correct size first to save hassles). You can save off the map separately from the scenario inside the map editing subroutine. Note that selecting the date and the opponent pairing will determine the map used for random maps from the normal **The Camo Workshop** selection, this ignores the climate of the map (desert, summer or winter).

The climate buttons determine the basic map colour, desert gives yellow tiles and desert features (like soft sand), summer is the regular green background (toggled to 'jungle' if you select the palm trees inside the map editor), and winter gives white tiles and access to the winter extra tiles such as snow drifts. Note that the editor does not care about dates regarding winter, you can make a winter map in august, should you so desire.

⚠ ****IMPORTANT NOTE WHEN EDITING MAPS***.** The map generation code is a lot more complicated than in the past. There are now Arid, savannah, winter,fall an spring set ups in the code. When building a map it is **VERY** important now to set the likely opponents for this map *before* editing. If you are designing it for Western or Eastern Europe in April then set the date to April and pick two likely opponents and stick with those while you edit the map. If you change to South Africa and Cuba in June for another map then try to go back you will see some different terrain when you try to edit. This is all part of the random map code. The code knows what we've told it to place on map when South Africa and Cuba are the opponents and that I**S NOT** the terrain you want when you are building a map for Germany. Just remember to set the two opponents you expect to play on that map and you'll be OK

A BIG note to map designers is that the map will be **one** of these types **only**, **Summer**, **Jungle**, **Winter** or **Desert**, depending on what mode it was *last edited in*.

Why say this?, well some map designers go in and use say a green summer map, then come out to the main screen, flip to winter, and then go in and place a few white tiles for what they *think* will be a few patches of 'snow' on a green map for extra 'colour'. **Nope**, if they last edited the map in **'winter'** mode, as far as the game is concerned the map is **now** *entirely* **a winter map**! The colour of the basic clear terrain tiles has **no** in-game effect, the season of the map is a *global variable* which affects the **entire** map. Only the special 'feature' tiles (such as snow drifts or soft sand) have inbuilt special effects. 'Clear' terrain tiles do not. Any tile that gives out 'clear' when you hover the mouse over it is a 'basic' terrain tile, of the type of terrain you last edited the map in, so if you say started with a summer map, exit and changed to desert and laid some 'yellow' clear tiles, then exited again, changed to winter and laid some 'white' clear tiles, this is now a winter map, and all the yellow, green and white 'clear' tiles will be basic snow (winter) terrain, because the last map edit mode was *winter*.

Select the visibility in hexes for the scenario with the **visibility** control.

Give the scenario location a name with the **NAME** button, this is NOT the scenario file name, it is the location name reported inside the game, like 'Sword Beach', 'St Lo', i.e. the geographical place name.

The **save** button here saves a scenario, a scenario is a map plus troops deployed. A scenario can be played, and a separately saved map can be used in battles.

The **Load** button by the maps loads a pre made map into the scenario.

The **Random** map button generates a random map using the **The Camo Workshop** map generation code, based on the 2 players involved and the date, but ignoring the climate, so a German vs French map generated as "Desert" would tend to look like a 'desert' France European map. If you want a desert map pick two nations with desert

The 2 main players are selected as for a normal battle. However unlike other battles, in the scenario editor, the map sides each use as home base is reported here, as this is very important stuff for scenario design. In scenarios we often need to be able to have the 2 sides fighting in a different direction. The side that you play from determines the retreat direction for routers, and where off map artillery comes from. If you just lay your troops as desired, but on opposite sides from the given, routers will run to the enemy and artillery will come from the wrong direction as well. Note that the directions are given in map terms, left and right, as there is no compass direction in any SP series game, Left side of the map can be North, South East or whatever you desire to call it. (Many players mistakenly think of the Right of the map as 'East' say, **not so**. Just a convenient convention which fits most cases. If you need North to be at the 'bottom' of your map, just design it that way, and note where North is in the scenario introductory text, you can even put the direction to North on the map with Map Text).

The **Map Sides** buttons are what allow you to exchange the default map sides, and it is a **very, very good idea indeed to set the map sides before you buy a single unit of either side** *should* you need to exchange sides. When you enter the editor for the first time the map buttons are 'free', press **Swap** to exchange sides. The map side buttons will then be put into '*locked*' state and the Swap button will be *hidden*. You can **unlock** the Swap button if required. Also note that loading a scenario into the editor will take the map sides you set up while editing that scenario, and place map sides into locked state. Just so you do not make a mistake. If you like the map side setup, then press **Lock** to lock the sides in, should the map sides be in free status.

The **preferences** button allows you to set preferences as you desire. For scenario design, points are of course unlimited, you just buy the 2 sides regardless of any notional points values (But, the points values of the various units will be counted as part of the scoring process at game end!, some scenario designers have in the past placed some 'destroyed' tanks etc. as 'scenic effects', a 'destroyed' Panther on the map will still be about 40 victory points to the opposite side!, if you do not want this, remember to adjust the points value for such a creation to 0 in the deployment subroutine!). The end user will be able to override your preferences, should these be important for your design then put a recommended set into your scenario introduction text. What is effected here is basic troop quality, if you want this to be other than the default, set as desired before buying your troops as this will save time editing later. You can go through them all and individually change morale and experience, but if the default for a nation is say 60 experience at this point in the war, and you know in advance that you want an elite bunch with say about 80 experience, set this up here and most of the troops bought subsequently will be nearer what you want on purchase.

The **map editor** subroutine of the scenario editor is where you create maps

Generally, it is just a case of laying down tiles, but see above about the climate.

A couple of other game global variables require to be mentioned however that relate to **water borne scenarios**.

The first is the gBeach global variable, this one determines if it is a **beach assault**, and whether landing craft are auto bought for your troops. This requires to be set **before** you buy any troops, and it is determined by building a beach in the editor with the appropriate key. Simply drawing in a lot of 'lake' tiles will not suffice, you **must** use the map editor beach key to have a beach built, though after the game has put your beach down, feel free to edit whatever it placed on the map of course. If you set the gBeach variable then all the assaulting side's troops will have landing craft bought for them by the AI buy routine, and added to their formations. You can of course edit the AI bought craft later, should you so desire. The gBeach variable is also used by the game purchase routines to make naval artillery available for purchasing. It is quite possible, should you desire, to ignore the gBeach variable and just lay down water, however it is then up to you to buy trucks (say) and convert to landing craft manually, and to buy artillery and also convert these manually. Also see the **'&'** key below..

The Second Global water variable is the gWideRiver variable. This is used to indicate to the game that this is a **river crossing assault**, and that the assaulter's troops that qualify will be issued with rubber assault rafts. This is the only way to have squads issued with rafts and to be able to carry these, a separately bought raft will need a truck to move it, it cannot be placed on a squad. Once again, just laying a few lake hexes manually to create your own wide river will not do to tell the scenario it is this type. Use the 'convert all rivers to wide rivers' key. Now this key will convert all the rivers on the map to wide rivers, so it is not a brainy idea to use this at the end of map design, should there be a need for minor streams and so on. Do this at the start, lay a stream about where you want your wide river to be, then convert this stream to a wide river. Lay your normal streams later, and edit whatever the AI did to widen the initial river to suit your map. Should you need both sides to have rafts, after setting the wide river variable, buy side 1, with the battle dial set to assault for that side!, and their squads get rafts issued. Now, go back to the main screen, save the scenario!, and flick the battle dial to the other side, so it is the 'assaulting' player now and buy its required forces and they will have rafts as well, see the **'^'** key **below**.

Note that if you need **jungle** terrain, then edit a **summer** map, and first thing, toggle the palm trees icon to use palm trees, not European ones. Then jungle features arrive, paddy fields, high grass becomes tall jungle grass (or bamboo etc.).

There are 2 map design pages, use the '>' red button to toggle between pages. Some features will change depending on climate (such as winter snow drifts).

There are now 15 hill levels as opposed to the other SP series games, which had a mere 3 hill levels, but only 1 through 4 are there all the time on dedicated buttons, use the '+' Cycle Level key to cycle the max hill button, this starts at level 5, one press of '+' Cycle Level key and you get level 6 and so on, cycling back to level 5 after 15. This method saved a lot of extra terrain level buttons.

Map Editing HotKeys

PAGE 1

CME= Custom Map Editor only

		DESERT	SUMMER	WINTER
	A	Red rough / rice paddys(jungle)	Tilled field / Rice paddies(jungle)	Stubble fields
	B	Concrete/Stone buildings	Concrete/Stone buildings	Concrete/Stone buildings
	C	base clear terrain	base clear terrain	base clear terrain
	D	secondary road	secondary road	secondary road
	E	Save Map	Save Map	Save Map
	F	red sand	wheat fields	light snow winter field
	G	soft sand	tall grass	winter grass

H	wooden buildings	wooden buildings	wooden buildings
I	Add text to hex	Add text to hex	Add text to hex
J	switch to Jungle	switch to Jungle	switch to Jungle
K	cycle through level 5+ hills	cycle through level 5+ hills	cycle through level 5+ hills
L	Custom Map editor - Load map	Custom Map editor - Load map	Custom Map editor - Load map
M	Map Text ON / OFF	Map Text ON / OFF	Map Text ON / OFF
N	Switch from page 1 to 2	Switch from page 1 to 2	Switch from page 1 to 2
O	Orchard	Orchard	Orchard
P	Paved Road	Paved Road	Paved Road
Q	Quit editing	Quit editing	Quit editing
R	Desert Rough	Summer Rough	Winter Rough
S	Stream	Stream	Frozen Stream (Dec, Jan, Feb)
T	trees	trees	trees
U	swamp	swamp	swamp
V	volcanic sand	green crops	snow drifts
W	water	water	Ice (Dec, Jan, Feb)
X	Erase Map	Erase Map	Erase Map
Y	Impassable Terrain	Impassable Terrain	Impassable Terrain
Z	CME - Select an area of the map	CME - Select an area of the map	CME - Select an area of the map
1	NEW level 1 hill	NEW level 1 hill	NEW level 1 hill
2	NEW level 2 hill	NEW level 2 hill	NEW level 2 hill
3	NEW level 3 hill	NEW level 3 hill	NEW level 3 hill
4	NEW level 4 hill	NEW level 4 hill	NEW level 4 hill
5	NEW level 5+ hill	NEW level 5+ hill	NEW level 5+ hill
6	Set Terrain Fill Range	Set Terrain Fill Range	Set Terrain Fill Range
7	Fill Area with Current Terrain	Fill Area with Current Terrain	Fill Area with Current Terrain
8	Mud	Mud	Mud
9	Bare Earth/Arid Soil	Bare Earth/Arid Soil	Bare Earth/Arid Soil
0	~~~	~~~	~~~
!	CME - Remove damage	CME - Remove damage	CME - Remove damage
@	Custom Map editor - RESTORE	Custom Map editor - RESTORE	Custom Map editor - RESTORE
#	Clear all map text strings	Clear all map text strings	Clear all map text strings
$	Change to Beach landing map	Change to Beach landing map	Change to Beach landing map
%	Do not use	Do not use	Do not use
^	Change to River crossing map	Change to River crossing map	Change to River crossing map
&	Do not use	Do not use	Do not use
*	Set hex height	Set hex height	Set hex height
(	~~~	~~~	~~~
)	~~~	~~~	~~~
__	Disable victory hexes	Victory hex display on/off	Victory hex display on/off
<	Set Obstacle height-CD only	Set Obstacle height-CD only	Set Obstacle height-CD only
>	Set Density of terrain-CD only	Set Density of terrain-CD only	Set Density of terrain-CD only
.	Turn hex grid on/off	Turn hex grid on/off	Turn hex grid on/off
****	CME-Goto the Map Generator	CME-Goto the Map Generator	CME-Goto the Map Generator
=	Generates a random map	Generates a random map	Generates a random map
,	Enter map region number	Enter map region number	Enter map region number
+	Map zoom in	Map zoom in	Map zoom in
-	Map zoom out	Map zoom out	Map zoom out
;	lock house	lock house	lock house
{	CME - restore map from undo	CME - restore map from undo	CME - restore map from undo
}	CME - restore map -> redo	CME - restore map -> redo	CME - restore map -> redo
:	CME- Saves map to the undo buffer	CME- Saves map to the undo buffer	CME- Saves map to the undo buffer

	DESERT	SUMMER	WINTER
/	Special multi hex buildings	Special multi hex buildings	Special multi hex buildings
[	Beach Sand	Beach Sand	Beach Sand
space	CME- clears terrain data	CME- clears terrain data	CME- clears terrain data
]	CME - paste into map	CME - paste into map	CME - paste into map
~	CME - quick autosave	CME - quick autosave	CME - quick autosave

	DESERT	SUMMER	WINTER
A	make beach L or R	make beach L or R	make beach L or R
B	grey cobblestones	grey cobblestones	grey cobblestones
C	contour base terrain	contour base terrain	contour base terrain
D	railway	railway	railway
E	Save Map	Save Map	Save Map
F	Grey sand	wheat fields	light snow winter field
G	ground cover/leaves	ground cover/leaves	ground cover/leaves
H	brick cobblestones	brick cobblestones	brick cobblestones
I	Beach Sand	Beach Sand	Beach Sand
J	red earth	red earth	red earth
K	cycle through level 5+ hills	cycle through level 5+ hills	cycle through level 5+ hills
L	Grass	Grass	Grass
M	Map Text ON / OFF	Map Text ON / OFF	Map Text ON / OFF
N	Switch from page 1 to 2	Switch from page 1 to 2	Switch from page 1 to 2
O	Convert streams to rivers	Convert streams to rivers	Convert streams to rivers
P	tramlines	tramlines	tramlines
Q	Quit editing	Quit editing	Quit editing
R	Grey Rough	Grey Rough	Grey Rough
S	Desert Hedgerow	Summer Hedgerow	Winter Hedgerow
T	Grass	Grass	Grass
U	swamp	swamp	swamp
V	volcanic sand	green crops	snow drifts
W	trench	trench	trench
X	Erase Map	Erase Map	Erase Map
Y	pavement	pavement	pavement
Z	CME - Select an area of the map	CME - Select an area of the map	CME - Select an area of the map
1	NEW level 1 hill	NEW level 1 hill	NEW level 1 hill
2	NEW level 2 hill	NEW level 2 hill	NEW level 2 hill
3	NEW level 3 hill	NEW level 3 hill	NEW level 3 hill
4	NEW level 4 hill	NEW level 4 hill	NEW level 4 hill
5	NEW level 5+ hill	NEW level 5+ hill	NEW level 5+ hill
6	Custom Map editor -New Fill Range	Custom Map editor -New Fill Range	Custom Map editor -New Fill Range
7	Custom Map editor -Fill Area	Custom Map editor -Fill Area	Custom Map editor -Fill Area
8	Create a City Grid	Create a City Grid	Create a City Grid
9	Light Damage	Light Damage	Light Damage
0	Heavy Damage	Heavy Damage	Heavy Damage
!	Custom Map editor - Remove damage	Custom Map editor - Remove damage	Custom Map editor - Remove damage
@	Custom Map editor - RESTORE	Custom Map editor - RESTORE	Custom Map editor - RESTORE
#	Clear all map text strings	Clear all map text strings	Clear all map text strings
$	Change to Beach landing map	Change to Beach landing map	Change to Beach landing map
%	Do not use	Do not use	Do not use
^	Change to River crossing map	Change to River crossing map	Change to River crossing map
&	Do not use	Do not use	Do not use
*	Set hex height	Set hex height	Set hex height

(	~~~	~~~	~~~
)	~~~	~~~	~~~
__	Disable victory hexes	Victory hex display on/off	Victory hex display on/off
<	Set Obstacle height	Set Obstacle height	Set Obstacle height
>	Set Density of terrain	Set Density of terrain	Set Density of terrain
.	Turn hex grid on/off	Turn hex grid on/off	Turn hex grid on/off
\	Goto the Map Generator-P2	Goto the Map Generator-P2	Goto the Map Generator-P2
=	Generates a random map	Generates a random map	Generates a random map
,	Enter map region number	Enter map region number	Enter map region number
+	Map zoom in	Map zoom in	Map zoom in
-	Map zoom out	Map zoom out	Map zoom out
;	lock house	lock house	lock house
{	CME - restore map from undo	CME - restore map from undo	CME - restore map from undo
}	CME - restore map -> redo	CME - restore map -> redo	CME - restore map -> redo
:	CME- Saves map to the undo buffer	CME- Saves map to the undo buffer	CME- Saves map to the undo buffer
/	~~~	~~~	~~~
[	~~~	~~~	~~~
space	CME- clears terrain data	CME- clears terrain data	CME- clears terrain data
]	CME - paste into map	CME - paste into map	CME - paste into map
~	CME - quick autosave	CME - quick autosave	CME - quick autosave

Further information (from information above)

$	Use this to set or reset the **global beach variable** 'gBeach' of the map for beach assault missions (triggers purchase of landing craft, use of naval off map artillery etc). Very useful for folk who made a large water map and forgot to make it using the normal 'convert 1 side of the map to beach' key! use this key after you have loaded the map into the editor, and before you purchase any troops at all, or difficulties can occur. This section of code will check to see that this is an assault mission, and will prompt you if it is not, you can elect to not follow this advice, but non-assault beach scenarios can have strange results. The game is intended **only** for assaults when the beach flag is on, remember! Note that when you purchase the assault nation's troops you will be asked if you want to buy the landing craft for them, in some circumstances you may not want to do this (say for a batch of troops on an island, which the human player will ferry over as secondary waves, using the first wave's transport). Note also that before the landing craft are bought, the code will now try to load up any swimming or flying transport craft with troops, before it buys the landing craft, so it will load up any separately bought amtracks, DUKW or Dakotas you have purchased, unlike the original SP series games!
^	This works as for the global beach variable above, but applies to the **global Wide River** 'gWideRiver' map variable. In other words, use this to expressly set the wide river assault flag (infantry buy rafts), for example when you have a map where you want to put say a lot of small lakes, but do not want to use the 'convert all streams to wide rivers' flag for some reason. Again, the game will prompt you to make this an assault mission as this is the correct battle type for a river crossing. Also, use this key after you have loaded the map, but before you buy the troops, as usual.
!	This sets a start line for the human player 1 in **user generated campaigns only**. Player 1 gets to deploy up to this line, side depends on his base edge
"	**CD owners Only**. You can now flood fill areas of zero elevation with deep water using the **"** key in the map editors. This was primarily added to be used with the **Venhola map generator** but it can be used for hand made maps as well. For shoreline maps it saves a great deal of time but be aware that sometimes beach areas are recorded by Venhola as the same level as the water so those areas and any areas of shallow water you may want troops to wade through need to be added manually

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TIP

One easy way to build custom formations for your scenario is to create them in your OOB with MOBHack. You can then remove them after they have been bought for your scenario.

To the game, formations are just frameworks to hold units . Lets assume you want to build a specialised kampfgruppe with a mix of equipment not found in the regular OOB you can build in in MOBHack and when it's bought for the scenario it will retain the name you gave it in MOBHack and all the units. That data is saved in the scenario and the scenario does not refer back to it after it's bought so custom formations can be deleted from MOBHack after use without affecting your scenario.

Please remember---You CANNOT do this with UNITS.....only formations

Scenario troop deployment and editing

OK, you have made and saved off your map. This is where you buy your troops and deploy them for the battle.

Purchase is as for normal battles, but points are unlimited, as the troops on the table are what you decide

Deployment is basically similar to normal battle deployment with loads of extra features added on

Placement of troops is pretty much standard, it is the editing that differs

The first thing you will want to do is to **place the victory hexes**, it does not matter which of the 2 sides you are editing when you do this. Use the edit victory objectives button, and lay your victory hexes where you want them to be, and what nationality they will start as. The big decision here is what points value to make them, victory points are part of the score, and what you grant here is relevant. Low values will mean VP for destroying units is most of the end game score (approximately half the value of a destroyed unit is given as VP, remember, and abandoned units are counted killed to the side which has most score and/or holds all the objectives). High victory hex points will tend to skew the end score towards holding of victory hexes, especially where the overall points values of the 2 forces are on the low side, less so if this is a monster 12000 points a side scenario. If you do not require all 21 victory hexes, simply leave some at 0 value, and stack these with other scored victory hexes. Never leave a victory hex with zero value out in the open as it were, unless you are an expert. Recall that on initial entry, the victory hexes will have zero values!, the AI will not steer to victory hexes worth nil points that much, this is a common complaint from some new scenario designers 'I laid out the victory hexes but the AI would not advance on them it just sat still', please give the victory hexes a VP value greater than zero, bar the unused ones that you stacked with a scored one should you need less than 21 locations. Do not leave any victory hexes on the grey map edges as this causes the AI to have fits, ensure all are on the playing surface. Also, ensure that there is some way that the AI especially, and the human player less so, has of getting to these. A victory hex in a lake hex will only be reachable by swimming, ensure the AI has such units, and several ,as the first few may be killed. Better still, **always** place V hexes on terrain that any infantry or vehicle can reach. (Remember that even a stone bridge could be dropped, if a victory hex is on this it will probably now be in a lake hex, if it was crossing deep water, therefore now needing something which can swim to get at it, and if the AI has no swimmers it can have a case of fits! 😊

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PLEASE NOTE

Ensure that you have deployed all 21 victory hexes on the scenario map, at 0 value and stacked under others if you need less than 21 objectives. In a delay or defence scenario, you should ensure that all the victory hexes are set to the delay or defend player's nationality. Experienced users can place neutral or attacker-held victory hexes ahead of the delaying or defending AI positions to trigger a counter-attack, but this is an advanced technique which will need fine tuning of your scenario, with the reaction turn variable for formations, to get right. We repeat - **ALL 21 victory hexes MUST be on the scenario map**, as these are used in AI decision making. Off map objectives may well result in AI troops exiting the map to try to take these !

We have added a new button to the victory hex placement window to clear the victory hexes down and/or set all of them to a common value. The first question will allow you to move all victory hexes to the 0,0 position, and the second allows you to allocate a value to all simultaneously.

The Victory hex placement 'shapes' your scenario, for both the layout of defenders, and the likely approaches of the attackers, especially moving AI troops. Get it right and you have the basis of a good scenario, get it wrong and you have started your design off on the wrong foot.

If this is an attack and defence game, then you probably want to lay the defence side out first. Then place the attackers where you want them, determined by the defence layout and your scenario requirements.

Note that in a scenario battle, the only pre registered artillery targets that the player will get are those you set up for him here, in the deployment phase. Be creative with these, if you place too many right on the other sides defended locales, you will give the defence away! Place them 'near enough' to adjust from, and blame that on faulty intelligence staff work <G>. Also, you may really need only 2 or 3 gold spots, place the others at misleading places on the map,

again to mask the AI deployment. If you do not place any pre registered gold spots, all artillery calls for impromptu fires will be at full delay. This may be what you actually require in your scenario, if so, do not grant any pre registered targets.

Any pre game bombardment you plan will also fall as well, with nothing the player can do to alter this. A scenario starts at the beginning of turn 1, the turn 0 artillery plot (including pre registered targets) is up to you, the scenario designer. See the section on the bombardment screen for the new information, e.g. about timed missions and aircraft deployment.

The normal **deployment HotKeys** are made available to you, with some additions we detail here.

D	Edit the current units data. Note that we have allowed access to the armour fields for all units, in case they need *correcting*. DO NOT add armour to unarmoured types, such as infantry or AT guns, as this will just cause odd things to happen in the game. An AT gun with a 1 front armour value does NOT have a gun shield, it will probably get shot up with AP, or other unpredictable results.
O	Toggle the objective hexes display on or off
R	Change the current unit to a different type. Generally speaking, if you need trucks, buy a truck unit, but in certain circumstances you may need to change a unit to something else. Buying a rifle company and then changing all the units to tanks is just plain silly :-), buy the correct formation type when you can. Also, changing type can cause problems sometimes, so you may need to check the unit over with the D key, and ensure things like armour are correct. In other words, this facility should not be abused. Note, planes are artillery, and only planes can be changed to other planes, should you want a mixed flight, say as most end users expect the things to be in multiples of 2, a mixed flight of 2 different plane types can upset their count somewhat.. Be careful changing off map units to on map types, or vice versa, any on map unit of an off map formation will be a LONG way from its command unit, so will tend to be out of command control, and so not rally very well, amongst other things. Stick to changing off map gun types to other off map gun types and planes to other plane types, and you should be OK.
Z	Place and point objective hexes. (NB, objective hexes usually start with a value of 0, which the AI will naturally ignore. Many folk ask 'why does the AI not go for the objectives I placed in my scenario?', well, check that you remembered to assign them a positive value! :->)
.	For a scenario this is how you enter the game (scenario) **length in turns**, **IMPORTANT**!, a scenario with a 0 length will end *very* abruptly!
#	Set reinforcement turn for this unit, at the current hex. Set reinforcement chance, this is a percentage chance of arrival per turn, NOT a one shot chance. Therefore a reinforcement with a 10 per cent chance which does not arrive on the due turn will test again on each subsequent turn after its due turn as and until it makes the chance roll or the game ends, whichever comes first. Off map reinforcement units (air, artillery) will not arrive on map, but will be unavailable until they do arrive (Exception, reinforcement batteries will fire **Counter Battery fires**, something the game scenario designers wanted to represent higher formation counter battery assets under Army etc control, not the player's to plot on map missions with, they belong to 'A General of Artillery', not to 'Lt Col Player!'). This facility could be useful to ensure, say, that the AI keeps its planes in reserve for a later phase of the game as a surprise strike (the human player may have decided that since he has seen no air activity for some time,that the AI has none..). Off map units includes gliders, if set as a reinforcement, their speed does not start to halve per turn until they are on the map. Note that there are no restrictions to moving reinforcements about after setting them, but the thing if marked as a reinforcement will be **removed** from the game map at scenario start, and will use the location and facing it was in when you set it as a reinforcement. Any non reinforcement units loaded as a passenger on a transport will automatically be given reinforcement status as passengers of that transport, so load your transport up and just set the carrier up as a reinforcement, no need to do each carried unit separately. There are no restrictions as to arrival point, just do not use the grey hexes!, so your reinforcements could be paratroopers, or partisans appearing in the rear of the enemy. Or a massive flank march!
9	Toggle selected unit's auxiliary status, aux, fix or none. Do NOT use with anything carrying a passenger!!

The **next** and **previous** keys have a major difference here, in that they allow you to choose off map units (including passengers), as you just might want to be able to edit their characteristics. Note that as you can see passengers, you will see things like 'M10, passenger M10' which you don't normally see as you cannot select passengers, worry not, this is how SP points to its internal linked list of passengers, these M10s will likely be on a amphibious barge. Normally hidden from you as passengers are in normal games, unelectable. **But**, to be safe, it is best **not** to edit any unit that is a passenger as the game could possibly lose track, unload passenger units, edit them, then replace.

Auxiliary troops

These are introduced for Scripted Campaign scenarios mainly. Auxiliary troops are best seen as reinforcements given by you, the scenario designer to the player. Auxiliary troops will be added to the player's force, just like support troops, but they are additional to any support points allocated by you for this campaign node. They will appear on the list to be deployed as normal support troops if Aux status (placement hex is then irrelevant). Fixed auxiliary troops (status=fix) will remain in the hex and with the facing you design in the deployment phase, the user cannot move these troops in his deployment, they are useful for troops outside the normal deploy zone, or for critical units you do not want the player to mess with the deployment of, due to your scenario's design.

AUXILIARY TROOP NOTE

[1] Auxilliary Troops cannot be used in the first battle of a Scripted Campaign, rather only in the second or subsequent battles.

[2] Fixed and auxiliary troops are NOT meant to be loaded with or as passengers! Please see the Q & A at the end for a work around for that desired loaded up truck convoy!

Notes on changing unit type and editing data

The **D** key and button, give you access to most of the statistics of units. You can add on a point of armour for some of your units, say to represent sandbags, layered on tracks, or logs, if desired. You can remove armour, say to have a unit without the anti bazooka side plates, or to represent a particular tank at a certain point which was known perhaps to have brittle armour. Whatever is required for your scenario. You can increase or decrease crew experience, moral, and play with the leadership values. You might want to increase the Range Finder and Fire Control values of some known elite unit, say Wittman's Tiger 1. Do not add armour to an infantry unit, gun or whatever, that is silly, but feel free to armour vehicles, say a truck with improvised plates. However, be aware that armouring some soft vehicles can cause unexpected results, so be prepared to test your changes as part of your scenario design process to ensure they work as intended.

A major field for the scenario designer to play with is the points cost. Recall that approximately half the cost of a destroyed unit is granted as part of the final score, so playing with this value can be most useful. For example, if the scenario is a convoy situation, you may want to make the convoy trucks worth 300 points or so, so that losing one will hurt the player's score. A particular pillbox may be the desired point of a commando raid to blow it up with satchel charges, if so, point it high so the destruction of the thing is the point, not any victory hex it is placed on, as a victory hex belong to whoever last walked into that hex. Then the commandos can destroy the thing and withdraw, without some enemy straggler flipping over the hex it is placed on after they depart.

Remember also that this editor when allocating ammo will allow sabot rounds even if there are none for weapon 1, no check is made. Only weapon 1 has HEAT or SABOT ammo (bar those with an internal 222 code, see Mobhack for details), and the smoke ammo is related to weapon 1. (Main weapon smoke ammo is editable for scenarios, but not in Mobhack, it is data generated inside the game, like the leader name and statistics, not from OB files).

Scenarios save most information, so that changed OOB formations and unit types tend not to cause too many problems since the original data is saved in the scenario. However, this is the original data, if all T34 are changed from say speed 21 to speed 18 in a new OOB version, the scenarios built with the old OOB will still have speed 21.

The main thing that can cause problems when OOB data is changed in a subsequent release, or by a user editing things inappropriately in Mobhack is weapons data changes, as weapon data is reloaded into a scenario from the appropriate OOB databases. A weapon change to remove say sabot from some gun can leave scenarios with units having a load of now completely useless sabot rounds. If an existing weapon OOB slot is overwritten with a completely new weapon then extremely weird things can happen to scenarios!. For example, changing the M16 rifle in the USA OOB to a new howitzer class will result in existing scenarios using USA troops having howitzers instead of rifles.

Scenario Waypoints

We allow up to **125** waypoints per formation HQ now, the old limit was a mere 10. This gives you as the scenario designer a much richer tool for crafting the AI force reaction. Set up patrol paths, flanking moves and so forth using this facility. Refer to the section on waypoints for more detail.

Making Your Scenario Introductory Text

No proper scenario is complete until you have made a text file which is the text that the user sees on selecting your scenario on the main game scenario page.

This file is a plain text file that you create in a text editor, such as notepad, not a word processor which stuffs a lot of extra nonsense into the data, a plain text only editor. It is called **'SpscnNNN.txt'** and lives in the scen sub directory of the game. NNN is a 3 digit, leading zero number and is the same as the slot number you saved your scenario to, with 000 being the first slot and 999 the last.

It uses special characters to format. The code will wrap paragraphs, but is not very good at this, so it is best to manually place the CR/LF character yourself in text files. You will probably have to experiment a few times until the right hand side cut-offs appear exactly as you desire as the code is not very good at automatically wrapping the RHS of text strings correctly.

The '*' (asterix) character is used to indicate an end of line CR/LF pair.

The '_' (underscore) character is used to space titles etc, the underscores are not shown.

Generally, it is best to lay out your introductory text along the following lines:

SCENARIO TITLE*
*
Date: February 24, 1971* [use the long style, with month **spelled out**, some nations use dd/mm/yy format some use e.g. mm/dd/yy]
*
Battle Location: Somewhere*
*
Battle Type: (for exampe) Japan (Assault) vs China (Defend)*
*
*Historical overview section, if required. [Lay out the background here, as it applies to both sides. Leave nation specific stuff to the national briefs below]
*
Nationality #1 MISSION STATEMENT*
[Lay out what is required for player 1 to play the scenario, intelligence briefing, what he is expected to do, any special conditions in this section]
*
Nationality #2 MISSION STATEMENT (if required)*
[Lay out what is required for player 2 to play the scenario, intelligence briefing, what he is expected to do, any special conditions in this section]
[Normally, player 1 is the human player, and player 2 is the computer. This section is therefore only required if this scenario has been designed to be played either way, or as a human versus human scenario. If the computer side is not designed to be played by a human, say so here!]
*
Special notes*
* place any special requirements or recommendation's here, e.g., that this scenario is not designed to be played with a human as player 1, or suggested reality settings. (Even if you laid these out above, repeat, for emphasis)
*
Designed By : designer's name*

Naturally, feel free to do it your way, but the above is a useful template to start off with.

Note the **asterix** used to end lines (=CR/LF).

Distributing Your Scenario

A scenario is simply another form of save game, it therefore consists of the 3 parts **SpscnNNN.txt** if you provided this (and you should do so, it is the only way to talk to the end user!), **SpscnNNN.cmt and SpscnNNN.dat.** Remember that NNN is the slot number you saved to. As with PBEM games, you can open the .cmt file to see the game title in notepad but **do not edit** this, should you forget which is which, and select 'sort by name' so all the appropriate files are shown together in Explorer. Read only!

Zip the 3 files up, add any text file you need to the zip (assume the end user will not read this, they hardly ever do, heck hardly any read game manuals like this one!, consider yourself a cut above the average end user for having actually opened the game guide <G!>). Send to a friend, or post at sites which have SP scenarios. Include your email address in the end section of the intro text file, assume as I say that nobody will read any readme.txt file you supply in the zip.

One point, if you use slot 19, and someone else has already used slot 19 in their installation, your scenario will overwrite the existing number 19. The end user should know that he should manually renumber the scenarios as desired, but most do not, even though it is in the manual.. But remind them of this in your 'never-ever-readme.txt' file. And be prepared for complaints from those who never read these things, and toast their existing scenario..

WinSPWW2 and WinSPMBT scenarios are not compatible with each other due to database differences. WinSPWW2 maps can be brought over to WinSPMBT however, and vice versa

Scenario Question & Answer Section

Q: In the Scripted Campaign when I design a scenario using vehicles with passengers in fixed/aux status, I find those passengers standing around in various locations on the map during the Deploy phase.

A: This is a known problem with fixed/aux passengers. To avoid this when designing scenarios for the Scripted Campaign, load the passengers, set the vehicle as fixed/aux and then set the vehicle as Reinforcement, turn 1. The vehicle with its passengers properly embarked will then arrive at the beginning of Turn 1. (Andy says, Fixed Auxiliaries were not designed for passengers, they are meant to be fully deployed troops! 😄).

Q: What is the '**Fix Cmd Button**' used for?

A: This is only to update scenarios built for versions prior to WinSPWW2 version 5, to input the correct command level details so 'P' for platoon etc appear on the roster list. Use if upgrading an old scenario, otherwise ignore. (It was really only introduced for the **The Camo Workshop** scenario design team and was going to go, but then we realised some of you may have scenarios built for old versions which need this small data massage!).

Installing Third Party Scenarios

Some folk seem to have problems with this process, and 'lose' existing scenarios. Each scenario set supplied should provide this basic information in its readme.txt file, but here is the process.

1) Get your scenario downloaded, these will usually be together in a zip file. If you do not know what a zip file is, you will likely need one go to **www.winzip.com** and download the utility, it is usable without registration, but nags you after a while. Learn how to use the utility.

2) Unzip the files to a scratch directory, not directly to the \scen sub directory of WinSPMBT! You do not want to unzip directly into the \scen directory as the supplied scenarios **may** overwrite your existing scenarios, **if** the designer has used the same slot numbers as somebody else. [That is why you 'lose' existing scenarios, if your old one was Scen003 and the new one from some other designer is also numbered Scen003]

3) Open up the scratch directory in Windows Explorer, and **read** any readme.txt file the scenario designer supplied. He should note in this how to change numbers but here is what you do:

3.1) Check the scenario files supplied against the ones already in your \scen files directory, if these use the same numbers, they will overwrite your existing files. If no clash, move them over using Windows explorer in the usual manner.

3.2) If any of the files use the same numbers, say you have a spscn019 set already, then you must **manually** edit the numbers used in the new scenarios to a disused number in the 000 to 999 range (with leading zeros). You may decide on slot number 42 say (and up, if it is a bundle of scenarios). Simply use the normal Windows **file rename** process, and change the **numeric** portion of the file name **only** entering 042 in the first (if a series) 042 in the second for each file in the set. So the set spscn019.txt (if provided), spscn019.dat and spscn019.cmt get renamed to spscn042.txt (if provided), spscn042.dat and spscn042.cmt. The supplied slot 19 scenario is now ready to be moved over into your \scen sub directory, where it will no longer overwrite the existing 019 set, and will be available in the game in the 43rd scenario slot (000 being the first index).

(If you do not know how to rename files, or use explorer, refer to your Microsoft Windows help files.)

Only use WinSPMBT scenarios and campaigns- do not load SP1, SP2, SP3, WinSPWW2 or SPWaW scenarios or campaign data files into your MBT \scen directory, the save files are not compatible between game versions, but attempting to load 'foreign' data files into the wrong SP version seems to be a very common error.
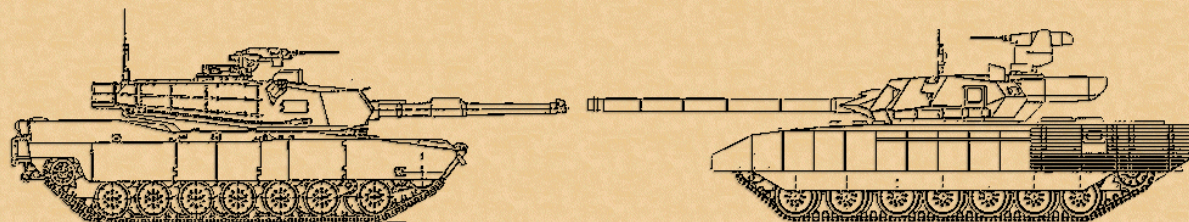
Scripted Campaign Editor
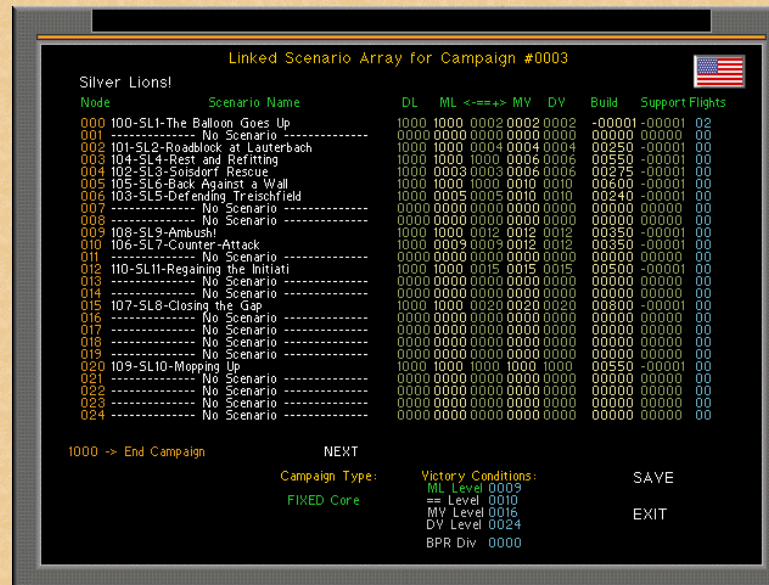
The Camo Workshop Scripted Campaigns will utilise the first few slots on page, and advance downwards, so you may consider using higher campaign numbers for your own Scripted Campaigns.

In Steel panthers 3, you could link up to 12 scenarios in a strictly end to end linear succession to form a Scripted Campaign. In SP1 and SP2, there was no way at all to make a campaign of your own design.

As you may have gathered from looking at the above screen shot, the The Camo Workshop WinSPWW2 and WinSPMBT Scripted Campaigns allow a lot more flexibility than that! :-). We allow up to 999 scenario nodes in a Scripted Campaign, not 12.

Our campaigns are also **not linear**, the battle result is used to determine the next scenario node to play, hence our campaigns can be 'threaded'.

Scripted Campaign editing is not for the faint hearted, it is for experienced scenario designers only. The following is aimed at that target audience, and as a general guide, you will require to experiment to get your campaigns right, much more so than you would with scenario design.

This is a 'live menu' screen. Live menus have 'live text' whenever you put the mouse over the text, most of these text fields are in fact 'buttons'.

Campaign Name, click the campaign name field and enter a new one, default is 'A campaign with no name'.

National Flag, click the flag to change the player's nationality.

Save, Saves the campaign data

Exit, leaves without saving

VICTORY these fields are used to determine the campaign end result in victory points (VP) At the moment 3 VP for a decisive battle victory, 2 for a win, 1 for a draw. (SSI campaign default) [We may change these values if designers think say a 0 1 2 4 8 type sequence is better, in a later release]

ML LEVEL enter the VP score needed to be met to gain a marginal loss of the **entire campaign** (failure to meet this level is taken as a **decisive loss** of the campaign)

== LEVEL enter the VP to be met for a draw of the entire campaign

MV LEVEL enter the minimum VP score required to be met to win the campaign marginally

DV enter the VP level which if met or exceeded results in a decisive level of victory for the entire campaign.

As a rule of thumb, count along the 'straight path' through your campaign, and assign perhaps 2.5 to 2.8 points times the number of battles in a row, all at DV exit level to reach the campaign end. So if the quick path through your campaign was say 10 battles, then a VP level of maybe 25 to 28 (out of a possible 30 VP) would be a useful first approximation of the DV level needed to win the campaign decisively, and scale the rest from there, here at 1 point for a draw, perhaps 15 for that level, and the win, but not decisively about half way between the draw and the decisive level.

BPR DIV This stands for 'Build Points Remaining Divisor'. This field gives the designer the ability to reward a player who has a surplus of build points left over at campaign end with a bonus amount of VP. Only **unspent** Build Points left in the player's 'kitty' count to this total. A player who completes the campaign with unspent Buy Points may have had an easier or more successful run than someone who goes the same set route of battles, but has spent all his points as he went along, either in repairs or upgrades. This bonus therefore rewards the more prudent player (or perhaps the one who uses a smaller core force, and does not expand it much) or the one who completes more missions with

less loss, and hence less repairs required. If this field is left at 0, excess Build Points are ignored, only the basic VP are used to determine campaign victory level. If, however this field is set to a positive number, then the amount of Build Points remaining will be divided by this number then the factor is added to the VP total for battles won. For example, entering 1000 here will add 1 VP per full 1000 remaining BP at end of campaign to the VP already gained for winning battles.

Scenario **Nodes** each node (battle location) has a set of fields:

The **Number**, At the left hand side, this denotes the node number, But it is also a LIVE FIELD. Pressing a node number field results in that number being entered as a selection, This number is then automatically pasted into any of the Exit fields you then left click on. This saves an awful lot of typing!, simply select node 123 by licking its number field, then fill all the EXIT fields which need 123 in them. A note is placed at the foot of the screen showing the value of the current selection, for your information. Click on this field to clear the selection. A live field is also provided at the foot of the page with 1000 as a value, select this to enter a selection value of 1000, the terminator node number. 1000 in an Exit field of a node is the signal to end the campaign.

Node 0 (the first one on the list) is the Start battle location for the campaign.

Scenario Name, to the right of the Number field. Press this and If the scenario is 'No Scenario' then the list of available scenarios is displayed.

1) The scenario name appears at that battle node number

2) The original scenario is copied as a template, then it is saved off as a campaign scenario file, with a note displayed confirming this. (See campaign files later). Therefore you can reuse the one scenario several times at different node locations, **provided** that the dates are correct!!

The end user does **not** require the scenario file to be installed in his scenario directory, you will distribute the scenario data files which contain your nodes scenario data.

IF there is a **already** scenario name, then pressing again clears the name. (But does not delete the node files generated, you may need to manually delete these if not overwritten with new game data)

Scenario **Exit Branches**, there are 5 of these for each scenario battle node. From left to right, DL, go to this battle node if the battle was a decisive loss for the player ML, go here if the player lost marginally ==, go to this location if the battle resulted in a draw MV, goto this location if the player has won a marginal victory DV, goto this location if the player won a decisive victory NB, remember that 1000 is the magic number for termination of the entire campaign at that exit point.

These numbers act differently depending on whether or not a selection is 'live' (see Number above). If a selection is live, then the value of the current selection is automatically entered on pressing the exit link field, but if there is no selection currently live, you will be asked to manually enter the number.

Build for Node 0, this will be the initial buy points for the entire campaign, as node 0 is the **starting** battle. For subsequent nodes, this field is the repair/upgrade points received at the start of that battle. Leaving this field at 0 results in whatever game defaults are in use being used as the basis of calculating the build points for the battle or campaign (if node 0). Entering a positive number results in this amount of points being granted to the user as a maximum, i.e. this is a 'cap' to the number of points granted (if the user has set preferences to a lower level, or his core is small for example, so the game generates a lower number, he will get less than this. If the game generates a larger number, this cap value will be used). Entering a negative number results in what I call a 'locked points' campaign. The user is given this amount of points (returned to him as a *positive* value!) and this *overrides* any user set preferences (so if the game decided on say 49 points, but you had entered,55 the player gets 55 whatever the game thinks). Thus a value of,1200 for node 0 gives the player 1200 start points to buy his core, and a value of,123 for battle node 1 will result in him being granted 123 buy points on starting that scenario to build or repair with. This method gives the designer the most control, and removes the problem of someone say selecting 3000 points at the outset of a campaign you designed to start with say 600 points and so destroying your careful balance of battles. (You should mention if a campaign is 'locked' on the introductory text screen for it to notify the end user of the fact.)

Support This field controls the amount of support points granted for each battle to purchase non-core units. Again, leave at 0 to use game defaults, a positive number for your 'recommended' level which the user preferences can override, and a negative value to use as a *locked* value, which the end user will **not** be able to override.

Flights This field is used to determine the number of flights made available to player 1 (The human), player 2 (the computer's) flights are whatever you put into his force in the scenario design. -1 uses the current game preferences setting (XXX or whatever the user has entered), 0 is no planes at all, positive numbers allows that number of air strikes.

Variable start lines in Scripted Campaigns, when designing the scenario, you can enter a start line which deviates from the normal 25 or 50 of the default battles, use the '**!**' key in the map editor to assign a start line for usage only in Scripted Campaign battles, and only for the human (player No 1). This allows the Scripted Campaign designer a latitude of freedom similar to a scenario set up.

Overall though, the best way to find out how the campaign system works is by making and experimenting with a few **small** test ones, even 2 battle ones. Only a foolish person would dive right in and try a 50 battle mega campaign as a starting point!

Scripted Campaign Design

When using a scenario for a campaign, take care to note that the human player will ALWAYS be player number 1 (i.e. his flag is on the LEFT hand side when the scenario is in the editor).. This does not mean he plays on the left side remember! The player 1 forces for the scenario are REMOVED to be replaced with player bought forces. Player 2 forces will remain. Best to buy an HQ unit anyway for safety.

The name given to the scenario in the Scenario Editor, number of moves, and visibility etc. will all be used. **ABOVE ALL**, the scenario date will be used for the battle date!, do NOT use a 1939 scenario after a 1944 one, or you will warp back in time! Another date related item, certain nations will use different sides of the battlefield depending on opponent and date. If you use a scenario as a battle location where say the original designer has 'swapped sides' then you can end up with both sides having the same deployment side of the map! The key one that causes confusion is where a scenario was designed for one nation (say USA) as player #1, and you use a different nationality (say USSR) from the original scenario player #1 as the human player nation in the Scripted Campaign.

It is therefore best to test each scenario you intend to use in a 'test rig' campaign consisting of precisely 1 battle location, you can use this in succession, replacing the scenario with each of the set you plan to use. Load the scenario to test, save the test campaign and start it, you should quickly determine if it is one where the enemy is on the wrong map side at that date and time. You may need to redo the scenario.

You can reuse a scenario several times over, say if you place it on a different 'thread line' depending on earlier victory or loss situations in the scenario line of progression. If all the parameters stay the same, fine, just use it as it stands. However, you may need to adjust the battle date if the time line for the scenario differs in the new thread. Just load the scenario into the editor, change the date (you could change the name too!), and save in a scratch file, then use that scratch file in your Scripted Campaign.

It is **not** a very good idea to loop **backwards** in the campaign flow. This could create endless loops, and going back to battle 0 is not likely to be a good idea either. Probably the best idea is to lay down your 'decisive victory' main thread as the first sequence of battles, this will be the series of battles the end user plays should he win decisively in all battles to the campaign end. Use that as the backbone to your campaign design. Then, say, write a thread of battles from the marginal victory of battle 0, and lay this down after the main backbone thread. This thread may rejoin the main thread after a decisive victory, say.

You cannot easily enter (insert in between, rather) new nodes, so do not write a campaign 'on the fly' as you make it up, otherwise you will end up with a tangle of 'spaghetti code' which will be nigh on impossible to maintain. **Plan** your campaign, and write your battle flow as a proper flow chart on paper first. Also, there are 999 locations here, and most Scripted Campaigns will not use anywhere near that number, one idea would be to space your initial nodes apart say 3 or 4 lines, thus leaving space for last minute additions to be inserted later on, without as much grief. Any of you who ever programmed in one of those BASIC compilers which had no 'renumber' command in the editor will know why the default was to number lines with an interval of 10!

Scripted Campaign Files

The campaign data is saved in the /scen directory in the format UCAMPNNN.DAT (Scripted Campaign 999 would therefore be Ucamp999.dat) Each battle file for each scenario is saved off in the form CNNNSXXX.DAT (Battle 1 for campaign 0 would therefore be C000s001.dat)

Note, once you have used the 'advance of the guards' scenario as a template in say node 123, the data will be saved off into a separate copy for the scenario, there is **no** need to supply 'advance of the guards' to the user (unless you really want to). You have distributed it to the user as CNNNSXXX.DAT. If you need to use a particular scenario at different places in your campaign, just place it at each node as required, provided all details (especially the DATE!) will be exactly the same. If, however you need variants of the scenario (even just slightly different dates to fit the campaign 'chain') either, create as many clones and edit them in the editor as required, then link into the campaign in 1 campaign edit session, or just use the one, link and save in the campaign editor once, save the campaign and exit, edit the scenario details as required, exit and save from scenario editor and re enter the campaign editor and link the altered version. That decision is up to you. Also recall, in your scenarios written for campaigns, there will be no need to buy any troops or place them for player 1, bar the HQ say as a placeholder, for these will all be removed from the map in any case.

Scripted Campaign Text Files

You can write an introductory text file for the scenario, which is displayed on selecting the campaign on the main game selection screen. Use a text editor like notepad to generate a file and save it with a filename of the format UcampNNN.txt, and that text will display when the user selects your campaign on the game menu. Ucamp0001.txt would therefore display for campaign slot 1 (recall these are indexed from zero!).

Do not use a word processor, and ensure your text is USA ASCII compliant (no umlauts, stuff like that).

For each scenario you can write both introductory text and exit text files. All take the form UCCCLNNN.txt where:

CCC	is the campaign number (000 to 999)		
L	is the ID letter for the message text file for each of the following game events:		
	i = the scenario introductory text message, played on entry to game		
	a, the text displayed at end game if the user loses badly		
	b, same, but user has merely lost		
	c, text displayed if the battle is a draw		
	d, congratulatory text on user winning the scenario		
	e, the text displayed if he won decisively		
NNN	is the battle node number (000 to 998)		

The introductory text file for a scenario is displayed at the entry to the scenario, it is scrolling text, and I have tried a 25K file. The exit texts can be used to taunt or congratulate the user on his progress, and give campaign progress info etc. All the text files are **optional**, but really should be prepared for a professional campaign. If the intro texts are not provided or not found, no adverse effect. If the exit texts are not found or provided, the **default** SSI exit texts are used (Scendd.txt etc. from the \scen directory).

Note, use the SSI text formatting characters, as with any scenario introductory text:

*	is used for a CR/LF pair (new line or empty line) and are not displayed
___ (underscores)	are used to align (e.g. centre) text and are not displayed

Distributing Your Scripted Campaign

Bundle up: UcampNNN.dat, UcampNNN.txt (if used), all the generated CNNNSXXX.DAT scenario files, and any UCCCLNNN.txt files you created. Wrap these up in a ZIP file, and instruct the user to extract to his \Campaigns directory.

Better yet, use some form of self extracting executable file installer, we have found that simple things like ZIP files, even PDF document files, confuse many less computer literate end users. Also, a decent install program will at least put the readme files in front of your end users eyes at least once, should you have readme files. Assume the end user will not read the readme files in any case, 90% will not, from our experience. Go to **www.clickteam.com** for a shareware install maker (which we used for this game).

Note, if the end user has a campaign NNN installed already. In this case Your campaign will have to overwrite the existing one (you cannot simply rename the campaign files to a different slot number as with scenarios - the internal data files refer to the campaign ID (slot) number). In this case the user will have to extract whichever campaign NNN he wants to play from his ZIP archive.

winSPMBT Unit Classes

Unit Class Names & Numbers, any special abilities Infantry Clone

UnitClass 0=Fort	Stationary, (can have rotating turret if correct icons provided now)
UnitClass 1=Infantry	Base infantry type, cloned by many others
UnitClass 2=Inf-AT	Base infantry AT weapon type
UnitClass 3=Cavalry	Infantry type, on horses
UnitClass 4=Machine Gun	Base MMG/HMG (tripod) type

UnitClass 5=Mortar	Fires indirect
UnitClass 6=AT Gun	Base AT gun type
UnitClass 7=	Automatic Grenade Launcher
UnitClass 8=Flak	AA guns (towed). Fires at aircraft
UnitClass 9=Field Gun	Fires indirect
UnitClass 10=Off Map Field Artillery	offmap, fires indirect
UnitClass 11=Armoured Car	All terrain wheeled (default) armoured vehicle
UnitClass 12=Light Tank	Tank Clone
UnitClass 13=Medium Tank	Tracked AFV, basic armoured vehicle type
UnitClass 14=Heavy Tank	Tank Clone
UnitClass 15=Close Support Tank	Tank Clone, may have smoke shells in non command units
UnitClass 16=Area SAM	Longer ranged and medium SAM, not vehicle mounted or vehicle mounted, but essentially fixed when deployed. If range long enough, can engage off map planes firing long range missiles.
UnitClass 17=Flame Tank	Tank Clone
UnitClass 18=Assault Gun	Tank Clone
UnitClass 19=SP ATGM	Basic ATGW vehicle
UnitClass 20=Engineer	Infantry clone, clears mines and DT
UnitClass 21=SP Artillery	Fires Indirect
UnitClass 22=SP Flak	Fires AAA
UnitClass 23=APC (Wheel)	Protects carried troops
UnitClass 24=APC (Halftrack)	Protects carried troops
UnitClass 25=APC (Track)	Protects carried troops
UnitClass 26=Utility Vehicle	soft skin
UnitClass 27=Medium Truck	soft skin
UnitClass 28=Heavy Truck	soft skin
UnitClass 29=Infantry SAM	Fires AAA, MG if correct icon assigned, or MANPADS SAM team icon
UnitClass 30=SP SAM	Self propelled SAM unit, capable of setting up to fire in a useful time if moved
UnitClass 31=Off Map Rocket Arty	Fires Indirect
UnitClass 32=Scout Vehicle	Armoured car type
UnitClass 33=Light Amphibian	Swims (if OB designer remembered)
UnitClass 34=Heavy Amphibian	Swims (if OB designer remembered), bought in beach assaults in some armies
UnitClass 35=Amphibian Tank	Swims (if OB designer remembered)
UnitClass 36=Mine Clearing Tank	Clears mines and DT
UnitClass 37=Engineer Tank	Clone of 36, Clears mines, Dragon teeth
UnitClass 38=SP Mortar	Fires Indirect
UnitClass 39=SP Gun	Tank Clone (not an indirect gun), use for SU or jeep/RCL etc
UnitClass 40=Heavy Infantry	Infantry clone
UnitClass 41=Landing Barge	Can be carried by barge carrier, default buy for beach assault transport
UnitClass 42=Assault Boat	Given 1 per rifle squad in river assault (only squads given a raft by the AI buy routines can carry a raft)
UnitClass 43=LCS	Barge type unitclass that allows **indirect** firing (**rockets only**)
UnitClass 44=Aircraft	Basic Strike plane type
UnitClass 45=Sniper	Size 0 gives extra hide and extra difficult to hit abilities. Extra inbuilt accuracy
UnitClass 46=LCG	Barge type unitclass that allows **direct** firing guns only
UnitClass 47=Glider	Air type which lands troops in gliders
UnitClass 48=Barge Carrier	Comes loaded with one AI selected barge.
UnitClass 49=Motorcycle	Infantry type.
UnitClass 50 =Air OP Aircraft	Small propellor aircraft or UAV used as spotter plane
UnitClass 51=Light Infantry	Infantry clone
UnitClass 52 =Wheeled SP-AT	Jeeps with ATGM, BRDM-ATGM and similar wheeled ATGM vehicles
UnitClass 53 = helicopter	Basic transport Helicopter
UnitClass 54=Crew	special infantry type generated from destroyed tank, gun, or bunker.
UnitClass 55=HQ	Special infantry type used for A0, better artillery spotter than other 0 unit types

UnitClass 56=Ammo Carrier	Replenishes ammunition expended. Both supplier and customer must be halted and in range for the supply unit (see below). Helicopters must land to be resupplied.
	AMMO CANISTER, crew is 1 and speed must be 0, usually transportable, supplies small ammo only (to WH size **4**), low supply points per move (20 ammo points) (Originally the ammo box icon for this was done only for a particular WinSPWW2 scenario using German paras (who only dropped armed with pistols), but left in for specialised scenario usage). Range 1 hex.
	AMMO DUMP, 6 or more men, speed must be 0, loadcost>49, an ammo dump supplies at lower rate (~1/2 rate) at 2 hexes range, full rate at 1 or less, has more supply per move (60 ammo points)
	Anything else is a normal ammo truck (even if armoured), 40 ammo supply points per move. Range 1 hex.
	NB, ammo units no longer supply points to an infinite number of 'customers' as in previous SP games, they supply one customer until it is topped off, then move on to the next. The order will be in unit list order (units further up the roster will be supplied first). You cannot cluster an entire company round 1 ammo truck and have all load equally any more.
	Ammo resupply is based on the Warhead size, WH 1 rifle ammo gets more rounds resupplied than a size 10 missile say.
	When destroyed, ammo units may generate secondary explosions in their own and nearby hexes. These are effectively 1000lb bomb bursts.
	You cannot play the old SP2 trick of loading a hovering missile firing helo from an ammo truck beside it - helicopters now need to *land* to resupply!.
UnitClass 57=FO Vehicle	Vehicle which acts as artillery observer
UnitClass 58=Scout	Infantry clone
UnitClass 59=MBT	Tank Clone, Main Battle Tank
UnitClass 60=Paratroop Transport	Air type which carries troops, drops paratroopers
UnitClass 61=Transport Aircraft	Clone of Paratroop Transport, drops paratroopers
UnitClass 62=Level Bomber	Carpet bomber type, only can use weapons with range 1, bombs, napalm, CBU, makes one pass and goes home.
UnitClass 63=Art Observer	Infantry type with special artillery spotting and quick calling facility.
UnitClass 64=Medium Infantry	Infantry clone
UnitClass 65=LMG Section	Infantry clone
UnitClass 66=SMG Section	Infantry clone
UnitClass 67=Rifle Section	Infantry clone
UnitClass 68=Rifle Squad	Infantry clone
UnitClass 69=Mechanised Infantry	Infantry clone
UnitClass 70=Heavy Mech Infantry	Infantry clone
UnitClass 71=Medium Mech Infantry	Infantry clone
UnitClass 72=Light Mech Infantry	Infantry clone
UnitClass 73=Mech Support Squad	Infantry clone
UnitClass 74=Mech SMG Squad	Infantry clone
UnitClass 75=Irregulars	Infantry clone. Hand To Hand combat bonus.
UnitClass 76=Partisans	Infantry clone
UnitClass 77=Partisan Support	Infantry clone
UnitClass 78=Partisan Band	Infantry clone
UnitClass 79=Native Troops	Infantry clone. Hand To Hand combat bonus.
UnitClass 80=Partisan Scouts	Infantry clone
UnitClass 81=Mech Scouts	Infantry clone
UnitClass 82=Patrol	Infantry clone
UnitClass 83=Commandos	Infantry clone, less problems with impassable terrain crossing. Hand To Hand combat bonus.
UnitClass 84=Commando Support	Commando clone. Hand To Hand combat bonus.
UnitClass 85=Light Commando	Commando clone. Hand To Hand combat bonus.
UnitClass 86=Medium Commandos	Commando clone. Hand To Hand combat bonus.
UnitClass 87=Heavy Commandos	Commando clone. Hand To Hand combat bonus.
UnitClass 88=Commando Scouts	Commando clone. Hand To Hand combat bonus.

UnitClass 89=Guards Infantry	Infantry clone
UnitClass 90=Guards SMG Squad	Infantry clone
UnitClass 91=Light Guards Squad	Infantry clone
UnitClass 92=Medium Guards Squad	Infantry clone
UnitClass 93=Heavy Guards Squad	Infantry clone
UnitClass 94=Guards Scouts	Infantry clone
UnitClass 95=Guards Support Squad	Infantry clone
UnitClass 96=Paratroops	Infantry clone, will be able to jump out of planes with less impact casualties than regular infantry!. Hand To Hand combat bonus.
UnitClass 97=Paratroop Support	Paratroop clone. Hand To Hand combat bonus.
UnitClass 98=Para light Infantry	Paratroop clone. Hand To Hand combat bonus.
UnitClass 99=Para Medium Infantry	Paratroop clone. Hand To Hand combat bonus.
UnitClass 100=Para SMG Squad	Paratroop clone. Hand To Hand combat bonus.
UnitClass 101=Paratroop Scouts	Paratroop clone. Hand To Hand combat bonus.
UnitClass 102=Obsolete Tank	Tank Clone
UnitClass 103=Medium Tank	Tank Clone
UnitClass 104=CS MBT	Close Support Tank clone.
UnitClass 105=Infantry Tank	Tank Clone
UnitClass 106=CS Infantry Tank	Close Support Tank clone.
UnitClass 107=Obsolete Heavy Tank	Tank Clone
UnitClass 108=Heavy Armoured Car	Armoured car clone
UnitClass 109=Wagon	Truck type Clone
UnitClass 110=Marines	Infantry clone (naval infantry)
UnitClass 111=Rangers	Commando clone. Hand To Hand combat bonus.
UnitClass 112=Marine Light Infantry	Infantry clone
UnitClass 113=Marine Support Squad	Infantry clone
UnitClass 114=Ranger Support Squad	Commando clone
UnitClass 115=Airmobile Support Squad	Infantry clone
UnitClass 116=Airmobile SPT Squad	Infantry clone
UnitClass 117=Legionnaires	Infantry clone. Hand To Hand combat bonus.
UnitClass 118=Legion SMG Squad	Infantry clone. Hand To Hand combat bonus.
UnitClass 119=Legion Support Wpns	Infantry clone
UnitClass 120=Heavy APC	APC Clone, protects passengers.
UnitClass 121=Light APC	APC Clone, protects passengers.
UnitClass 122=Light Support APC	APC Clone, use for fire support variants etc., protects passengers.
UnitClass 123=Airborne APC	APC Clone (no special 'airborne' ability bar the class name), protects passengers.
UnitClass 124=Airborne Support APC	APC Clone, protects passengers.
UnitClass 125=Gun APC (HalfTrack)	APC clone, protects passengers.
UnitClass 126=Gun APC (Wheeled)	Clone of 125, default move class is AT_Wheel
UnitClass 127=Gun APC (Tracked)	Clone of 125, default move class is Tracked. (125-127 report name as same in game)
UnitClass 128=Light SPAA Vehicle	Clone of 22
UnitClass 129=Light SP ATGM	ATGM vehicle class
UnitClass 130=SP Howitzer	Another SP artillery class, fires indirect.
UnitClass 131=Cavalry Tank	Tank Clone
UnitClass 132=Light Cavalry Tank	Tank Clone
UnitClass 133=Light SP Mortar	Clone of 38.
UnitClass 134=Demolition	This is a "Demolition" class that covers booby traps, IED's etc. These explosive devices can self detonate when enemy units are nearby and, in the case of IED's and Fougasse can be "command detonated" on the players turn who "owns" them, IF there is radio contact, by selecting the explosive charge then pressing "F". They can be defused / removed by Engineer units but because these do not represent "simple" mines the time required to take one out of the game varies even if the engineer unit is not under fire so patience is required. Sometimes it might only take a turn or two sometime 8 or 9 turns of longer (as in real life) If you do not have time for the "patience" approach and don't want to risk your troops they can be taken out with a well placed shot from a Sniper rifle. This is usually the preferred option because in this game there is no penalty for causing "collateral damage" so it's usually easier to simply detonate them with a Heavy sniper round from a distance NOTE that a "normal " sniper can also take out an IED but it may take a few shots to do it. As well , a large radio-controlled IED is useful for a pre-laid bridge demolition. One usually takes out a wooden bridge section but a player might want to stack 2 on a concrete bridge section to be sure and as well IEDs in the vicinity of an explosion may detonate spontaneously so a "string" of them side by side may cause multiple explosions setting off other IED's in

	sequence
UnitClass 135=Main Battle Tank	Tank Clone
UnitClass 136=Improvised APC	APC clone, protects passengers.
UnitClass 137=SP Rocket Launcher	SP Rocket launcher on map, fires indirect.
UnitClass 138=Heavy Transporter	Truck Clone (Used for Tank Transporter)
UnitClass 139=Self-Propelled Gun	Tank Clone (not an indirect gun), use for SU or Jeep/RCL etc
UnitClass 140=Pioneers	Engineer clone
UnitClass 141=Para Engineers	Paratroop clone, engineer abilities. Hand To Hand combat bonus.
UnitClass 142=Para Inf-AT	Inf-AT Clone, Paratrooper abilities. Hand To Hand combat bonus.
UnitClass 143=Para Sniper	Sniper Clone, Paratrooper abilities.
UnitClass 144=Para MG	MG Clone, Paratrooper abilities.
UnitClass 145=Commando Engineers	Commando clone, engineer abilities. Hand To Hand combat bonus.
UnitClass 146=Commando Inf-AT	Inf-AT Clone, Commando abilities. Hand To Hand combat bonus.
UnitClass 147=Commando Sniper	Sniper Clone, Commando abilities.
UnitClass 148=Motorised Infantry	Infantry Clone
UnitClass 149=para MG Section	MG Clone, survives para drops better.
UnitClass 150=Cavalry Scouts	Cavalry Clone
UnitClass 151=Rocket Launcher	On map artillery, fires rockets.
UnitClass 152=Heavy Mortar	Mortar Clone.
UnitClass 153=Light Mortar	Mortar Clone, minimum range halved.
UnitClass 154=Howitzer	Field gun clone.
UnitClass 155=Medium Artillery	Off Map Artillery clone.
UnitClass 156=Heavy Artillery	Off Map Artillery clone.
UnitClass 157=Light AT Gun	AT Gun clone.
UnitClass 158=Heavy AT Gun	AT Gun clone.
UnitClass 159=Captured Tank	Tank Clone
UnitClass 160=Reserve Infantry	Infantry clone
UnitClass 161=Reserve Sup't Squad	Infantry clone
UnitClass 162=Ski Troops	Infantry clone, snow terrain abilities.
UnitClass 163=Heavy Ski Troops	Ski Troops clone.
UnitClass 164=Ski Sniper	Sniper Clone, Ski abilities
UnitClass 165=Ski Inf-AT	Inf-AT Clone, Ski abilities
UnitClass 166=Ski Pioneers	Ski Troops clone, engineer abilities
UnitClass 167=Snow Vehicle	Truck type Clone, snow terrain abilities. (Snowmobile, BOVO etc.)
UnitClass 168=Ski Scouts	Ski Troops clone
UnitClass 169=Ski SMG Squad	Ski Troops clone
UnitClass 170=Guards Engineers	Engineer Clone
UnitClass 171=Marine Engineers	Engineer Clone
UnitClass 172=Bicycle Squad	Replaces old usage of Motorcycle class for bicyclists
UnitClass 173=Para Mortar Team	Paratrooper direct fire light/medium mortar class
UnitClass 174=Airmobile Engineers	Engineer Clone
UnitClass 175=Airborne Lt Tank	Special light tank, for hamilcar glider landing
UnitClass 176=Heavy MG	MG clone
UnitClass 177=Heavy MG Section	MG clone, use for multiple MG unit
UnitClass 178=Police	Infantry Clone
UnitClass 179=Hvy Bicycle Squad	Clone of bicyclists
UnitClass 180=Artillery Prime Mover	Special type for heavy artillery prime transport
UnitClass 181=AA Truck	as SPAA, but on soft truck
UnitClass 182=Pack Animals	A cavalry (horse based) transport unit
UnitClass 183=Light Truck	Same as light truck above, but assumed to be 4WD (mc=ATW)
UnitClass 184=Airborne Field Howitzer	Special Artillery piece, for airborne unit usage
UnitClass 185=Airmobile Hvy Infantry	Infantry Clone

UnitClass 186=Airmobile Rifle Squad	Infantry Clone
UnitClass 187=Motorcycle(Light Inf)	motorcycle clone
UnitClass 188=Motorcycle(Heavy Inf)	motorcycle clone
UnitClass 189=Militia	Infantry Clone
UnitClass 190=Light Militia	Infantry Clone
UnitClass 191=Heavy Militia	Infantry Clone
UnitClass 192=Militia Support	Infantry Clone
UnitClass 193= MG Unit	MMG/HMG (tripod) Clone
UnitClass 194=MG Section	MMG/HMG (tripod) Clone
UnitClass 195=Engineer Support Squad	Engineer Clone
UnitClass 196=Pack Howitzer	Howitzer clone
UnitClass 197=Rivercraft	LCG clone
UnitClass 198=Torpedo Boat	LCG clone
UnitClass 199=Patrol Boat	LCG clone
UnitClass 200=Mortar A	Mortar clone *(These 3 classes usually used for individual mortars in some OB's)*
UnitClass 201=Mortar B	Mortar clone
UnitClass 202=Mortar C	Mortar clone
UnitClass 203=Attack Helicopter	Armed attack helicopter
UnitClass 204=Light Helicopter	Use for observation type helos so acts as an **Artillery Spotter**, small transport helos with <1 squad lift etc, not armed with heavy weapons.
UnitClass 205=Heavy Helicopter	Heavy transport helo, Chinooks etc
UnitClass 206=Inf-ATGM Team	Use to separate missiles from e.g. RPG Inf-AT. AI will know not to approach too close with these (opposite of Inf-AT)
UnitClass 207=Para-ATGM Team	Same as 206, but para ability
UnitClass 208=Inf-RR Team	Inf_AT clone
UnitClass 209=Para_RR Team	As 209, plus para ability
UnitClass 210=Minelet Rocket Battery	Off map unit which fires artillery laid mines. Fires at faster rate than 211. 211 and 210 are the **only** permitted classes to use minelets. Cannot fire other ammo.
UnitClass 211=Minelet Arty battery	As 210, but represents tube artillery with minelet ammo, therefore fires at a slower rate. 211 and 210 are the **only** permitted classes to use minelets. Cannot fire other ammo.
UnitClass 212=Heavy INF-ATGM	clone of 206, used for e.g. TOW and other not too portable ATGM
UnitClass 213=Para Hy Inf-ATGM	as 213, but with para abilities.
UnitClass 214=SEAD Aircraft	Aircraft fitted with Anti Radiation Missile(s) which attacks SAM or AAA radars
UnitClass 215=Gunship Aircraft	Specialist aircraft which circles a target and uses cannon in area fires on that.
UnitClass 216=No Unit	Used in OOB design, if found in the game, it is an error!
UnitClass 217=MRV APC	APC Clone but Mine Resistant -- less likely to be destroyed by mines.
UnitClass 218=Mercenaries	Infantry clone
UnitClass 219=Light MRV APC	MRV APC Clone
UnitClass 220=Heavy MRV APC	MRV APC Clone
UnitClass 221=Light Attack Helicopter	Armed Attack Helicopter Clone
UnitClass 222=COIN Armed Helo	Clone of Attack Helicopter
UnitClass 223=COIN Fighter Plane	Clone of Fighter-Bomber, but it is less vehicle-centric in its targetting, so is more useful against them
UnitClass 224=COIN Infantry Squad	Infantry Clone
UnitClass 225=COIN Lt Infantry Squad	Infantry Clone
UnitClass 226=COIN Hvy Infantry Squad	Infantry Clone
UnitClass 227=COIN Inf Support Squad	Infantry Clone
UnitClass 228=COIN Scout	Scout Clone
UnitClass 229=Para Forward Observer	Paratrooper Clone plus Forward Observer Clone
UnitClass 230=Guerrilla Inf Squad	Infantry Clone
UnitClass 231=Guerrilla Lt Inf Squad	Infantry Clone
UnitClass 232=Guerrilla Hvy Inf Squad	Infantry Clone
UnitClass 233=Guerrilla Inf Support	Infantry Clone

UnitClass 234=Guerrilla Scout	Scout Clone
UnitClass 235=Guerrilla Sniper	Sniper Clone
UnitClass 236=Guerrilla Rocket	Rocket Launcher Clone (Indirect Fire)
UnitClass 237=MRV IFV	MRV APC Clone
UnitClass 238=MRV Light IFV	MRV APC Clone
UnitClass 239=Hovercraft	Hovercraft cannot bog down in mud and swamp like other vehicle classes and can move freely over land and water. They do not do well over Rough terrain and slopes and cannot enter treed hexes
UnitClass 240=Marine Heavy Infantry	Infantry Clone
UnitClass 241=Marine Scout	Scout Clone
UnitClass 242=Marine Sniper	Sniper Clone
UnitClass 243=Marine Forward Observer	Forward Observer Clone
UnitClass 244=Marine Infantry AT	Infantry AT Clone
UnitClass 245=Rocket APC	SP-Rocket Launcher Clone plus APC Clone (Indirect Fire)
UnitClass 246=Ranger Lt Infantry Squad	Ranger Clone
UnitClass 247=Ranger Hvy Infantry Squad	Ranger Clone
UnitClass 248=Ranger Scout	Ranger Clone plus Scout Clone
UnitClass 249=Ranger Sniper	Ranger Clone plus Sniper Clone
UnitClass 250=Ranger Pioneer	Ranger Clone plus Engineer Clone
UnitClass 251=APC	APC Clone
UnitClass 252=Field Gun	Field Gun Clone (Indirect Fire)
UnitClass 253=COIN Bomber	Level Bomber Clone
UnitClass 254=Machinegun Team	Crewed Machinegun Clone
UnitClass 255=Mortar(Sub Type D)	Mortar Clone

Non technical types might ask why so many classes are just clones (copies) of base classes, well, it is mainly of use in designing formations. The multitude of new classes allows the OB designer to write far more realistic OB files. Note also that any 'elite' or 'poor quality' comes from the formation that is used to hold the units, not the class, a Guards squad has no inherent elite nature, this comes from the 2 fields shown in the formation purchase screen. OB designers, note that anything marked as unused or not yet implemented should **not** be used for custom OB files!.

Map Generator screen

The map generator can be accessed from two places. If you are editing a map in the main game EDITOR press the " , " (comma) key shortcut and this message will appear at the bottom of your screen

Enter map region (0..249) or 500 for the Map Generator :

If you enter **500** the screen shown above will appear. The second place this can be accessed is from the **VIEW MAP SCREEN** by pressing this button.

The random Map generator lets you utilise all the various random map generation vaiables to experiment with creating your own randomised maps. The map Generator takes its basic settings from the Scenario Map Editor, such as type of map (Winter, Summer etc) and type of trees (Jungle or normal), as well as whether or not to use paddy fields.

As well, the Map Generator will pick up whatever batloc (Battle Location) map variables of either :

a] the default maps for the two opponents you have set in the editor based on month and year or

b] the terrain values of the batloc number you enter using the "," comma key When you enter 500 and the Map Generator appears you will see most of the numbers we use to generate a random map. Some of the numbers we use in the code can be modified by you in the editor.

The seasons are one example. Those can be adjusted in the editor before going into the Generator. If you enter map ID 119 as Summer in June it will pick up all the appropriate terrain features for a summer map in June. If you tried that same batloc number with the controls set to Winter in June you'll get a winter style map and the terrain tiles will be carried into the Generator so it is very important you familiarize yourself with all the new terrain features in the editor before doing too much with the Generator. Terrain can change quite a lot now from month to month even with the same "season" selected. Try starting in January with the "season" set to Summer then try it through every month of the year with Batloc 119. Now try the same batloc 119 with the season set to Winter and see how the maps change as you select successive months. Once you familiarize yourself with these changes understanding why the generator does what it does will be easier.

NOTE#1 - On returning to the editor, some random map variables will be overwritten, so if you used , for example, SP Camo Map ID 44, went in here and then exited - use the comma key and 44 to ensure that the correct vars for 44 are reloaded if you want to continue using that ID for random maps in that editor session.

NOTE#2 - There are many variables set into the code so that maps are not always generated the same over and over. An example of this are streams. Just becasue you enter a high number of streams in the Map Generator does NOT mean you will always get even one and if you enter a really high number what you will get will be a lot of swamps as streams and swamps are linked in the code

KEYS

Help - Brings you to the in game Help screen (? Key). You can find all the information about the Map Generator here as well under the "Map Generator" button

Zoom in/Out - Zoom map in or out (+ or - Keys).

Save Map - Save your map to a disk file (HotKey = s).

Generate Key - create a new Random Map using the current variables (HotKey is g).

Quit Key - Return to the Scenario Map Editor (HotKey q).

HotKey "." - Toggles hex display on or off.

VARIABLES

- **Urbanisation**

This controls both the road network AND the buildings made on the map

0 - No roads or buildings (possible small village).

1 - Single earth road, some buidings.

2 - Several earth roads, more buildings.

3 - One paved left-Right road, and secondary Earth roads.

4 - Produces more villages especially at road crossings.

5 - Produces a town placed on the Left-Right Paved Road. A town is a few small city grids.

6 -8 City.

9 - City starts to use more Government type Buildings.

This control is handly if you have an autogenerated map that you like but you don't like the way the roads or towns are set down. All you need to do is select the batloc you like in the editor using the , (comma) key then hit the , (

comma) key once again but this time select the editor using 500. The map variables that created the map you like will all be in place. All you need to do to remove the road and town net from that map by setting "Urbanisation" to zero and when you regenerate that map the roads will be removed. Press the black up arrow button and you will be returned to the editor and you can add whatever road/town net you prefer by hand.

NOTE! - it is NOT recommended to try numbers > 20 or so, unless you fancy a VERY long coffee break if you have a slow computer 😊.

- **Hill Density**

This variable determines the basic number of hills built. 0 means dead flat. Very large numbers can cause a long delay with a slow computer but can also create interesting maps as the hills try to merge into one another

- **Streams/Marsh**

This number determines how wet the map is. It controls number of streams, marshland, and lakes. As this number increases, these will do so too. NOTE: The controls here affect map swamps and lakes that are attached to streams. The other Marsh and Lake controls affect stand alone lakes and Marshes

- **Max Hill Height**

Determines the maximum Hill Height on the map. 0 will be rather flat, max is 15.

- **Hill Base Size**

This number (Which cannot be <1) determines the basic base size of the hills made. 1 produces very sharply rising hills, larger numbers produce broader flatter hills. Very large numbers can cause delays with slow computers.

- **Tree Level**

Controls the forestation level of the map. Produces both forests and tree-lines. 0 Means no forestation, larger numbers produce more forest.

- **Orchard Level**

Controls the number of orchards produced. 0 is no orchards.

- **Grass Level**

This controls how many grassy parts are laid on the map. Large numbers will tend to produce more grassy fields, if fields are not 0, *We recommend you experiment with this control and the fields controls as they are linked*

- **Rough Level**

This number controls how much rough terrain is laid on the map, both on flat areas and also on higher hills (>level 2 or 3).

- **Field Level**

This controls the number of fields which will be built. Fields can be grass, paddy, tilled, large patches of soft sand etc, Depending on map type. A high grass level number coupled to a high field level number will tend to produce more grass fields than planted. Entering 0 means a low field count, not none. **NOTE** - Note that SP Camo location ID 240 (used for e.g. Falklands and WW1 Western Front maps) will NEVER generate fields!. It is a special flattish map for such special wastelands which the field making code returns from without action.

- **Mud Level**

This variable controls the building of mud patches and strips of mud on the map. Generally, only small numbers need be used here unless you want a very difficult map. - Note that when the "Mud" number is increased for desert maps you will get increasingly larger patches of "earth" appearing. Those earth patches are treated as clear terrain

- **River Trees**
- **River Marsh**
- **River Mud**
- **River Rough**

These control the building of edging trees, rough, mud or marsh alongside rivers. Generally, only very small numbers will be needed here, 1 is approximately a 1% chance of say a river being planted in a riverside hex NOTE -River Rough also controls whether or not WADIS are built INSTEAD OF Streams. If River Rough is >100 AND the Wide River and Beach variables are NOT set (as we do not want any giant wadis or landing barges stuck on rocks :-)!! - 101 will give a 1% chance of a wadi being built instead of a river (if present) by the Wadi routine. If the Wadi routine is called, all rivers are converted to rough, and edged with rough as well, to produce a dried-out riverbed.

- **Road Code**

This is a road-building modifier flag. It is usually set to 0 for no effect.

0 - No effect.*

1 - Bocage edge roads, IF on lower hill heights.

2 - Edge Paved roads with trees only.

3 - As 2, but rough terrain is placed under the trees as well.

4 - As 2, but does Earth roads as well.

5 - As 3, But includes Earth roads as well.

255 - A special override, which ensures that action 0 is done, overriding internal map generator codes.

- **Terrain Mod Code**

0 - No modifications

1 - Bocage edging round fields

2 - Paddy Bunds (Banked Edges) around paddy fields

3 - Edge all fields with trees

4 - All fields are earth banked edges, with trees

5 - Paved roads raised on embankments, sometimes earth roads as well, Occasional edging of fields with trees (primarily for Holland Maps)

6 - Used for Sicily, Italy, Europe. Ocasionally apply edged fields to the map.

7 - WW1 or Stalingrad type shell-damaged map. Add many shell holes, blow all bridges etc.

- **Lakes Mod Code**

Zero is no lakes. A higher number gives bigger lakes

- **Marsh Mod Code**

Zero is no marshes. A higher number gives bigger marshes

- **Arid Mod Code**

This changes the base terrain to earth. One is Arid. Zero is no Arid. *The effect can vary depending on the two opponents choosen*. This control is NOT available when "Winter" is selected

- **Savannah Mod Code**

This changes the base terrain to yellow/brown grass. One is Savannah. Zero is no Savannah. *The effect can vary depending on the two opponents choosen.* This control is NOT available when "Winter" is selected

Note that "Savannah" and "Arid" cannot both be on at the same time

- **Season** in WinSPMBT. This allows you to change any map to Desert(0) or Summer(1) or Winter(2) terrain.

Mastering the Map generator requires some practice but once mastered the Map Generator can help map or scenario designers can save a great deal of time when building maps and/or scenarios. It's also quite handy for the casual player in that it allows you to customize your game maps quite quickly and easily.

⚠️Frequently Asked Questions

Is the number of times a unit reaction fires against an enemy who is firing or moving unlimited?

The number of certain shots is the number you leave it with at end turn. If you leave a unit with 6 shots free, then it has 6 free shots to take in opfire in the enemy turn.

However, if the enemy causes suppression or worse to your unit in his turn, then its number of shots will go down, or its chance of generating one (if 0) is diminished.

If you leave 0 shots, or it reduces to 0 during the enemy turn then unlike the original SSI code, our game will test to see if it generates a shot when needed. Likelihood of this depends on experience level (more is good), suppression level (more is bad), Morale (better is better), weapon size (smaller warhead is better).

Therefore - potential opfires from an enemy are in theory unlimited other than by ammo capacity, though in practice of course they are not.

This behaviour was introduced back in the MSDOS days, to stop the guys who used to tease out a Tiger's opfires with Jeeps, then send in the tanks once it stopped shooting back. In the old SSI code once he did not fire then it was guaranteed no further shots would come your way. Not so much, now. In our code the Tiger might just wake up and get a shot off at you. (And additionally it might not shoot at the 'bait' Jeeps much if at all, if it thinks those were not a threat).

In addition, assaults done in reaction to enemy armour now need sufficient movement points remaining - so don't charge your guys out to the end of a road with no MP left and expect to ambush a passing panzer! - leave at least 2MP.

So the answer to your question cannot be reduced to a single quantifiable number. It depends on many things. However it's best, should you think that a unit will need to fire lots of opfires to:

- not fire it in your turn, thus preserving maximum opportunities
- not move it either, ditto
- if its suppressed, then rally it up if you can.

Conversely, if attacking enemy and you want to reduce opfires, then get them suppressed before you move or fire.
- Your artillery now falls at the beginning of the turn, unlike the original code. So you have the benefit of any suppression done through your own turn - the enemy cannot "rally the barrage away" as in the original SSI code.
- Tripod mounted MGs are a good way of pinning enemy - they have a 1 hex blast radius and decent range. 50 cal have more range.
- Prior to assaulting a tank, have other riflemen than the prospective assaulter hose the target down with rifle and MG fire if it is not buttoned up, direct fire infantry mortars are good here. Wait till it shows as buttoned, then assault.

Can someone explain to me the benefits of an FOO... I always use just the headquarters unit to call in artillery indirectly, and that seems to work just fine. Why bother with a dedicated observer? What about mobile FOO? Are they any better calling in indirectly? Wouldn't a mobile FOO just be seen and destroyed if it tried to observe directly and call in fire?

The HQ is an "almost FOO" - it has speed of fire calling in between a line HQ and a proper FOO. (FOO includes observation helos - they are trained in calling for fire).

Your HQ is important - it is a rear link for comms, and getting it killed is a morale blow for the entire army, plus in most long campaigns, dead HQ = you are dead, campaign over. - so its job is to "hide with pride" somewhere safe in the rear.

FOOs call fires faster, and adjust fire better than non-FOs. They can be moved about and get into more risky situations than the HQ, to get "eyes on" target for more accurate shifting of fire. Losing an FOO does not end your campaign, or provide a morale and off-map comms penalty as with an HQ kill.

A proper FOO is more accurate when plotting fires with no LOS (map fires). Map fires plotted by an FOO are that bit more likely not to wander, or not wander as far. HQ is again better than an average line leader at map fire, but FO is the best boy there.

A core FOO in a long campaign will get art experience gain, which applied to his already high art command means very snappy arty response times. (For any support arty - core arty art command also increases, and is added to the FOO art command for call of fire delay, to a certain minimum).

So the fastest calls for fire are experienced core FO + experienced core arty element.

Getting an experienced core FOO killed is therefore bad news, as to a latter extent is losing the crew of an experienced mortar section say.

When pre-plotted fire points (gold spots) are allocated then more are added for the number of FOOs present, and also some of the kit does so too (GPS?). FOs with laser range-finders aid accuracy of observed fires. See the bullet points in the appropriate release history of the Game Guide.

In a long campaign, I usually only buy the one FOO in the core. They are not that cheap (especially if they have the later Gucci kit). It is my immediately first purchase. Thus it is B0 and easy to find on the roster (right after the A0). Saves looking all over the map for it - just open roster, select off page #1 and close roster. That gives me one mobile FOO if needed, and the HQ can occasionally call area fire on out of LOS targets etc.

What I hardly ever buy is FOO vehicles, though. They are too obvious a target, especially versus AI planes, or a human opponent. I stick to foot elements. However, in the 70s or so, the vehicle ones may be the only ones with enhanced vision (TI or GSR) able to see through smoke, which is a very nice ability to have. From the 90s on you tend to have foot teams with radar or TI available.

Observation helos are extremely good arty spotting platforms if the enemy has limited or no anti-air capability (against the VC or NVA say, where you can stay out of AAAMG range easily). Then you can perch it up at high altitude with impunity and not have to move it. (Moving while servicing a fire mission can break LOS and so make adjusting fire less accurate. Applies to non-helos too to a lesser extent. Basically unless you have to, FO should remain in place while servicing a call for fire if it is in LOS. Unobserved map fire has no LOS keeping problems of course). But any credible enemy AAA threat, and they have to play peek-a-boo with the enemy ADA. So then in a LC, they usually go "boom" every few battles and lose any accumulated experience gain.

Plotting arty is always my last event before I hit "end turn". I do not faff around with opening the arty menu every so often during a turn as things appear willy-nilly.

I often use the FOO to call in a task (for speed of response) out of LOS to him. Once that task has landed and expired then I can use a line HQ with LOS to the target to pick up that task and adjust fire. (One reason I usually only bother with the one professional FOO).

What is the minimum range for indirect artillery fire?

Artillery have a built-in minimum range, 20% of their max range and locked to a maximum of 20 hexes, minimum of 5. So only some very short range on-map infantry guns will tend to have a min range of 5-19 hexes in reality. (There has never been any distinction between guns, rockets, or howitzers as to min range in the game series).

It's not spelled out in any detail in any manuals since it is obvious from the fact that the "cannot fire" indicator is shown if you try to plot the gun on too close a target hex in the bombardment screen. Mousing over the red circle gives an explanatory message.

If you really need to fire indirect at close-in enemy targets - then issue mortars to your troops, not infantry guns.

What do the victory conditions represent ?

- **decisive victory** - your ratio of points is 8 times the enemy's or greater
- **minor victory** - your ratio of points is 2 times but less than 8 times the enemy's score
- **draw** - whenever either side scores less than 2 times against the other side.
- **minor loss** - your opponent scored a minor victory over you
- **decisive defeat** - your opponent scored a decisive victory over you

Does a unit in a hex containing smoke gain a bonus to its ability to remain unspotted?

Smoke in the target hex is counted for spotting and will help a little bit in providing cover. Movement, firing and size would be more relevant factors.

When using the higher resolutions the mini map is too small to see individual units clearly. Can this be made bigger ?

No. The mini map must fit a space common to all screen resolutions and a bigger mini map will not fit the space available at the lower resolutions. However The mini maps real function is primarily a way to get around the map quickly. The dots that represent units on both sides are there to indicate where your units are and where known units are. It is NOT there to give you an overview of your units. That's what zoom out with ID tags ON is for.

I've installed the game and all the patches but I cannot save a PBEM game. Is this a bug ?

No. It's Microsoft's way of making "advancements". Vista and Win7 changed the way files are saved to anything in the Program files folder and that's where the game was put when we started working with Shrapnel games. Everything worked OK until Vista was released and even with that some versions of Vista didn't have a problem being in the program files folder.

If you have this problem the only solution is to re-install the game into your main drive (usually C:) and then when the game tries to save a DAT file Windows won't transport it someplace the game cannot find

I was playing a game and had all the victory hexes held but the game wouldn't end and suddenly an AI force started counter-attacking. What was happening ?

The AI is coded to occasionally hold back some of the units it has purchased to enter the game at random times as reinforcements. It must be stressed that these are **not** extra troops bought with additional points but part of the normal AI force held back for entry later in the game

I've noticed that after an artillery barrage, sometimes my planned hex has moved away into another one. Why is this?

If the unit you are using for spotting the barrage loses line of sight, the point of impact for a barrage can shift and the shot scatter. In real life if the spotter cannot see the target hex and fall of shot for any reason there is no way for him to know how effective the barrage is. In the game we can always see the shot land but code has been added to scatter shot that is not observed and to shift the main point of impact as well. It prevents players from shooting accurate barrages into areas they cannot see.

I bought FASCAM / MINELET arty but it's not appearing in the Bombardment menu. What's wrong?

There is a three turn delay built into the game to stop all FASCAM / MINELET artillery units from appearing in the bombard menu at the start of the game. This prevents a player from using these to box his opponenet into his start line. They will be available for use after turn 2 is completed.

How do I slow the game scroll speed?

See

What is a Commando, What is a <insert Unit>

See the list of classes and special abilities etc.

Why do generated battles and campaigns play unbalanced when I use a very small force?

The AI has a **minimum** troop purchase that, due to built in variables, is anywhere from 150 to 250 points. That is the least amount the AI will buy. If you have a 200 point core in a campaign and are given a Human advance or assault the odds will end up being around 1:1 rather than the 2.5:1 they should be simply because the AI will not take less than it's minimum force, even if you have a minute core and omit to use the given support points. The AI **requires** a basic minimum to cover the defence (or it may end up holding the line with an HQ and a sniper!), and it needs a certain minimum to create a credible attacking force. We recommend that you play a campaign with a minimum of 450 to500 points for your core. This allows the AI a fair number of troops and will provide you with a better game. You CAN play with less than a 300 to350 point core but you MUST take the support points offered in a Human advance or assault or the AI will end up with a higher proportion of troops than they should have. 350 points should be the absolute minimum size for all campaign and generated battle games. Anything less WILL give you very challenging games in advance/assault, especially in MBT where vehicle cost is much heavier than in WinSPWW2. A WW2 Sherman would tend to cost 40 or so points. A Challenger is over 500 in MBT!.

What are those " ** "s I see when I hit an AFV?

When a tank is hit and a penetration occurs it does not always cause an outright "kill". Occasionally, depending on the shell size/armour thickness ratio and the survivability rating of that vehicle, you may notice hit messages ending in ***. These are not new, they have always been in SP2 but it was not widely known that this indicates that damage is occurring to a vehicle. We have reworked the code to give more of these damage results under certain conditions. If you see these when your tank is hit you are taking critical damage and/or lost crewmen which affects the number of shots available and overall vehicle/crew performance. Damaging hits can also remove weapons, immobilise the vehicle and so forth (note that unlike the original SP series games, bringing up the information screen for an enemy AFV will **not** show you that, for example, the main gun has been destroyed for that vehicle!).

In PBEM, I never see my opponent's artillery on the playback, just new craters.

Unless BOTH of you have 'fast artillery' set to OFF then no history of the artillery barrages is saved in the PBEM file. Play PBEM with fast arty off, both of you, to see the shots and messages in the replay. And ensure you have animation turned on as well, or you will not see direct fire shots either. **Additionally**, any pre game bombardment in a PBEM (artillery plotted to drop in turn 0), only one side will be able to see the replay, because the game replay code is only set up to replay the **one** player's last turn, not "both players' last turns, saving a bit of turn 0 through your opponent's turn 1 and then adding that bit on at the front of the next replay". It is therefore best **not** to use any pre game (turn 0 arrival) artillery in a PBEM game, unless you are willing to sacrifice player 2 playback. Agree this as part of the pre game discussion with your PBEM opponent.

My aircraft seem useless, and cannot hit things with guns/rockets.

If you see the message "attacking hex" then your plane has not been able to establish LOS to the target hex. This is usually due to smoke and dust in the area, but sometimes it is because the target is tucked away behind a ridge for example. Try to target aircraft, especially if relying on direct fire weapons like rockets, onto targets well out in clear air, and preferably out in the open, on a flat plain as opposed to in a town, wood, or valley. Do not target artillery bombardments and planes on the same target area, this is a major failing of the AI. If you must hit a target in smoke, flames etc., Then try to use planes with bombs, napalm, or PTAB bomblets as these are area fire weapons. Still not as good as a clear attack, but better than random cannon strafing. Remember, very big bombs will kill infantry in the adjacent hexes as well (~1000lbs and more).

You will know if you got a good shot since the message will be 'attacking T-34' or similar and a percentage to hit is usually displayed on the yellow bar at the top of the screen.

Note that MBT aircraft, unlike WinSPWW2 planes, may have night vision sights, including Thermal Imagers, which may mitigate the smoke and poor visibility problems of WW2 aircraft that relied on the unaided eyeball Mk1.

To try out aircraft tactics it is best to set up a **test game**. Set up with both sides human player for everything, and give the side you are testing planes the advance, especially if you decide to let the AI run the targets, then it wont move! Go to the Preferences Menu and set up the air strikes item to at least one to ensure you can buy air. Then when setting up enter no passwords, and for the delaying (target) side, buy the sort of targets you want to test against. Set the target side up in interesting arrays, and its often best to set these up as preplanned bombardment targets ('gold spots') for the advancer to save time waiting for strikes to arrive. Now play the game; try out various plane types as desired on target types and arrays as desired. Because you are playing left hand vs. right hand, you can inspect the damage from the target's viewpoint. This method is also useful for testing out AA tactics and units as well. Or pretty much anything for that matter, before jumping off to a bulletin board, try a few experimental tests of your own. Many folk just do not seem to realise that they can in fact play both sides, so as to try things out.

I bought a 90mm AA (AT) gun formation with trucks but they cannot pick them up.

Some AT gun formations were provided with integral trucks, but the picker will let you choose any legitimate AT gun, howitzer or whatever. In this case there is usually a separate 'Heavy AT Gun/T' formation with 7.5 ton heavy trucks or similar. What can be picked up is a vexed question in SP. Look for the '*' after some guns, read the manual.

But the best way to see what fits what is to set up a test game, buy one of about every type of transport and load item, and try it out in the set up phase of the game, then quit before playing. This is especially true of some things like say USA mech. Infantry. You should be able to fit most combinations in to the vehicles some way but do not buy 76mm AT guns for example. If offered mortars, you should stick to the correct 60mm sections, as 4.2 inch mortars are both ahistorical, and likely will not fit, or not leave room for that final bazooka team.

There is no real easy way to screen out inappropriate choices (though the new classes for V3.0 will help), learn by experimentation, do not plunge into a game and then find out what lifts what when it is really embarrassing.

I cannot spend all my points and / or buy any more support troops in a campaign game.

There is a limit to the number of units you can buy in total, this has been increased to 500 units per side in version 3.0, over about 130 before. In addition, there is a limit to the total number of formations (platoons formations, and a 1 man sniper formation is a platoon!, not companies). Also, in a beach assault you are limited to about 400 units, as the game needs space for the automatically bought landing craft, and in a river crossing assault, we have left about 90 free units to provide assault raft unit space for deployed infantry assault boats and deployed barges off barge carriers as these need to be created on deployment. In a campaign core, you can have 200 units now.

Once you reach either limit, you cannot buy any more units, even if you have a lot of surplus points. The formation limit means that it is best to buy in reasonable sized platoons of 4 or 5, not sections of 1 or 2. However, avoid things like the 10 tank Soviet 'Company in a Platoon' since when things start going bad for this unit, the leader is unlikely to be able to rally that many subordinates.

There is an 8cm-mortar platoon and a 12cm mortar platoon, what is the difference?

Usually, just the number of mortars (but with the new expanded mortar classes, the OB designer may have utilised these so the heavy mortars are in their own units, now). For example, 6 tubes in a German WW2 8cm platoon and 4 12cm tubes in that platoon, one off each in the battalion support company. Also, the designer may have provided formations using mortar section units (several mortars firing off the same baseplate) as well as individual mortars per unit type mortars.

The 'All Formation' key produces unusual results when I try to move a platoon.

This button has never really worked since SP1. Do not bother with it. Its only use is when setting an entire formation's range with the 'Y' key. Select 'all', select any unit of the formation set the range, and all the formation uses the range setting. It saves a few extra clicks. Then remember to turn the all mode off before moving anything or you will get a rude surprise. That's the only practical use for the ALL key in SP. By all means try the all formation key a few times for fun in a scratch game, the results are often interesting, but not what you desired even on flat ground. Note that the button was removed, and only the 'A' HotKey remains.

I think artillery/infantry is too powerful/too weak

See the section on 'The Preferences Screen'. Experiment with the values till it suits **your** idea of 'reality'.

How do I call a quick repeat artillery mission?

Once the artillery unit has completed its mission it tends to keep its last x,y target location, unless it was manually cancelled, or was an aircraft. Go to the bombardment screen, and press the ID button for the unit. Do NOT click on the map, or you are calling a brand new mission in! press the HE icon (or smoke if that was what was wanted), and the symbol will appear at the last x,y location. Adjust if required, but the time will be much less than a new fire mission from scratch. This is how to do a 'creeping barrage', plot and fire, letting the battery finish, then call a repeat using this technique, and adjusting the line of fires forwards a bit.

How do I fire counter battery fires on enemy off map batteries?

You (the player) do not, your gunners will attempt to locate off map batteries themselves, and allocate any units in range to CB fires.

For a battery to fire CB missions, it needs to be idle (not plotted to fire missions), it needs its crew quality to be good (better than 60 or so, and the higher the better), have HE ammo to hand, and to have equal or better range than the enemy battery in order to be able to reach the target. It also has to pass a chance roll. Off map artillery units range is shown as a number usually in the 200 series or more, 209 is longer range than say 205. Range information is found in the encyclopaedia entry for that battery.

How do I recrew my vehicle/Gun etc. ?

Once the crew has stopped running away, walk them or transport them back to the same hex as the gun or vehicle they abandoned, and leave them there for a while. *Provided* their morale is good enough, and the item to be crewed is not too badly damaged, they will mount up. NB, the **original** crew for the abandoned unit is the **only** one which can recrew it.

How do I get things into the same hex as one containing another unit

Whether friendly, enemy or wrecks, select the unit to be moved, then hold the SHIFT key and click into the target hex containing other units. (Enemy units in the target hex may object to this!). Barges will allow you to load from the hex alongside, otherwise units would have had to drive into deep water!.

How do I get an enemy squad to surrender?

Enter the same hex as the retreating or routed squad, and blaze away, when approximately 2/3 of the crew is gone it will tend to surrender, depending on nationality and morale, though occasionally a squad will run away even from such a pinning attack.

Alternatively, provided you are shooting the unit up, and it cannot find a hex to retreat to, it may surrender, i.e. Typically it is surrounded by your units which have shots left AND are in good morale, an enemy squad may run into a hex containing a retreating unit of yours, or just may panic and enter an enemy held hex regardless. Note that rivers for example, can block retreat paths, as can minefields.

How do I turn a unit in place?

Select the unit, then RIGHT click into a hex which is clear of wrecks, friendly or enemy units in the desired direction then the unit turns, and the unit LOS in that direction is shown by dark and light hexes. Use the clear dark function to remove the dark hexes. Some units like pillboxes cannot turn (other than when being placed in deployment) and barges and other watercraft need to be moved to turn, they cannot turn in place.

What is the LOS from this unit?

Please refer to the question 'how do I turn a unit in place?' above.

How do I destroy a bridge?

Use typically an engineer unit with satchel charges, anti tank mines (can represent hollow charge demolition munitions) or a Churchill or centurion AVRE with demolition gun fitted (165mm), and area fire onto the bridge hex. (Z key). It may take several attempts, especially for stone bridges. Very large artillery can destroy bridges, as can aircraft using large bombs if they drop these onto the bridge hex (bridges are valid aircraft target hexes, give a plane a bridge target hex and it will tend to attack that in preference to any bystanders). Generally, crater causing artillery (about 120mm up) is needed to drop wooden bridges, and 8 inch or greater artillery to have a chance on stone bridges.

When a bridge collapses, all units on that section are destroyed by falling into the river, and this can be very satisfying when you catch a massive traffic jam of the opposition's units on a rickety wood bridge with some 122mm...

How do I deploy a barge or raft?

When beside the water, with some MP left, attempt to 'drive' the barge carrier into the water, or 'walk' the infantry squad into it (if it is carrying a raft!). A barge carrier will appear in the water or the squad will transform into a raft carrying itself and armed with the squad's primary infantry weapon. To unload, 'drive' the barge or boat onto the river bank or beach side. If in -1 depth water, barges can now unload into the water if desired.

What sort of forces and maps will the computer player pick?

The AI pick list code is adaptive, and randomised in places. This gives a far richer AI force structure than in SP2 and SP3 where it got to the point that you could pretty much predict the AI force, given the points allocated.

MBT AI pick will be affected by some or all of the following: Battle type (Different if assaulting than defending), points available, the battle date, the particular opponent (e.g. Russian AI pick vs. a NATO country will differ in structure from playing against Mujadeen), air strikes available, AI Tank Heavy switch setting, and sometimes the battle map (may de-emphasise long range ATGW in a city fight and buy more leg infantry and mortars, and less tanks perhaps).

The best way to look at what the AI buys is to experiment with test game setups.

Select your points, air points if desired and the date and players and also battle type just like a normal battle generator battle with the following exceptions.

1) Set **Computer** as the player in both cases

2) Select **computer** buys forces for both sides

3) Set both sides to **human** deploy

Now hit continue. Select human deploy or computer deploy for side 1, and examine what was bought. [If you want to look at AI deployments - use auto deploy, repeat several times to see several alternate deployments]

Now exit this side's deployment and examine the second force as above.

Finally - in the second force, choose exit game, or you will get to watch an AI plays AI game!. If this happens - hit the space bar and the game will allow you to break in at the next end phase.

Repeat the process of examining AI picks at various dates and force levels as desired. When you have done this a large number of times for any opponent pairing, you should have a good idea of what to expect.

Also each battle will select a new map and these can be examined as well, as for many nation pairings we no longer limit you to but one battle location as with the old SP2 and SP3 games. Some of the possible maps can be quite rare as well, so you may need to run quite a few test games before seeing these.

I've noticed that sometimes after my artillery bombardment my planned hex has moved away into another one. Why is this?

This happens mainly if you do not have a clear LOS from the spotting unit to the target hex. Unspotted artillery is not nearly as accurate as it would be if the spotting unit has clear LOS to the target hex and can drift considerably from turn to turn. It also takes longer to move the target hex marker back on target when artillery is not spotted.. That change is noted at 33) **HERE**

How do I reload ammo?

See the write-up of UnitClass 56=Ammo Carrier in **MBT Unit Classes**.

Also, read through the tutorial scenario notes as use of these is taught there.

I bought a bomber/transport/Spotter plane and cannot see it on the artillery plot?

Click on the bombardment button and when the next screen appears look for the button under "Switch to:". Click on that to cycle through the choices offered That buttons cycles between "Bombard", "Airborne" and "Spotters".

How many more points does the other player or AI get in the different battle types ?

When battle points are set to XXX for player 2 the following applies to both the AI and another Human player and applies to all battle types in the game

If Player 1 is the defender and Player 2 the Attacker Player 2 will get 2.5 times Player 1's points so if you as Player 1 have 1000 points to defend with Player 2 , the attacker, would get around 2500 points

If Player 1 is delaying and Player 2 is advancing Player 2 will get 2 times Player 1's points so if you as Player 1 have 1000 points to delay with Player 2 , who is advancing, would get around 2000 points

A meeting engagement gives the same number of points to both players

If Player 1 is advancing and Player 2 is delaying Player 2 gets 50% of Player 1's points so if you as Player 1 have 1000 points to advance with Player 2 , who is delaying, would get around 500 points

If Player 1 is attacking and Player 2 is defending Player 2 gets roughly 40% of Player 1's points so if you as Player 1 have 1000 points to assault with then Player 2 , who is defending, would get around 400 points

Can Recon units spot better than normal units ?

No. There are no units with magic abilities in this game.

All spotting comes from the normal SP spotting rules. Infantry on foot, or as passengers, tend to spot better than vehicles do and stationary units spot better than ones that are slow-moving which are better than fast moving ones. Experienced units spot better than ones with low experience and suppressed units spot less than unsuppressed units do.

Size 0 infantry units can get a hex or 2 closer, so may well notice things the other infantry have not yet seen and that is why some players may feel scouts have special spotting abilities but they do not.

Recce formations can have a few more EXPERIENCE points, but that is usually only marginally better than line formations. Formations have nothing to do with unit class, in any case.

How do I delete a saved game ?

There is no automatic way to delete a save game either in the regular save game folder or the PBEM folder. The simplest solution is to overwrite the old save game with a new one. This will clear all the old info out but if you do want to clean out the entire folder or just specific save games you first need to find your game files using My Computer. If you have installed the game in the default directory those files will be found in the Program files folder under "Shrapnel Games" and "The Camo Workshop". Select either WinSPWW2 or WinSPMBT for the "PBEM Games" folder or the "Saved Games" folder.

Click on those folders and in the case of PBEM Games you will see two files for each slot like this:

SpEml004.cmt
SpEml004.dat

for regular save games those two files will look something like this

SpSv002.cmt
SpSv002.dat

In the case of PBEM Games 004 represents data for slot 4 and in the case of the regular saved games these two files represent the data for slot 2. Deleting those files will permanently remove them from the games save game folder. The DAT file contains all the save game data and the CMT file contains the save slot title so you need to delete both files.

"WHY HAS THE GAME BEEN PROGRAMMED WITH ALL KNOWING "BORG" AI ARTILLERY"

The original arty code for the SP games by SSI had some inbuilt advantages for the AI for its artillery routines.

1) When plotted arty was about to fall, the code would "teleport" the stonk to somewhere more useful, i.e. somewhere near a detected unit of yours. No matter where it had plotted it on the map.

2) Pre-game barrages were based on an "average" of your unit's actual positions, so most would fall somewhere useful to the AI.It was AFAIR an average of your actual deployment plot - so if you went for an "all South" deployment - a good deal of the AI arty automatically would fall down there.

ALL of that, I removed as soon as we got hold of the source code or as soon as we determined there was another AI inbuilt advantage. (Like the free troops the AI selected forces would be given on picking a random force).

So - the original code as delivered by SSI did have what the OP might have called "borg" artillery routines, but we did not in any way reinstate it - we removed it.

Our pre-game arty plots are based on an average of the entire deployment zone , with emphasis on roads (if the human is going to advance, it is where he tends to stack units), the front of the deployment area, and just in front of the deployment area (if advancing). Sometimes it will stonk up the rear of the deployment area in hopes of getting your arty park. But it is all random guessing, it no longer has intel about the human player's pre-game positioning.

In-game arty plotting now is affected by "AI Interest" - as described in the release history, as well as on units actually spotted. If you fire (or pop smoke, make dust trails, etc) from a position, the AI will test for "interest" and the more you fire from an area, the more likely it is to be interested (especially if it currently has free batteries to assign). That allows it to drop presents on the human player who does the "hill dance" - popping up from behind a ridge to snap shoot, but always ending out of LOS at end turn. Some fire events will be more interesting to the AI than others (ATGM and MRL are rather interesting forex) The AI will still use the old routines for plotting unassigned arty (Usually nearby to enemy or neutral V-Hexes) as well from time to time.

(NB - nearby an objective does not necessarily mean within 2-3 hexes. It can be a click or so short, long, sideways or whatever. It's a bell curve distribution. Then add the normal scatter for fall of unobserved shot. But don't be surprised if some arty lands "telepathically" on the platoon of tanks you had 750 metres north of a particular objective cluster and which you know have not yet revealed themselves. The target was not the platoon - it was the V-Hex cluster)

And as well - do not be surprised if your tank coy trundles up to a ridge and gets an "instant" barrage. Remember that arty takes time to arrive, and in this case the player calling "foul" has usually forgotten that 2-3 moves before, his recce bumbled over that hill in full view of the AI. The AI target was therefore the recce, and so if you are going to take a position - remember to allow for time of fall of any plotted AI presents, if you are going to move lead elements over that hill. Or better yet - do not telegraph it at all, and move the scout cars round the side of the to-be-defended hill !.

So - some of these stonks will be self-called by your activities, and some are just random guesswork.

But there are no more teleported stonks, and no more plotting with foreknowledge of your general location. Nor have there been, since 1999/2000 or so.

Historical Design Notes

The Green OOB is a generic South and Central American OOB. The terrain will be mostly jungle, forest, mountains and villages. The OOB also contains generic American-backed insurgents, rebels, government forces, terrorists and more.

The RED OOB, prior to the break-up of the USSR is a sort of 'Balkan' OOB, using Soviet kit. After the break-up of the FUSSR, it becomes a generic stand in for those FUSSR states which do not have their own OOB, when playing against Russia or Turkey. Playing against Poland, it becomes Byelorussia, as it does against Ukraine. Playing against China, it represents an Eastern FUSSR state, with rather flatter terrain, and less chance of urban areas. To the rest, it remains a 'Balkan' OOB. The OOB also contains generic Soviet-backed insurgents, rebels, government forces, terrorists and more.

The UN OOB is intended ONLY for scenario designers, it merely provides an headquarters under which the scenario designer can add troops as Allies (own ID flag) or as 'captured' for troops using the UN ID tag. It does include some other basic units to help the designer fill out a UN force, but it does not have enough formations or units to stand alone. Do not try to fight random battles or campaigns against this OOB under AI control, though you could use it as a human player force, buying constituent items with the ALLIES facility. This OOB also contains some scenario designer eye candy, like grounded planes, civilian vehicles and herd animals.

National availability dates listing:

1 Egypt 1/1946 - 12/ 2025	24 ARVN 1/1948 4/1975	47 Cyprus 8/1960 12/ 2025	70 Chechnya 11/1990 5/2000
2 Poland 1/1946 12/ 2025	25 Pakistan 8/1947 12/ 2025	48 Brazil 1/1946 12/ 2025	71 Indonesia 1/1946 12/ 2025
3 Syria 1/1946 12/ 2025	26 Afghanistan 1/1946 12/ 2025	49 Cuba 1/1946 12/ 2025	72 Viet Cong 12/1946 4/1975
4 Israel 5/1948 12/ 2025	27 Belgium 1/1946 12/ 2025	50 Algeria 11/1954 12/ 2025	73 Portugal 1/1946 12/ 2025
5 Japan 7/1954 12/ 2025	28 Netherlands 1/1946 12/ 2025	51 Slovakia 1/1993 12/ 2025	74 Malaysia 1/1946 12/ 2025
6 France 1/1946 12/ 2025	29 Norway 1/1946 12/ 2025	52 South Africa 1/1946 12/ 2025	75 Zimbabwe 5/1980 12/ 2025
7 Great Britain 1/1946 12/ 2025	30 Canada 1/1946 12/ 2025	53 Switzerland 1/1946 12/ 2025	76 South Yemen 11/1967 4/1990
8 PLO 1/1946 12/ 2025	31 Greece 1/1946 12/ 2025	54 Thailand 1/1946 12/ 2025	77 North Yemen 1/1946 12/ 2025
9 Jordan 1/1946 12/ 2025	32 Turkey 1/1946 12/ 2025	55 Albania 1/1946 12/ 2025	78 Eritrea 1/1963 12/ 2025
10 Iran 1/1946 12/ 2025	33 Spain 1/1946 12/ 2025	56 Angola 11/1975 12/ 2025	79 Ukraine 8/1991 12/ 2025
11 Russia 1/1946 12/ 2025	34 Italy 1/1946 12/ 2025	57 Bosnia-Herzegovina 3/1992 12/ 2025	80 UN 1/1946 12/ 2025
12 USA 1/1946 12/ 2025	35 Denmark 1/1946 12/ 2025	58 Cambodia 1/1946 12/ 2025	81 Mozambique 9/1974 12/ 2025
13 USMC 1/1946 12/ 2025	36 E Germany 10/1949 9/1990	59 Chile 1/1946 12/ 2025	82 Ecuador 1/1946 12/ 2025
14 China 1/1946 12/ 2025	37 Czechoslovakia 1/1946 12/ 2025	60 Croatia 6/1991 12/ 2025	83 El Salvador 1/1946 12/ 2025
15 Australia 1/1946 12/ 2025	38 Hungary 1/1946 12/ 2025	61 Nigeria 10/1960 12/ 2025	84 Nicaragua 1/1946 12/ 2025
16 Gulf States 1/1946 12/ 2025	39 Romania 1/1946 12/ 2025	62 Chad 8/1960 12/ 2025	85 Peru 1/1946 12/ 2025
17 Iraq 1/1946 12/ 2025	40 Libya 1/1946 12/ 2025	63 Ethiopia 1/1946 12/ 2025	86 Rhodesia 1/1948 4/1980
18 India 8/1947 12/ 2025	41 Yugoslavia 1/1946 12/ 2025	64 Saudi Arabia 1/1946 12/ 2025	87 Bulgaria 1/1946 12/ 2025
19 N Korea 2/1948 12/ 2025	42 Green 1/1946 12/ 2025	65 Finland 1/1946 12/ 2025	88 Somalia 7/1960 12/ 2025
20 S Korea 9/1948 12/ 2025	43 Red 1/1946 12/ 2025	66 Sweden 1/1946 12/ 2025	89 Tanzania 1/1946 12/ 2025
21 Taiwan 1/1946 12/ 2025	44 W Germany 5/1949 12/ 2025	67 Sudan 1/1956 12/ 2025	90 Uganda 10/1962 12/ 2025
22 Mujahadeen 1/1946 12/ 2025	45 Argentina 1/1946 12/ 2025	68 Lebanon 1/1946 12/ 2025	91 Uruguay 1/1946 12/ 2025
23 NVA 1/1948 12/ 2025	46 Austria 1/1946 12/ 2025	69 Kenya 1/1946 12/ 2025	92 Paraguay 1/1946 12/ 2025
			93 Georgia 4/1991 12/ 2025

WINSPMBT
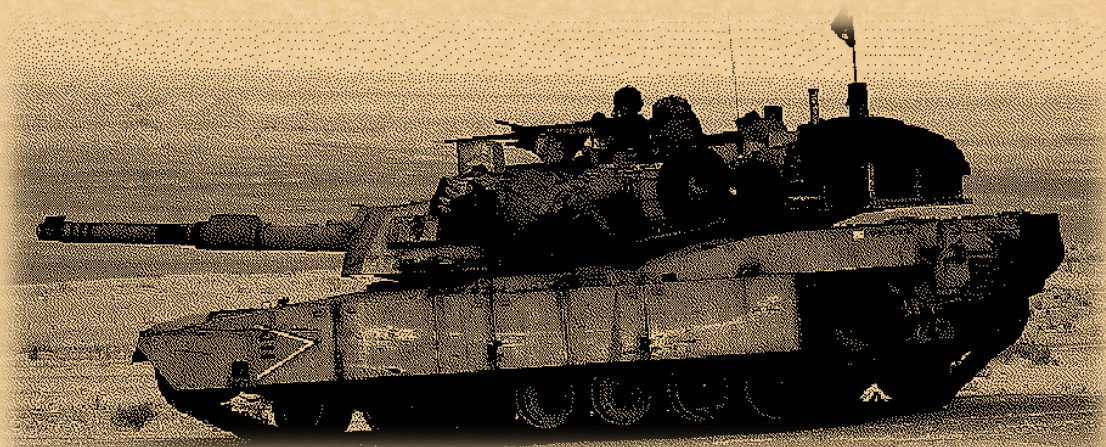
Development History

What is new over SP2?

The following is a general list of improvements in this game (WinSPMBT), as compared with the original SSI post war wargame Steel Panthers II : Modern Battles (SP2), as some players will not have experienced the changes in the SP2 game engine.

The artillery routine was completely revised and these changes were carried into WinSPMBT right from the start. Your artillery fire now lands at the end of the enemy player turn, as opposed to SP2 where it landed at the end of your turn, thus allowing your opponent to rally away the suppressive effects. You can now take advantage of your artillery's neutralising effects properly. This means predicting where the enemy will be when the shells arrive is a much more challenging procedure than has been the case in the past. You will no longer be able to simply shift fire a hex or two and have your artillery land right after you press the end turn button. This is a **MUCH** fairer system for both sides and better reflects "reality" where orders from the front lines had to be passed on to the gun troop commander who then passed the correction onto the gun crews who then adjusted their fire to new co-ordinates. This was not something done in a minute or two and this new system reflects that. The change takes a game or two to get used to but once you have played this way you will agree it is a better system than what was in place in the past. As well, guns that have high turn delay (such as .05) will deliver fewer shells on target than if the delay was .00

Expanded map size. SP2 maps were limited to a maximum of 80 hexes height and 100 width. MBT maps can now go from a minimum of 20 hexes wide and 20 hexes high to up 160 hexes wide and 200 hexes high. ALL maps are fully playable in generated, campaign, PBEM or scenario based games. AI deployment routines for units and victory hexes have been re-written to accommodate every map size. Campaign players now have the added bonus of pre-selecting map size before every game to allow them to tailor map sizes to fit their campaign core size.

Area fire can now be directed through smoke at reduced effectiveness and accuracy

Enhanced secure Play By E-Mail mode, this makes cheating rather more difficult than the original SP games, where an opponent could simply re load the turn and replay it as much as desired before returning this to you. We provide a non secure PBEM mode for those who do not need the encrypted secure mode.

You can now play scenarios against a human opponent in PBEM or in hot seat mode (handled like PBEM, but on the same PC), not just being limited to the AI.

Dates can run from 1946 to 2025, SP2 only ran 1950 to 1999.

Availability dates work on month as well, SP2 availability dates were by the whole year only.

93 Nations (OOBS), SP2 was limited to 43 nations. MBT national flags change to the appropriate one for the year when necessary, e.g. from USSR to Russian flag. Nations appear at the appropriate time (e.g. Ukraine, Zimbabwe) or disappear (e.g. Rhodesia, ARVN).

Expanded OOB files, MBT can have 999 units, and 999 formations in its database, SP2 was very much smaller than this, the expanded MBT OOB size allows designers to produce a much richer palette of forces for you to command.

Expanded maximum units in a game. SP2 was limited to around 200 units per side, and about 49 formations. In campaigns, core size maximum was about 100 units. In MBT, you can have up to 500 units per side, in up to 200 formations, and cores of 200. Thus much larger battles are possible.

Expanded unit classes. SP2 was limited to about 40 unit classes, MBT has about 255. This enables OOB designers to assemble much richer OOBs, and to handle mixed formations much better.

Expanded terrain types. We have added mud, impassable to vehicles terrain, orchards, hedgerows, fire trenches, volcanic sand, railway and tramway terrain tiles. Fire trenches may be bought and laid out by the defender similarly to mines, dragons teeth and much more.

Expanded terrain heights. SP2 was only capable of maps of 3 terrain height levels. MBT maps can have 15 levels, 5 times more. Truly mountainous maps can now be generated, for example in Afghanistan.

Enhanced terrain map generation routines. We have nearly tripled the number of variables used in computer map generation compared with the original SP2 code. MBT maps can be custom tailored with for example, tree lined roads, paddy fields inside bund walls, or to generate urban sprawl or villages, and a new town type of map intermediate between the old full map city grid and the villages.

Enhanced battle location generation. In SP2, when 2 nationalities fought each other, only one default battle location was used. This soon grew tiresome after a few battles!. MBT generates historically believable battle locations for the major conflicts post WW2 that occurred, or had the potential to occur (such as a NATO v WARPACT WW3). The battle location code for the USSR vs Afghanistan is 1286 lines of 'C' code for example.

New Aircraft classes, SEAD planes to perform wild weasel strikes, Level Bombers to perform arclight missions, Transport planes to drop paratroops, spotter planes and UAV for scouting. New heavy transport helicopter class.

Parachute drops and Gliders can be used for air landing of troops.

Many new unit classes allow richer OOB designs. Some specialist infantry classes have additional abilities in close combat, or in crossing impassable terrain, or are trained paratroops. Some APC may be more resistant to mine explosions.

Formations may have morale and training bonuses both positive for above average troops, or negative for less elite groupings. Appropriate points cost modifiers are made here, unlike SP2 which charged the same points for a T72 whether crewed by experience 60 conscripts or by experience level 90 veterans.

New weapon classes and defences. Top Attack missiles attack the thinner top armour of MBT, multi charge ATGM help defeat Explosive Reactive Armour defences. Autocannon can engage low flying planes and helicopters. Advanced ERA such as Soviet Kontakt can deflect AP shot. Visual and Infra Red Screening Smoke can defeat incoming ATGM, and Soviet Arena active countermeasures systems can hard kill them.

The unit information screens now show much more data than before, when purchasing units, you get to see the full ammo loadout, whereas in SP2, you were often in the dark as to how many missiles a TOW jeep carried for example. New armour information lets you cycle through the 3 armour types for vehicles, steel, anti HEAT and ERA, with the ERA values being current reflections as to how many charges remain on a face. Informational text is made available for units, and also at the formation level.

New cross attachment code lets you reorganise your companies, platoons can be moved under command of different company commanders. In campaigns, you can attach support troops bought for this mission under your core troop companies for the current battle. You can still attach individual units as with previous SP games, but we now ensure that the command unit cannot be attached away, leaving a 'phantom commander' as was the case in older versions of SP games.

More information about your troops is now available in the new headquarters and company details screens, for example which platoons belong to B company.

In campaigns, you can use your repair points as buy points to expand your core force. Therefore you do not require to buy lots of cheap armoured cars and trucks at campaign start in order to change these into useful units later on as in older SP series games.

You can set up user or historic long campaign difficulty levels, either making it easier by granting yourself more repair points, or less so as you wish.

Air parity is allowed now, just because you have been granted a few air strikes does not automatically mean your opponent has none as was the case in other SP games, he may have a few, or even a few more than yourself. You will always have to guard against the air threat, unless the opponent is completely bereft of air, e.g. the VC.

All fixed wing assets are off map assets, only helicopters are under hex by hex player control.

Units with smoke dischargers can pop these in response to enemy incoming fires. Units when fired on from the flank will often turn to face the firer, thus presenting thicker armour and/or locating previously unspotted firers.

Infantry when fired on can hit the ground, and possibly take cover perhaps even breaking LOS. Infantry can suffer from tank panic and flee from AFV if not equipped with AT weapons.

When infantry fight in the same hex, melee combat may occur, and some troops such as commandos and paratroops are better at this form of close combat. Sometimes in close quarters combat, troops especially if low morale or experience may be panicked and hence produce less accurate fire than would normally be the case.

The AI is considerably enhanced as compared with the SP2 version. It is not as objective obsessed, and will attempt to flank your entire position as well as bypassing round strong points. It is somewhat more cautious than the 'tin lemmings' of SP2!. The AI uses an adaptive purchase routine which uses points remaining and chance die rolls in buying its forces thus you will find enemy forces bought by the AI more varied than in SP2. The AI no longer assumes that if it is granted air strikes that its opponent will have no aircraft, so it buys AA assets even in this situation. The AI will use opening barrages in non assault games now, and it will often target the roads inside the human deployment area as human players tended to get into the habit of forming a traffic jam here against the old SP2 AI, which did not fire such missions. The AI will often plot interdictive missions on approach roads, bridges and cross-roads in no mans land as well, unlike previously. It also now knows about the smoke hexes that indirect fire of on map artillery leaves in SP series games, so will counterbattery your on map artillery assets more than you may have experienced in SP2 games. You will therefore have to learn shoot and scoot artillery tactics. It will now sometimes launch a patrol into enemy territory when defending, to locate your approach, or launch a spoiling counter attack. When defending, the new AI knows about the old human trick of running an end run along the top or bottom map edges, where the old SP2 AI would often not lay mines. The new AI will often lay edge of map mines, sometimes several layers deep. It now lays random individual mines or groups of mines on road hexes in its defended zone, and on bridges these may be backed up with a barrier (represented by a dragon tooth hex). The new AI knows that defending forwards when defending a river crossing is a good idea, it wants to shoot up those vulnerable rubber rafts now!. It will lay dragons teeth when defending a beachhead as well in some cases. In MBT, it knows about helicopter transport, it will use these in all battle types, not just when assaulting you, and it will try to get into the rear of your half of the map sometimes, even in a meeting engagement. If these transport helos are well armed, it will use them to cause annoyance to you as well whilst ammo remains. It may begin the game with SEAD strikes on your AAA systems. It may hold reserves, especially of attack helicopters and desant airmobile units to launch into the battle later on, perhaps to retake some objectives when the human player has moved on from these.

Expanded tools for scenario designers. Troops may be designated as reinforcements which arrive later, and this mechanism can be used e.g. for pop-up partisan units in certain scenario types. You can change the map side of the 2 players from the default game assigned setup. Scenario designers can set the various water variables for river crossing and beach assault missions. In Scripted Campaigns, pre determined auxiliary troops can be granted to the player, and if desired these can be in fixed positions which the player cannot alter on his deployment. Scenario designers can now add descriptive label text to hexes on the scenario map. As we now allow 125 waypoints to be plotted instead of the 10 of SP2, scenario designers are free to be more creative in setting up AI movement on map, for say patrol paths.

We provide the Mobhack windows based data editor. This allows the skilled end user to adjust unit, weapon and formation data to his liking (but incautious use of this may affect scenarios). SP2, of course, provided no such utility.

RELEASE HISTORY

DOS SPMBT Version 1.0 (Released June 2002)

DOS SPMBT Version 1.01 (Released July 2002)
DOS SPMBTv1.5 Upgrade Patch (Released December 2002)
DOS SPMBTv2.0 (Released June 2003)
DOS SPMBTv2.01 Supplement (Released August 2003)
DOS SPMBT Version 3 (Released July 2004)
DOS SPMBT Version 3.01 (Released September 2004)
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WinSPMBT version 1.0 (Released July 2005)
WinSPMBT version 2.0 upgrade patch (Released September 2005)
WinSPMBT version 3.0 upgrade patch (Released January 2007)
WinSPMBT version 3.5 upgrade patch (Released April 2007)
WinSPMBT version 4.0 Upgrade patch (Released April 2008)
WinSPMBT version 4.5 Upgrade patch (Released March 2009)
WinSPMBT version 5.0 Upgrade patch (Released March 2010)
WinSPMBT version 5.5 Upgrade patch (Released March 2011)
WinSPMBT version 6.0 Upgrade patch (Released March 2012)
WinSPMBT version 1.0 - 6.0 Consolidation patch (Released December 2012)
WinSPMBT version 7.0 Upgrade patch (Released April 2013)
WinSPMBT version 8.0 Upgrade patch (Released March 2014)
WinSPMBT version 9.0 Upgrade patch (Released as WinSPMBT version 7.0 - version 9.0 Consolidation patch - April 2015)
WinSPMBT version 9.1 Upgrade patch (Released as WinSPMBT version 7.0 - version 9.1 Consolidation patch - May 2015)
WinSPMBT version 10.0 Upgrade patch (Released as WinSPMBT version 7.0 - version 10.0 Consolidation patch - April 2016)
WinSPMBT version 11.01 Upgrade patch (Released- March 2017)
WinSPMBT version 12.0 Upgrade patch (Released as WinSPMBT version 10.0 - version 12.0 Consolidation patch - March 2018)
WinSPMBT version 13.0 Upgrade patch (Released as WinSPMBT version 10.0 - version 13.0 Consolidation patch - March 2019)

A very special **Thank You** to Ryan Crierie who dug deep into old internet records and allowed us to complete the timeline of released dates for the early versions of this game, that both Andy and I had forgotten, that allowed us to complete this history of releases section.

Release History

This section provides information on the changes to the game made since SPMBT DOS Version 1.0 was first released June 14 2002 with the latest changes first and the oldest last.

In the 17 years we have been producing SPMBT there have been a total of 25 versions/upgrades released.

As usual we remind everyone that on going secure PBEM games WILL fail

WinSPMBT version 13.0 Consolidation patch (Released as WinSPMBT version 10.0 - version 13.0) - March 2019

(the **2019** patch updates **any** version of WinSPMBT **ver 10 and up to version 13.0**)

100 New Scenarios
15 Revised Scenarios
2 Campaigns resurrected from old archives
2 Revised Campaigns
9 New or Revised Map files
76 New or Revised OOB Photos
1 New or Revised Game Interface Photos
280 New or Revised vehicle / aircraft Icons
93 Updated OOB Files
 35 New or Revised Icon files
  6 New or Revised Text files
109 Revised picklist files
2 New or Revised Game Guide Photos / Graphics

- Campaign games – If your core force is extremely large, then the only way the AI will be able to have sufficient points is to be the delayer or defender. Therefore the human player will see more assault and advance missions in this case.

- Planes which crash off map should now show the entire points value for the aircraft, not the damage at the point it was shot down.

- Random games will generate fewer low visibility conditions than before.

- UnitClass Commandos now have the same parachute ability level as Paratroops so they suffer fewer casualties when landing.

- Aircraft will no longer strafe at extreme angles though they may still fire one or two hexes off the flight path

- Maps will now save crater damage again.

- Ammo containers can be loaded onto trucks.

- Fewer objective flags will be auto placed on mud hexes in generated battles.

- There is now a slightly higher chance of flaming wrecks blocking LOS.

- The Replay key Y / N will no longer play UNLESS Y or N is pressed. Formerly any key other than N set off the replay.

- Airstrikes set for specific in and out points in scenarios should now " follow orders". The AI was sending them in at random directions as it would in a generated battle but they should behave as the scenario designer set them now.

- The formula for calculating aerial bomb ratings has been adjusted so the "little" ones are more effective and are not so much worthless wet firecrackers any longer. This was generally more of an issue in time period covered by SPWW2 but there are some in SPMBT as well and the codes are in sync on this issue.

- A code quirk, some might call it a bug, that allowed players, particularly PBEM players, the ability to Z-Fire or X- Smoke into a hex with on map artillery then go to the bombardment menu and get a 0.1 delay for a full bombardment has been eliminated. It is no longer possible to do that and a side benefit for some players, but perhaps not to the players who loved to do " recon by Z-fire", is that it is no longer possible to Z-fire into a hex then repeat, repeat, repeat using the F key. Every Z fire now needs to be done individually because after a Z-fire the process is reset to zero after each Z-Fire so that hex cannot be used to circumvent the artillery bombardment routine delay.

- Vehicles will now show drop shadow on paved road. They didn't for years. Now they do.

- **83** scenarios that Don Lazov resurrected from old archives have been added and updated.

- A bug that has existed in the game back to before we started working on the code has been found and eliminated that affected paved road in particular when it was manually placed on a map but not when the map was auto-generated by the game. The bug, in slightly different forms, affected streams as well as hedgerows when placed on the map but then had sections removed and then added back in again, if the map maker did not place the terrain on either side of the gap then in some cases it would appear the terrain was there but the game recorded and treated that hex for sighting and movement as being whatever the underlying terrain was. This bug fix not only corrects that problem for any new maps made but also in pre-existing maps and scenarios where the problem was mostly confined to hand made maps that used paved road as before this release if a map maker placed a paved road in a 5 hex line there would be paved road showing in all five hexes but the last hex placed would show a road tile but it was not being recorded as a road and this means if a map maker added small sections of road to a map and each time started the next section after that last hex showing a road was being built with many breaks that could not be seen but anyone driving down that road you would not be getting the full road allowance as you would passing over sections of the underlying terrain even though it appeared to be a road. The bug did not cause a problem with secondary roads as secondary road code was slightly different, and still is, as it only placed a tile up to the last hex but not on it.

    In the case of streams it was placing a "ford" on the map every time you started a stream which isn't such a problem as the roads but it was unintended and in Hedgerows it was not giving the proper density to the first hex in the line for sighting purposes. However all these little problems, that were not so "little" to fix, have been eliminated so now **WYSIWYG** and all old maps and scenarios will be automatically purged of these issues when using this new EXE.

CD owners Only- As the result of code changes to the way the game displays terrain graphics there are now **8** game display levels. Three more than previous, each of those allow you to zoom in closer to units on the map. The base zoom level, the one you see when you first start up the game is Z4 and previous versions of the game also allowed you to zoom in 1.5X closer than Z4 using Z5 but the new zoom ins allow 2X closer than Z4 using Z6 and 3X closer than Z4 using Z7 and 4x closer than Z4 using Z8. How this will look to each gamer depends on what size your monitor screen is and what resolution it uses so in some cases with older , smaller monitors the greater zoom ins may not be as useful to you as they would someone with a large monitor that displays at very High resolutions.

- **CD owners Only.** You can now flood fill areas of zero elevation with deep water using the **"** key in both the in game map editor and the extended map editor. This was primarily added to be a map making support tool for use with the **Venhola map contours generator** but it can be used for hand made maps as well. For shoreline maps it saves a great deal of time but be aware that sometimes beach areas are recorded by Venhola as the same level as the water so those areas and any areas of shallow water you may want troops to wade through need to be added manually.

- **CD owners Only**. There is a new "find text" function in the **Scenhack** utility that allows players to search through all scenario description text files to find specific text references. Once the search is run this new feature will provide a list of the scenarios in order, that match the search inquiry. **For example**, perhaps Israel or Warsaw pact or WW3 is entered and all the scenarios with that word or phrase used in the scenario desci: tion file will be listed, You can then click on the one that interests you and you will be taken to the **"Scenario Fixer"** tab and read the scenario description by clicking on the **Scenario** button. It can also be **ver**y handy for finding scenarios created by a specific designer. Simply enter the name and it will provide a list of any scenario that has that designers name on it. As well, scenhack now allows **SQL**'s database querys to be saved and loaded from a new folder placed in the game named 'SQL". The usage of these functions is explained on the CD features / Scenhack section at the end of the game guide **HERE**

- **CD owners Only-** There is now a Delete button for the scenarios page like the one for saved games.

- **CD owners Only-** There is now a GoTo button in the Campaign Editor scenario links page.

- **CD owners Only-** Pressing <**SHIFT+3**> (the **#** HotKey) during your turn will turn your bombardment markers on and off so you can see where they are and if you are advancing into your own barrage. It will also show which guns are targeting the hex .

- **CD owners Only-** Pressing **[** HotKey on your keyboard will show the victory hex values under the V hexes.

This example shows both the Victory Hex values (**[**) on, and the bombardment markers with guns targeted (**#**)CD features

- **CD owners Only-** Pressing **]** HotKey on your keyboard will force V hexes to the top of all building rubble , as well as smoke and units , so they cannot be hidden in any way. Just remember when this is on it may hide units as well so it is intended for temporary use only.

- **CD owners Only-** Scenhacks "Nation" button will no longer switch the entire OOB from one nation to another only the ID tags now.

- **CD owners Only-** Scenhack now shows the Scenario number and they are no longer being added to the CMT file.

- **CD owners Only-** Setting visibility can now be done in 10's or ones . Low visibility games 7 and under show a red number, 8- 20 will show yellow numbers and anything greater than 20 shows in green. You will see two rows of up/down arrows. The inner set changes by one and the outer set changes by 10's.

- **CD owners Only**. There is a new **Units In Hex** feature for the Full CD game that allows you to select the unit you want easily when you have multiple units in a hex.

If for example you have four units in a hex and you own the CD version you will see this to the right of the screen

The top unit shown is the one you clicked on and is the "active" unit that you can move or fire or whatever you want to do but lets assume you want to use the observer team to call artillery, Click on that unit and the list will re-order and change.

Now the Observer team is the unit you have direct control over in that hex and if you wanted to select one of the rifle sections just pick the one you want and it will appear at the top of the list and that is the one you have control of.

WinSPMBT version 12.0 Consolidation patch (Released as WinSPMBT version 10.0 - version 12.0) - March 2018

(the 2018 patch updates **any** verson of WinSPMBT **ver 10 and up to version 12.0)**

32 New Scenarios
30 Revised Scenarios
4 Revised Campaigns
81 New or Revised Map files
 347 New or Revised OOB Photos
5 New or Revised Game Interface Photos
 555 New or Revised vehicle / aircraft Icons
93 Updated OOB Files
 49 New or Revised Icon files
 221 New or Revised Text files
 23 Revised picklist files
7 New or Revised sound files
144 New or Revised Game Guide Photos / Graphics

1/ Secure PBEM is once again Secure. At some point in the past the code that checked for installation path had been commented out. We became aware of this when a player reported his opponents seem to have far too much foreknowledge of events and in testing we discovered that is was indeed possible to have two installations of a PBEM game and both would load secure PBEM moves allowing unscrupulous players the chance to preview play the turn on their mirror game as a "scouting" game then play the actual turn on their set up game. **This loophole in the security code is now closed.** If attempted the game in the mirror copy will refuse to load. The game has been returned to what we claimed it would do in the game guide....."you cannot move a copy of your secure PBEM turn to another install of winSPMBT or winSPWW2 ....it will not play. "

2/ Load cost info for Anti Tank Guns, Field Guns and Mortars now reports the combined true load cost of the **Gun + Crew** so, for example, a gun or mortar with a load cost of 2 for the weapon and a crew of 8 will now show the true load cost for that unit as **10**.

3/ In the Purchase Screen, Anti Tank Guns, Field Guns and Mortars that are combined with transport units **will now ONLY show the vehicles capable of transporting the gun selected** so in a formation that might have a wide range of gun/mortar choices coupled with a wide range of towing vehicles to choose from players can now be confident that the combination of gun and towing vehicles they choose will indeed tow the gun selected. You no longer have to manually check the carry capacity of a vehicle then add up the carry cost of the gun and it's crew. The game will only offer gun / towing vehicles that will work together.

4/ In MOBHack, what used to be the "Weight" data entry field is now *correctly* labelled for it's actual function ……the Load Cost for that particular unit.

5/ Campaign Cores are now limited to **24000 points**. We had to limit points to prevent situations that had been reported many times where players had allowed their core and support to get so large that the AI could not buy enough units to mount a proper advance or attack battle.

6/ Under some circumstances there were guns that would not fire AP rounds at targets that required AP rounds but use HE instead. That tangled bit of code has been sorted out and the problem eliminated.

7/ Under some circumstances the AI would turn your own guns on you. We have not noticed a repeat of that phenomena since a small bit of code was changed.

9/ Cultivated fields have been removed from viewing in the mini map. They served no real purpose and just cluttered up the mini map…. However, rice paddies still show up as they can be hazards to vehicles and can be used as a point of reference.

10/ All GameOptions and MOBHack screens have been checked for erroneous mouse over messages and corrected.

11/ Under some conditions foxholes were not being cleared when units were moved and re-dug-in during deployment and in the editor. We believe this to be corrected now.

12/ Maps may now have TXT files associated with them so map makers can now explain and "sign" their work. These text files can be manually added to the **Maps folder** named the same way as the map except with the ".txt" extension. There are examples in the patch to use as guidelines and the process has been streamlined. All that needs to be remembered is to end a paragraph with a ' * ' and use the same to leave a space between paragraphs. Map text length is not restricted.

13/ MOBHack now allows unit and formation information text files to be edited directly from MOBHack. As with maps all that needs to be remembered is to end a paragraph with a ' * ' and use the same to leave a space between paragraphs.

- UNIT information should be restricted to roughly 150 characters or three medium length paragraphs.
- FORMATION information can as long as needed as formation Information references a separate screen whereas Unit information does not.

14/ The Campaign "blank screen Review Unit bug" should now be eliminated.

15/ The blast radius circle now displays as two pixels wide making it easier to see on some terrain combinations.

16/ In the custom map editor, the EXIT button has been moved to the bottom of the screen to prevent accidentally exiting the editor and losing your work.

17/ April is now a "spring transition" month so the ground may have green vegetation but the trees are bare of leaves. Previously the game visually went from late winter in March to full summer foliage in April.

18/ "Rough slope" messages were being generated on roads. This has been corrected.

19/ The "Information" button that appeared when you right-clicked on a unit has been renamed the more correct "Unit Data"

20/ Fires from burning wrecks NO LONGER always obscures vision through the hex. A random variable has been added to smoke from wrecked vehicles that will sometimes allow LOS vision through that hex so unlike in the past, being behind a burning wreck no longer guarantees you are out of LOS. It also means that you can no longer be safe from return fire from units that had been following the tank you just knocked out.

This is an example from early testing. The dark hexes show what the game previously obscured because of smoke from burning wrecks

And this is the same battle with the new code which gives a rough idea of the code change.

21/ In game drop shadow around units has been increased. We have gone from what might be described as an "early Afternoon Shadow" to a "Late Afternoon shadow " .

This change defines units a bit better on the map

22/ An AAMG (or autocannon) in slot #4 is no longer treated as a fixed bow weapon. AAMG and autocannon in any slot is now treated as having 360 degree traverse.

23/ Both game guides and MoBHack Helps have had many updated screen graphics added.

24/ CD owners Only. In the main game screen and deployment screens, pressing **the middle mouse button** will centre the map on the currently selected unit and also simultaneously highlight all of the visible hexes from it.

25/ New load failure messages detail if it is a gun or vehicle class that was too large to fit a transport rather than just the generic "full" message.

26/ AAA hits on armoured aircraft were screening out most of the damage from the small warheads . AAA fire that hits a target aircraft now has a higher chance of doing damage.

27/ For CD owners only .The following menus now include a **GOTO** feature added .

- Save games List
- PBEM games List
- Tournament games List
- Scenarios List
- Campaign List
- Load and Save Custom Map List in the Main Game and the Custom Editor

Simply press **GOTO** , enter the slot number you want and then press enter and the screen will update to that position. This addition to the code saves a lot of mouse clicking.

28/ For CD owners only. The extended map editor now allows you to strip all terrain from the map , leaving only the contours with one press of a button. This does a bit more than flood filling the map with base terrain that followed contours did.

29/ When making bombing runs aircraft Icons will now appear to be above the smoke generated by bombing and not appearing to fly through or under it.

30/ A secondary benefit to 29/ above. Any map text will now appear above any smoke generated by any event that creates smoke.

31/ Graphic changes…… There have been alterations made to the smoke and flame graphics that are displayed when tanks are knocked out.
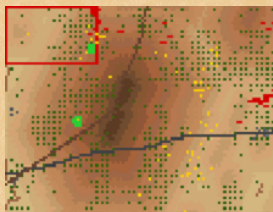
32/ For CD owners only. The functionality of the mini maps has been greatly expanded. The original purpose of the mini maps was to show a general overview of unit positions and allow players to quickly move the focus of the area they were playing by simply clicking on a new area on the mini map. This had more of a purpose in the original game where map sizes and screen resolution were fixed. As we expanded the size of maps and number of screen resolutions available and eventually set up the game to play at desktop resolution the mini map became less and less used as it's size shrank with the increase in resolution but now we have added code to help make it worthwhile once again.
The mini map can now be expanded to show the entire map by right clicking on it with the mouse *if the map is larger than 100 hexes wide and 80 hexes high* so it can now be expanded to show an entire large map up to 160 hexes wide and 200 hexes high.
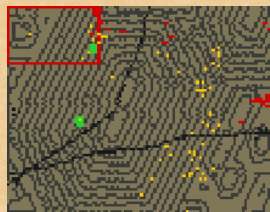
As well a second, simplified view of the map can be generated by pressing **the middle mouse button** of your mouse on the mini map. This **"RadarMini"** view shows the main map , roads, contour lines and streams/ water rather than the coloured graduated terrain of the old style MiniMap. It's background colour is darker than the standard MiniMap to allow players a higher contrast between the friendly and enemy units, and the Victory Hex locations and is there to give players an alternative overview. The old mini gives a better quick glance overview of terrain height whereas the **"RadarMini"** gives a clearer overview of friendly and known enemy unit positions. Both types of maps can be viewed small or large if the map is large enough and all four types allow players to left click anywhere on the mini and that will change the position of the main map allowing players to view unit positons and move to new areas of the map with one left click on the mouse.

2x normal size for ease of comparison
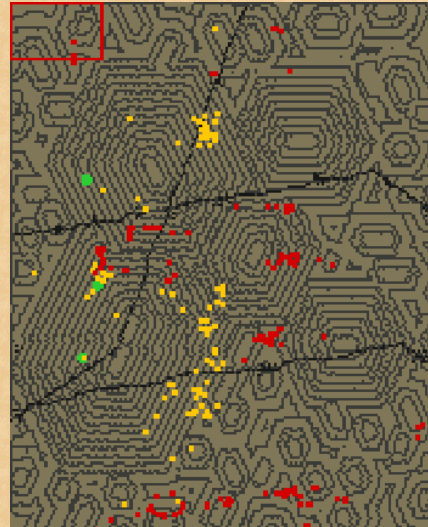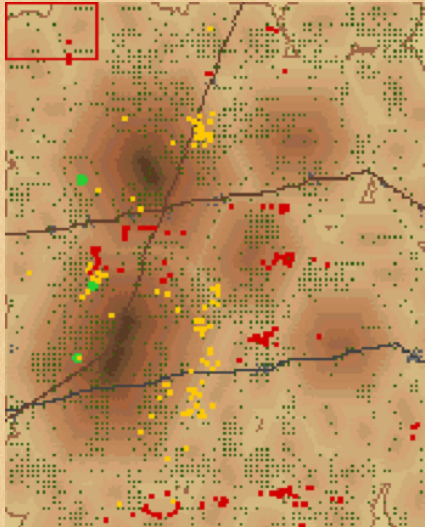
Standard MiniMap   NEW! **RadarMini**

NEW! **BigMini**   NEW! **BigRadarMini**

33/ The Information screen in the game encyclopaedia which is also the screen you see when you click on one of your units then press UNIT DATA, now includes a joined hull+ turret Icon , if it's a two piece Icon, a single piece Icon will show normally as a single Icon, at the bottom left of the screen at 1.5 x normal size for aircraft 2x normal size for vehicles.

34/ The Armour Slope Calculator and the **Armour Penetration Calculator** can now be accessed directly from the GameOptions Utilities screen.

35/ The Scenario, save game, load map and Help screens have all been redone in the " Flat Screen" style of the Edit Campaign screen with more room for information especially the Help screen that now allows text right across the width of the window

36/ Units with Thermal imaging equipment and/or Laser range finders now are highlighted in Yellow in the purchase menu to they are spotted more easily

37/ The game now has the correct start dates for both North and South Korea

38/ The Scenhack scenario data screen now allows you to change scenario dates to the full 2025 date limit. (Previously it maxed out at 1949)

39/ The Mujahedeen vs Afghan Army will now use Afghanistan battle locations if fighting each other, not Syrian.

40/ Russia vs Mujahedeen from 11/2015 on will now give Syrian batlocs, as Russia vs Syrian rebels or other anti-Syrian groups.

41/ A :Show Blast Radius" ON/OFF control has been added to GameOptions Misc

42/ For CD owners only.Ongoing regular battles and scenarios (but NOT PBEM or Campaign games) can now be saved " As Scenarios" in the scenario folder from the battle window by pressing the "Scenario Save" button that has been added. This allows players and scenario designers an easy-to-use way to save a regular game as a scenario without having to manually rename and transfer them from the save game folder to the scenario folder. This will allow "battle in progress" scenarios to be made much easier as a designer could play out a turn or two saving the game as a scenario until just the right one is found.

WinSPMBT version 11.01 Upgrade patch (Released- as WinSPMBT version 10.0 - version 11.01 Upgrade March 2017)

15 New Scenarios
6 Revised Scenarios
10 New or Revised Map files
77 New or Revised Photos
176 New or Revised vehicle / aircraft Icons
93 Updated OOB Files
138 New or Revised Icon and Terrain Graphic files
6 New or Revised Text files
2 Revised picklist files
18 New or Revised sound files
10 Revised terrains
7 New terrains
Upgraded **Cost Calculator**

There was a bug showing when off map batteries that were due to arrive later as reinforcements but the scenario designer had programmed them to fire in turn 0 pre-game bombardment that caused phantom fire missions. This has been fixed. Off map artillery that are plotted to fire before they arrive now properly clear down the illegal fire mission instead.

A bug whereby the early end of battle routine in a PBEM campaign was not engaging correctly and games that should have ended went on even when there was no enemy activity has been fixed.

Map sizes now increment/decrements by 5 hex increments, not 10 as before giving players more control over map size

The "phantom crews" bug in long campaigns has been fixed

A bug where the wrong observer may be used as the basis for scatter when the observer was retreating or worse was fixed.

The function to recombine split off crew with their vehicles (usually caused by loading the vehicle onto a cargo plane and then unloading again) had been inadvertently removed from the code. The "j" key functionality is restored to the deployment screen so if you have loaded a vehicle into a heavy air transport aircraft for a para drop. You can now unload it during the deployment phase for whatever reason and you can now re-join the crew and vehicle by pressing **'j'** (for "join"). Previously you had no choice but to leave it behind

A scenario info button to the game play screen, this is helpful if you have forgotten what battle you were fighting or need to know the scenario battle location (batloc #) once the game is underway. Previously there was no way to know which map your battle was on after the game had commenced. Helpful if you like the map and want to generate a similar one again using the same batloc #.

HEAT and HESH guns had stopped firing reaction fire at infantry at <1000m or so due to a knock off effect when we coded for NLOS ATGM. This has now been corrected.

Long range SAMs with extremely long minimum ranges were not engaging incoming aircraft or those that were performing a stand-off attack. This has now been fixed. SAM minimum range is now irrelevant for a stand-off attack (that includes entry onto map). However these very long minimum range SAMs will not fire on the surviving planes as they then move across the map only upon entry and in stand-off attacks.

Post 2014, "What-If" battles involving NATO nations versus Russia will be in the Baltics

Any nation that signed the Ottawa land mine treaty will no longer be able to purchase and place mines in defence after 1999. Additionally, any nation that signed the Convention on Cluster Munitions will no longer have cluster munition weapons in their game OOB's after the date that nation put the convention ban into effect. Depending on the nation that could currently be any time between 2010 and 2016 as there is a wide range of dates the various nations covered by the game have put the convention into effect. Conversely any nation that **IS NOT** a signatory to the Ottawa Treaty **will still be able** to purchase and place mines in a defensive battle and any nation that **DID NOT** sign the Convention on Cluster Munitions **will still have** access to cluster munitions in the game. Hopefully that explanation will cut down on the amount of erroneous "bug" reports.

Units which manually turn to face a new hex may now draw opfire. This affects both infantry and vehicles at different ranges and there are random variables we tossed in to make in unpredictable but *generally* (and the randoms we added really do mean "*generally*") **in hex** infantry movement *could possibly* attract opfire from enemy units **up to** 3 -5 hexes away *(generally...)*. Vehicles shifting hull or turrets around could attract opfire from enemy units **up to** 10 hexes away (and *maybe* a bit more...). And all that depends on the enemy's training , morale, suppression level, vision rating and battle visibility etc. AS WELL AS your units training , morale, suppression level, visibility etc.. This new game feature was originally intended to stop players from turning their tanks in place to present their heaviest armour towards the most likely threat without attracting enemy attention. That was expanded to include swinging the turret as obviously that kind of movement *if spotted by the enemy* would naturally draw fire in a real battle situation and then that was expanded to include infantry as well. The bottom line is if you just want to "look around" to check your LOS use the **}** HotKey (Unit View) otherwise you risk drawing unwanted attention to your unit .

Players should see a reduction in the number of cases where ERA defeats large aircraft launched anti tank missiles.

There were very rare cases when palm trees were generated on winter maps and we *think* this is now fixed

26 pages of OOB suggestions were integrated into the game OOB's

Info on revised terrains for 2017

After a hiatus of many years we added more terrain and revised to varying degrees some of the old ones. All terrain will show up on generated maps at one time or another but this year only CD owners will have access to edit the new terrain and we have added new way to edit them into maps

Here's a list of revised terrain. The list of new terrains are in the New for CD holders section below

- Summer trees are totally redone and more have been added to the base set

- Ground level grass

- Beach Sand has been totally redone ground level and hills

- Autumn trees have been reworked a bit so they aren't as colourful

- Winter trees have been reworked a bit as well. Not as much as the summer set but they have had a touch up

- Summer, Autumn and Winter orchards have been reworked to make them a bit denser than before.

- What was "winter grass" in the game is now "very light snow" because there is a new "light snow" set (see below)

- Short dry grass set has been totally redone ground level and hills

- Impassible terrain has been totally redone ground level and hills

- The green crop set has been totally redone ground level and hills

NEW for the extended CD version holders only

- The DLLs that Scenhack uses to sort scenarios have been included with this patch for the vast majority of players who don't have Borland Paradox installed on their Hard Drives for over a decade (and why we forgot everyone else needs them too 😊)

- CD / extended version holders will now get a warning message if they try to enter a building hex with a vehicle. You are now asked to confirm that you *really* want to do that. This is to stop you from inadvertently immobilising yourself as most cases involving building entry with vehicles is the result of a too long movement call through an urban built up area. The feature will also display on rough+slope combinations if you have travelled 3 or more hexes and thus are in danger of sticking. It's just a "friendly reminder."

- SAM and AAA will tend to save shots on low-probability to hit shots. Especially against Spotters (inc UAV) with less than about a 20% chance, other fliers at about 10%. AAA guns will hold fire at longer ranges (>1 KM) if to hit is under about 10% and wait for a better shot. This applies only to CD owners.

- We have introduced a new Formation sorting routine for the premium game. Over all the years these games have been developed, unit classes have expanded as required, but there was no logical order to the expansion as they were added on a need-it-now basis so the different infantry, armour and artillery unit classes that were used to build formations were spread all over the 256 unit class slots available and this meant that in some cases when buying formations you had to search though multiple pages of formations to find the ones you wanted. The new routine in place for CD holders only helps group unit types together and in a more intuitive and logical way. The caveat to that is that when sorting formations by unit class the unit class of the formation is still determined by the first unit in the formation and there is really no getting around that.

   For example. with this new routine if you go into the artillery page you will generally find that Forward observers are the first formations listed then generally if there is consistency to the first unit in the formation you will find the light mortars, then the medium mortars then the heavy mortars then the AT guns, then the Hvy AT guns through field guns into rocket formations, off map guns and finally AA guns. Again...its all determined by the first unit in the formation but in the past (and the free game will still use the original method) you may have had a one type of infantry company with unitclass #1 infantry as the first unit but the second type of infantry company may have had a unitclass # 64 Medium Infantry unit leading to in some cases a dogs breakfast of the sort order. A good example of that was the winSPMBT Russian OOB in the years that the T-55 and T-62 unitclass #13" medium" tanks were active along with the T-64 and up unitclass #59 "MBT" formations but the lower end Mediums were on page one and the higher end MBT's were on page 2. With this they are all grouped on page one and we think this will help bring a bit more order to the game

- A new button has been added to the main screen that allows access to the premium map editor from inside the game

Info on new terrains added for 2017

- There is a new "scrub grass" ground and hills set in dark brown tones for ground and hill levels that would be useful on maps between November and March but also as an accent on any map type. In the map editor this can be accessed from the "add short grass" button which is on page 2 of the editor to the right of the add trench button. You will be prompted to " Press 1 for regular grass, 2 for scrub grass "

- There is a new bare field ground and hills set that represents either a freshly planted field or a freshly harvested one. These are also handy as a base for any orchard type. In the map editor this can be accessed from the green crop button. You will be prompted "Press 1 for Crops, 2 for Tilled "

- There is a new "light snow" ground and hills set that will show up in the game in place of the old "winter grass" which is now called " very light snow". The new "light snow" is used by the game as a base tile over which winter trees are placed. It can be accessed only on winter maps from the button on page one directly under trees. You will be prompted "Press 1 for light snow, 2 for very light snow"

- There are now pure coniferous sets for summer and winter and those will be auto-generated on maps. These represent "old growth" pine forests and have additional movement and sighting restrictions above regular mixed forests. This can be accessed from the Trees button and you will be prompted "Press 1 for mixed Trees, 2 for Pines "

- There are also new vineyards and coconut plantations/ groves for use in map making and these are also placed in small amounts on game generated maps. In the map editor this can be accessed from the Orchards button and

you will be prompted "Press 1 for orchard, 2 for Vineyard, 3 for Coconut Grove "

- Deep water has been added (ground level only naturally). It is a very subtle change as it had to be . The water animation palette is fixed and not very big which limited my options and after two failed experiments I settled on what we have now as a compromise but as I said....it's subtle but sometimes subtle is best. The game palette was tweaked a bit to brighten up water....it's a bit more " Mediterranean" or "South Pacific" blue now.........a little less " dreary November " grey-blue.

We have also added an exciting new way to apply terrain to the map

Previous to this release the "Fill range" and "Fill" functions in the map editor were mainly used to flood and entire map with a base terrain that would follow the contours already on the map. If you tried to fill less area it placed whatever terrain you chose to use as a giant Hex shape block of terrain that was virtually useless for making maps so as a general rule anyone making a map avoided that control unless they were "skinning" and entire map. We have added a new dimension to the fill range controls that expands it's usefulness 10 fold or more

Now when pressing "Fill range" Extended game (CD) owners will see the following prompts:

First you will see **"New Fill Range: "** and you can enter any number you like. 255 will fill and entire map but you can choose any amount . After entering the number of hexes you wish to place your terrain onto the map, this new message will appear: **"Enter 0 for Block fill, or 1-90 for a Splatter Effect "**. "0 for Block fill" will give you what this feature has always given... a solid mass of terrain but entering 1-90 for a Splatter Effect controls what percentage is covered in the area you selected. Enter a high number and it will fill to that amount, Enter a low number and you have a much finer control over how much is placed on the map allowing you to build terrain gradually. It can almost be thought of as a spray gun. It is very useful when building up a forested area or when starting a map off after building the hill contours if you want to blend different types of grass.

AS WELL we have changed the old SSI function of "right clicking" the mouse to add 7 hex clusters of terrain to the map at a time. Left clicking the mouse button will still give you single hex fine control but now right clicking the mouse utilizes the same function as fill range so whatever range and density you have set you can now add by clicking the right mouse button. If you want to use it the "traditional" way simply set the range to 2 and 0 for Block fill and it will behave as it always has but now you can set whatever range you want to control the size of the fill but you can also adjust the splatter effect which GREATLY enhances the usefullness of the tool so adding terrain becomes quick and easy reducing the time it use to take to hand build a map by many hours.

This new tool has many uses but one thing you really want to avoid is mixing contrasting terrains together too much. A little is OK but it really depends on what you are mixing as too much is very distracting and can totally camouflage any contours on the map. What it's ideal for is blending similar colour densities together or placing forest. you can also use it to place hills but even a fast computer will take a few seconds to compute everything and place it on on a full sized map so be patient at first as slower computers may take a little longer to complete the command. We are after all, asking a 20 year old game to do a lot more than it used to but it will with sometimes spectacular results. I help design the feature and I'm still finding new ways to use it. We look forward to seeing the maps players design with this new feature.

WinSPMBT version 10.0 Upgrade patch (Released as WinSPMBT version 7.0 - version 10.0 Consolidation patch) - April 2016

22 New Scenarios
12 Revised Scenarios
 28 New or Revised Map files
181 New or Revised Photos
327 New or Revised Icons
93 Updated OOB Files
16 New or Revised Icon Graphic files
1 New or Revised Text files
115 Revised picklist files
 Upgraded **Game Options**
 Upgraded **ScenHack**

The game will now detect if Taskbar autohide is on when running in windowed mode and warn the player that this may cause problems . The game will now post an error message if in windowed mode if it finds auto-hide ON. Players have the option to ignore this or cancel out of game to fix auto-hide. To turn the check ON or OFF there is new line added to GameOptions in the MISC tab.

The Y key Range menu hot-keys now work properly.

There was a bug where if you loaded a game after an AI assault or advance. The old programmed fire block was not being cleared down, leading to odd behaviour (either your or the AI batteries would use the old data sometimes), requiring you to press the "clear programme" key to stop this happening for you to return the batteries to your control. This has been corrected and now works as intended

Autocannon firing indirect fire now use the correct explosion graphic, rather than the small single explosion.

Indirect artillery which is not located now produce less smoke, thus being less likely to give their position away.

Using Z fire (area fire) if enemy units are 30 hexes away or less away has a slightly increased chance per shot fired of the firing unit being spotted. So there is now a potential penalty for indiscriminate Z fire use

winSPMBT end date is now 2025

Setting OOB vehicle unit survivability to 7 gives that vehicle the same crew/ vehicle survival chance from of mine attacks as one in a normal MRAP unitclass and in game terms that is a slight increase to crew survival over a unit set to survivability=6. Remember this is mainly related to **crew** survival of mine attacks NOT survival of the vehicle itself.

Turkey VS Mujahadeen , battle locations (batlocs) are in Syria post 2013 and Mujahadeen uses ISIL forces. Also Jordan, Lebanon, Egypt, Gulf States, Saudi Arabia (generic Middle East) Israel VS Mujahadeen - generic middle east locations, v ISIL post 2013. Mujahadeen v Mujahadeen post 2011, uses Syrian batlocs, post 2013 uses ISIL troops (Syrian civil war)

Afghanistan battles in winter can now produce snowy maps, especially in mountain maps.

UK specific town battle locations to Afghanistan (Sangin, Musa Quala etc) have been added.

A bug whereby arty with high skills got an 0.6 initial delay off gold spots has been corrected, the minimum initial delay is now 1.0.

PGM (precision-guided munition) from aircraft will now work like HEAT on hard targets, even if it is an HE type weapon (has to be as an air weapon for aircraft). If the AP pen is 222 coded (and all relevant weapons now are...), it will strike any hard target hit as HEAT using the HEAT pen value.

A new NLOS missile weapon class has been added which can be directed only by FOOs (but this includes HQ's and light helos) at any located unit on-map. They can be fired at all targets, regardless of ammo. (uses PGM HEAT test for Ap value). NLOS missiles fired direct by ATGM vehicles act as a top-attack ATGM. NLOS missile firing is only available to the extended game / CD owners and is not available with the free demo version.

22 pages of suggested OOB changes and/or corrections have been reviewed , researched and applied to the game along with a number of changes we made to enhance OOB accuracy and / or completeness.

NEW for the extended CD version holders only

Additional new status information is now shown at the bottom of the screen. If the status is pinned, the status line is yellow, if retreat or worse, it is red. If suppressed more than 1, that is highlighted in yellow and Damage is now shown. In green if 0, otherwise in red.

```
O3>  Rifle Section     Out of Contact SHOTS: 1:0:0:0    RANGE: 500 metres        Turn 22
Pinned                                MOVES: - : -       SUPPRESSION: 20 DAMAGE: 2  Visibility 2
TARGET: T-54A                                                                      Length 35
```
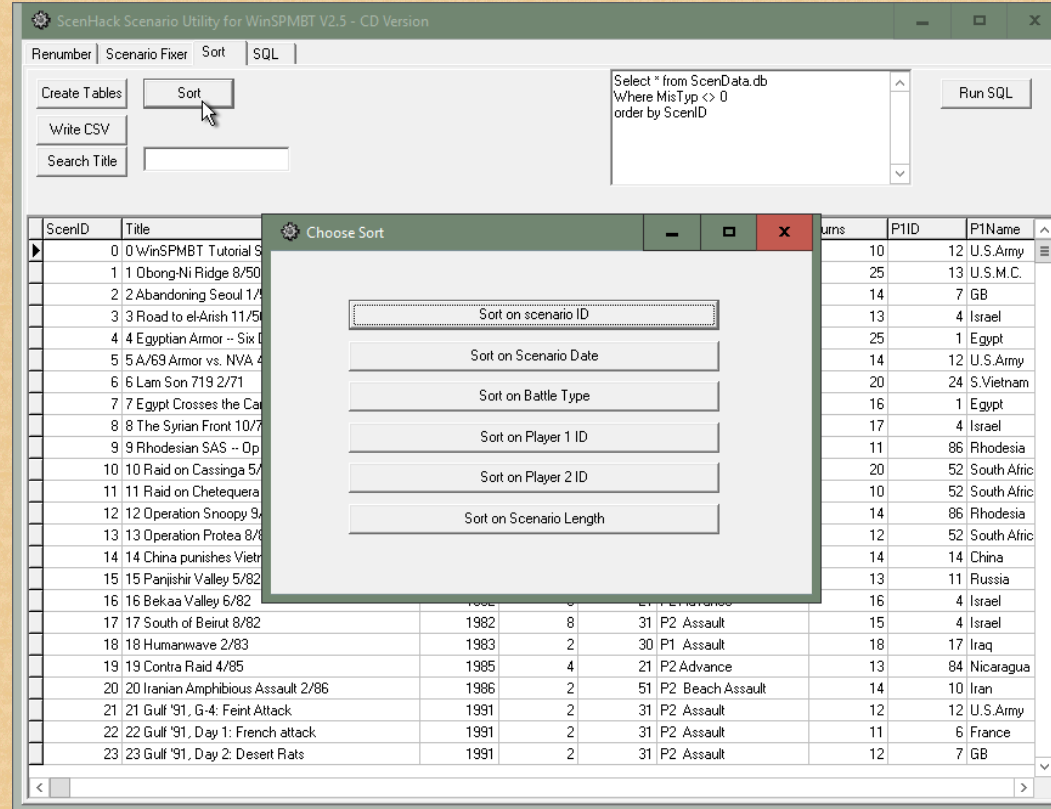
Scenhack has a new SQL sort facility. This will allow extended game/ CD holders to sort scenarios by the follow methods

- **Scenario ID** - (the current default sort)
- **Scenario date** - creates a list of all the scenarios in the game sorted earliest to latest. Handy for anyone interested in a specific time period
- **Battle type** - if you are only looking for assault scenarios for example this is will give you a list with all battle types grouped together
- **Player 1 ID** - if you are looking for all scenarios with Poland (for example) as player 1the list will order all scenarios by player 1 nation ID
- **Player 2 ID -** as above but the list will be ordered with the priority being Player 2.... If you want to find all the scenarios Great Britian is the opponent the answer is now one click away
- **Scenario length** - If, for example, you only have time for a short game and don't want to spend an hour of more looking through every scenario to find one for you to play with one click a list will be provided of all scenarios in the game ordered by length from shortest to longest

You can also search by scenario title

ScenHack Scenario Utility for WinSPMBT V2.5 - CD Version

| | Renumber | Scenario Fixer | Sort | SQL |

Create Tables | Sort
Write CSV
Search Title

Select * from ScenData.db
Where MisTyp <> 0
order by ScenID

Run SQL

Choose Sort

Sort on scenario ID
Sort on Scenario Date
Sort on Battle Type
Sort on Player 1 ID
Sort on Player 2 ID
Sort on Scenario Length

ScenID	Title			urns	P1ID	P1Name
0	0 WinSPMBT Tutorial S			10	12	U.S.Army
1	1 Obong-Ni Ridge 8/50			25	13	U.S.M.C.
2	2 Abandoning Seoul 1/5			14	7	GB
3	3 Road to el-Arish 11/56			13	4	Israel
4	4 Egyptian Armor -- Six D			25	1	Egypt
5	5 A/69 Armor vs. NVA 4			14	12	U.S.Army
6	6 Lam Son 719 2/71			20	24	S.Vietnam
7	7 Egypt Crosses the Ca			16	1	Egypt
8	8 The Syrian Front 10/7			17	4	Israel
9	9 Rhodesian SAS -- Op			11	86	Rhodesia
10	10 Raid on Cassinga 5/			20	52	South Afric
11	11 Raid on Chetequera			10	52	South Afric
12	12 Operation Snoopy 9/			14	86	Rhodesia
13	13 Operation Protea 8/8			12	52	South Afric
14	14 China punishes Vietn			14	14	China
15	15 Panjshir Valley 5/82			13	11	Russia
16	16 Bekaa Valley 6/82			16	4	Israel
17	17 South of Beirut 8/82	1982	8	31 P2 Assault	15	4	Israel
18	18 Humanwave 2/83	1983	2	30 P1 Assault	18	17	Iraq
19	19 Contra Raid 4/85	1985	4	21 P2 Advance	13	84	Nicaragua
20	20 Iranian Amphibious Assault 2/86	1986	2	51 P2 Beach Assault	14	10	Iran
21	21 Gulf '91, G-4: Feint Attack	1991	2	31 P2 Assault	12	12	U.S.Army
22	22 Gulf '91, Day 1: French attack	1991	2	31 P2 Assault	11	6	France
23	23 Gulf '91, Day 2: Desert Rats	1991	2	31 P2 Assault	12	7	GB

ADDITIONALLY ---- The AI pathfinding routines have been tweaked in the extended CD version . For obvious reasons I won't go into detail about what was done except to say the AI will now be less likely to think roads are wonderful things to advance down

WinSPMBT version 9.1 Upgrade patch (Released as WinSPMBT version 7.0 - version 9.1 Consolidation patch) - May 2015

Crews and passengers would not bail from destroyed units unless they were on a lake hex. This has been corrected and now crews and passengers bail out correctly in all terrain types.
Units with greater than 13 men were not showing on the game map. This has been corrected. The few units in winSPMBT that do have more than 13 men now show as 13 men
New unit Cost Calculator
5 new or revised Photos
A full set of re-calculated OOB's
Revised Japanese Leader Names

WinSPMBT version 9.0 Upgrade patch (Released as WinSPMBT version 7.0 - version 9.0 Consolidation patch) - April 2015

19 New Scenarios
4 Revised Scenarios
3 Campaigns added
2 Revised Campaigns
46 Revised Campaign files
 4 New or Revised Map files
531 New or Revised Photos
104 New or Revised Icons
93 Updated OOB Files includes **1 NEW OOB**
36 New or Revised Icon Graphic files
106 New or Revised Text files
1 Revised picklist file

Upgraded **Game Options**
Upgraded **MBT_APCalc**
Upgraded **Cost Calculator**
Upgraded **ScenHack**
Upgraded **Camo Map Editor**

The cheap Direct support / General support artillery bug has been fixed. If Player 1 bought Direct support or General support artillery and then immediately let the AI purchase it's units that would trip a code flag and the AI would purchase it's units at a reduced cost. This has been corrected

Ice edited into a map was reporting as being "tramlines". This has been corrected

A Campaign wide river bug has been corrected.

HotKey to exit game was x, which, unfortunately, was the same as another pre-existing HotKey. The game exit HotKey is now ' **/** ' (below ' ? ')

A bug with secure PBEM games losing any Opfire filters or plotted artillery barrages has been corrected.

There is a new cost calculator for winSPMBT. The old version was under-costing radar fire control
.
Battles involving Syria and Iraq vs Mujahideen for current dates have had new battle locations put into the game

Georgia has been added as a new Nation to the extended version of the game starting May 1991

The end date of Chechen OOB is now May 2000

ISIL / ISIS troops have been added to the Mujahideen OOB. The AI will used these units when Mujahideen is an AI opponent for Syria or Iraq

A large number of game screens have been revamped to give the text more contrast on screen therefore making them easier to read.

Scenario designers can now edit icon and photo numbers that display in a scenario with the in game scenario editor in winSPMBT using the Miscellaneous button. WinSPWW2 already had the ability for icon change but now has photos added as well. Additionally, owners of the Extended version of the game can use the CLONE feature to mass edit Icon and / or Photo changes into a scenario. This allows scenario designers the ability use variations for a particular unit if they exist in the graphics folder. The list and Icon numbers for all units in the game can be found in the Game Data / Design folder but photos you'll need to use MOBHack to find. This particular feature is useful for creating parked aircraft from other units like like Jeeps and trucks. The scenario designer can then add the appropriate photo number they found using MOBHack

There have been a number of code changes to the way the game handles units in shallow water. Shallow water was added to generated beach maps not long after we issued the windows versions of both games and shallow water was shown as different than deep water on the mini map and along shores on the main map for the past few years but there had been no further update to that until this year. Vehicles and troops could traverse shallow water at a greatly reduced rate of speed but when tanks or barges etc. were destroyed they were removed from the map as if sunk in deep water. This is no longer the case. Any boat, barge and any land unit that would show as a wreck on land will now show as a wreck in shallow water and surviving passengers and crew will bail out. So no longer will a DD tank that had entered shallow water be "sunk" with all hands if knocked out heading towards shore in shallow water. Normal tanks that are unloaded in shallow water and knocked out while wading towards shore will now show as a wreck and possibly eject surviving crew just as if they were on land. LVT's will eject crew and passengers if any survive the attack that knocked out their vehicle. This adds an additional level of realism to the game during beach assaults.

Additionally, scenario designers can now directly edit in Shallow water when creating maps. Now, when the water button is pressed in either the in game or extended map editor, you will be asked "Press 1 for -3 deep water or Press 2 for -1 shallow water "......... -3 deep water being the standard "water" available previously in all versions of Steel Panthers. This new feature works with all the normal game editing features so you can left click for a single hex or right click for a single hex and the six hexes around that point or you can set the range fill feature. You will NOT see a change in the main map water tiles. Shallow water is identified by passing the cursor over a hex OR by looking at the mini map which has shown shallow water on maps for a number of years. Future updates MAY include shallow water tiles but nothing has been planned in that regard yet. A LOT of code work would be involved in that change.

The game guide HTML files have been amagamated into one file so any keyword search will now find them all without changing to a new page and re-doing the search.

28 pages of suggested OOB changes and/or corrections have been reviewed , researched and applied to the game along with a number of changes we made to enhance OOB accuracy and / or completeness.

WinSPMBT version 8.0 Upgrade patch (Released March 2014)

21 New Scenarios
40 Revised Scenarios
2 New Campaigns
4 Revised Campaigns
120 Revised Campaign files
14 New or Revised Map files
87 New or revised Photos
66 New or Revised Icons
92 Updated OOB Files
14 New or Revised Icon Graphic files
14 New or Revised Text files
108 New or Revised picklists
Upgraded **Game Options**
Upgraded **MOBHack**
Upgraded **Cost Calculator**

Upgraded **ScenHack**
Upgraded **Camo Map Editor**

We have added a programmed barrage option for owners of the extended features version. This new feature is only available as a pre first turn set-up option so is only available when the player is advancing or assaulting . It can be set up to start at any time from initial bombardment to the limit of the turns set for that battle. Programming is easy. Assume for this example you want to set up an pre game bombardment with any number of guns that would deliver artillery just in front of a planned advance. You would choose the hex you want to start the bombardment just as you normally would then , once that was done you would advance the Artillery bombardment turn button (the one with the large +) to the next turn you wanted bombardment from that gun to land. It could be the next turn or it could be any number of turns in advance. When you click on the map for the next bombardment hex the first one you placed will disappear but be assured it has not been lost. You can continue on for as many turns as the guns have ammo for and it can be used by scenario designers as well. The AI will will sometimes use this feature in the attack and assault in the extended features version.

Please note that once a pre-planned bombardment has been set it cannot be stopped until complete, and **any guns assigned on a programmed task are not available to the player until their part of any programme is complete but the entire programme may be cancelled by pressing the "cancel Programme" button on the bombardment screen**. This button is provided to free game users as well, since they may want to do so in a scenario with an advanced programme that was made by a CD owner. The cancel bombardment button is also the only way to clear any programme you are creating (in the setup turn 0 of an advance or assault, or in the scenario editor) - it's all or nothing. Therefore plan your programme and plot it with care as this is the only way to cure a mistake.

All 15 levels of terrain are now represented by different colours on the mini map. Previously only the first 10 levels were with level 11-15 the same colour as level 10.

MOBHack has been improved to work with most of the commonly used integrated database checks. For example, if you select "Unit Checks" and " Find units *" and you, for example, clicked on 01- Infantry you would see a message to the right that reads " Searching for Units of class 1 Infantry" and under that would be a list of units that use that unit class. In the past you would then have to open MOBHack manually and scroll to the unit you were interested in. Now you can click on that unit in the database and it will automatically set MOBHack to that unit (or formation if you select formation checks..... the tabs marked with an asterix (*) will do this

MOBHack now has a "paste icons only" check box to allow pasting of only the 3 icon fields from the paste buffer.

Units of class 180 Artillery Prime Mover will now offer crew protection if the front armour is >0

A bug was fixed in the AAA reaction fires routines if weapon 1 is turned off or damaged. This mainly affected dual gun/SAM systems in MBT

AAA gun accuracy has been reduced at long ranges (>50% range) Non specialist AAA units with warhead 1 weapons (AAMGs) are also less effective (at ranges >5. Specialists with radar control are not particularly effected (>85% range).

Full map editor functionality is now made available on the "View Map" Screen, for any desired tailored tweaks of a randomly generated map for the extended features version only.

A larger text option has been included for the extended features version only. This uses a new font we developed for many of the screens that makes them easier to read in many cases. This new feature can be switched on or off though GameOptions / Misc and needs to be turned on manually by the player. The spin off effect of this was many screens needed slight adjustments to allow both the old and new font to work equally well which lead to further adjustments that balance text display better in either mode

General support and direct support artillery now have a bit more delay when adjusting fire due to the longer communications delay with their HQs

Rifle fire base hit chance has been reduced slightly at ranges of 6+ hexes and Self-Loading Rifle type weapons chance to hit has been increased slightly. SMG to-hit chance at 2 hexes or less has been increased slightly. This code was already in WW2 is now applied to MBT as well. An "assault rifle" is treated as an SMG at 2 hexes or less, and as an SLR at 3+ hexes. In addition, sections with more than 13 men have an additional to-hit based on the excess remaining men over 13 for any infantry prime class weapons. This code was also already in WW2, but is now applied to MBT as well. None of the above apply to indirect fires - only to aimed direct fires. In these examples a "Rifle" is an Infantry primary class (weapon class 1) weapon with a HEKILL =1 and a range >4. An SLR is a Infantry primary weapon class (weapon class 1) with HEKILL>1 and range >3. An "Assault Rifle" is an Infantry primary weapon with HEKILL of 3+ and range 5+ and a SMG is a Infantry primary weapon with HEKILL of 5 or more and range <4 hexes.

If Kenyas opponent is Mujahideen the default maps are Northern Kenya or Southern Sudan instead of Afghanistan. Mujahideen here represents Al-Shabab, Al-Quaeda, or Sudanese bandits and local warlords

Mine sweeper tank and engineer tank classes now protect any passengers as if an APC unless front armour is 0. This is for engineer type APCs. It is normal in the game now to give engineer and mine clearing tanks zero carry capacity but this penalised vehicles that had facilities to carry troops inside while the engineering / mine clearing work was being done so something like a M1A1 MCBS will still have a zero carry capacity but something like a M113A1 Dozer can have a carry capacity and protection for those passengers and something like the Merkava mine clearing tank can carry it's passengers under armour

New Battle locations have been added when the two opponents are Japan and China

73 pages of suggested OOB changes and/or corrections have been reviewed , researched and applied to the game along with a number of changes we made to enhance OOB accuracy and / or completeness. The USMC OOB and picklists have been redone completely and all game scenarios and campaigns have been corrected keeping them in sync with the new OOB's

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WinSPMBT version 7.0 Upgrade patch (Released April 2013)

13 New Scenarios
25 Revised Scenarios
4 Revised Campaigns
14 Revised Campaign files
1 New Map
130 New or revised Photos
106 New or Revised Icons
92 Updated OOB Files

25 New or Revised Icon Graphic files
14 New or Revised Text files
1 New Sound files
65 Revised picklists
 Upgraded **SHPEdit**
 Upgraded **MOBHack**
 Upgraded **Cost Calculator**
 Upgraded **ScenHack**
 Upgraded **Camo Map Editor**

Artillery overload has been added. Over-spending on artillery will now credit your opponent with extra Victory Points as a penalty for doing so. When the artillery value of a force exceeds a specified amount (see below) the arty percentage on the purchase screen is shown in yellow as a warning that you have entered artillery overload. If this happens an amount of the overload is allocated to your opponent as Victory points, specifically 50% of the excess amount of points spent on extra artillery. (Hover your mouse over the Artillery Mode change button to see what free VP you have granted to your opponent should the percentage value go yellow due to artillery overload.)

In an assault your artillery points spend is unlimited. The advancing side in an advance/delay can have **30%** of his points as artillery before overload applies. In a meeting engagement, both sides are allowed **20%** of total points as artillery. All others are limited to **15%** of total points to be spent on artillery before overload penalty.

Campaign cores do not limit artillery bought, but if you overload on it then you may well be handing points to the enemy especially when defending. Air units or ADA do not count as artillery points, only mortars, howitzers etc. that can fire indirectly. Ammo resupply units **do** count as artillery points, as they are a human use only unit against the AI. Artillery overload points are reported at the end of the first turn, and also on the totals screen at end game.

Artillery can no longer be plotted (including air transports and spotters) on turn 0, or 1 if the battle is a meeting engagement or you are the delayer or defender. A scenario designer can still plot artillery as he desires in his scenario, however. The AI may still plot fire as before. This is deliberate to penalise a human player who packs the approach roads. Note that the bombardment screen may still be entered to plot FDF gold spots, or toggle the blast radius display. The arty units just will not show up till post turn 1 if unavailable in the scenario for pre-game bombardment

Windows 8 changes have been made to the Game Options launcher programme. The Game Option programme should now report "Windows 8 or higher" if you are playing in Windows 8. In Win8 the windows Vista and 7 batch command file used to remove the aero interface in full-screen mode is <u>not</u> run as it is no longer needed in the newer version of Windows.

A **new weapon class** for HESH firing guns (Weapon Class 26) has been introduced. A HESH gun must be the slot 1 weapon. Any HEAT ammo given to a Weapon Class 26 gun is now HESH and that is how it will be reported on the unit info screen. HESH ammo is slightly more effective against plain steel than HEAT and HESH has a better HE effect than HEAT but with a slightly reduced blast radius. HESH ammo is not as good as an HE round due to lack of fragments. HESH is easily defeated by ERA of all types, but large HESH rounds may remove several tiles instead of just 1. HESH is very good against bunkers (That is what the round was designed for). Laminated or spaced armour (Anti HEAT armour) greater than steel is extremely effective at defeating HESH. Armour against HESH is HEAT armour + ((HEAT-steel)x2), ie twice the difference of any spacing or laminate is added on top. HESH and HEAT for slot 1 weapons will now fire in Z fire (direct area fire), if no HE is available, and there are >4 HEAT (HESH) rounds available.

There have been **revisions to the cost calculator algorithm** regarding the way unit points are allotted that include reductions in the costs charged for Thermal Imaging as well as reductions in the costs associated with better firecontrol and ranger finders. Although it varies from vehicle to vehicle due to variations in vision, FC and RF ratings, older tanks like a post WW2 M24 Chaffee may have their costs reduced 10% or less but a high end tank like a M1A2 SEP V1 may be closer to 18 % less expensive than previously. These changes also affect infantry with vision ratings so those units are now less expensive as well. The cost reductions also extend to aircraft so an aircraft like an F-22 will be around 20% cheaper than before whereas a post war P-51 might be 15% less expensive . Of course, the in game costs my vary somewhat due to the calculation the game makes for national Experience and Morale values. The end result is a more compressed price structure than before which helps reduce cases where a third rate nations units were so cheap they could flood the game with units in a battle with a first rate nation.

Vehicles which have moved are less likely to turn in response to enemy fires the further they have travelled, especially non-turreted or those turreted vehicles which have exceed their stabiliser value in hexes moved. Turreted vehicles which have moved too far to turn the hull to face may still turn the turret to face the enemy firer, however.

Small HEAT warheads are now less likely to perform above average. This chiefly affects the little 40mm and similar grenade launcher warheads.

Units with Laser Range Finder (20+ RF) and higher fire control (30+ FC) can get critical hits out to 1 KM as opposed to the rest that have a 500m limit.

France Vs Mujahideen January 2013-Dec 2025 battle location changes. Such battles now occur in Western (sub-Saharan) Africa or the Sahel (Southern Sahara). (Mali and environs). Nigeria now also uses this set of battle locations V Mujahideen, 1946- 2025 for the African force to go to Mali or just as Tuareg and other irregulars.

French expeditionary AI Pick list produced for selection of forces against various enemies that are more infantry-centric. Includes Mujahideen, Viet Cong, Cambodia etc. Expeditionary list is more infantry-centric and tends to use armoured cars rather than tanks. In early days, uses "goumiers" as generic local supporting forces.

Chile Vs Argentina had some extra battle locations added (Patagonia). Mainly for the 1978 war that almost occurred. This provides some flatter terrain than the previous Andes that was the main battlefield.

RPG type (Weapon Class 2) weapons firing AP/HEAT on moving vehicles (2+ hexes moved) at 4 hexes or greater are reduced in accuracy. RPG at any vehicle targets over 6 hexes is also reduced in accuracy. Moving targets beyond 1KM also bring a reduction. This last also applies to weapon class 3 and 26 recoilless guns.

HMG's (50 cal and 14.5s) at 300m or less firing HE ammo are slightly more effective in AP penetration value.

Cluster Munitions HE penetration values have been reduced. HE Penetration is the ONLY value the game looks at to determine if and how much CM penetrates armour.

Vehicles will no longer spin and face to the right when firing at enemy in their own hex

Vehicle smoke dischargers now make 1 "chuff" sound and deploy all 3 smoke bursts simultaneously (no sequence of 3 separate firings and noise sequences as before).

Infantry popping smoke when pulling back or treating now do so at full smoke value, rather than the partial screen they laid previously.

Buttoned vehicle movement cost is increased by 1 per hex.

AAMG's are now reduced further than other weapons if suppressed, but they will longer go straight to 0 shots if suppressed.

AFV suppression effects are now reduced. Only AAMG shots are reduced by being buttoned. (An "AFV" is considered a vehicle with hull steel armour of 1 or more all round for this piece of code).

Cultivated fields now cost one MP per hex more to traverse, so are no longer the same as clear terrain.

A weapon Sound Byte has been added to the weapons data in Mobhack. It overrides any sound entered in the unit field and will make adding new sounds for weapons much easier than having to apply them to each unit.

Infantry assaults now require 2 free MP. If there is insufficient MP the unit fires at the tank instead of close assaulting. As well, a failed infantry assault on armour can now result in casualties to the assaulting infantry element.

A new Movement Class for snowmobiles (8) has been added. This makes any unit given that M/C move as the snowmobile unit class currently does over snow.

A hit on a vehicle which does not have protected passengers (soft vehicle, non-APC AFV) does not now always cause a dismount event with attendant possible casualties. It will now force a dismount only 70% of the time.

Map vision algorithm changes have been made. The game is now more likely to produce both high (70-80 hex visibility) sunny days and also some night (1-4 hex) visibility conditions. Rooster trails of dust from moving vehicles in deserts and dry summer conditions etc. have been adjusted upwards by 10 hexes to allow for the higher typical visibility (typically above 75 now). (Previously the game tended to produce too many low visibility days of 20-40 hexes maximum visibility, i.e. an overcast day).

Woods and orchard hexes now cost 2 MP more for vehicles to traverse. Vehicular travel through woods was too easy before.

The victory hex placement routine will now try to avoid houses as well as lake and impassable terrain when placing tiles. This is chiefly to avoid the AI disabling vehicles by crashing into houses.

The delayer now gets 36% of the advancing sides points (was 40% before).

Blast circles are now shown in green on winter maps as that is more visible on a white background.

New game screen borders and backgrounds have been added. We have found the new background helps make the screen text easier to read.

The Map editing shortcuts have all been redone and some that had always been missing have been put into the game. As well, the shortcut key has been added to the text description that appears at the top of the map. Some shortcuts keys are the same as they always have been but many are changed. All changes are noted in the game guide and in the text files that can be called up for in game help.

X/Y hex co-ordinates now show all the time. Previously the map co-ordinates disappeared as soon as you moused over a unit, which in many cases, was exactly when you needed to know what hex a unit was in.

National Morale and Experience numbers have been reviewed and in many cases revised based on new information. In some cases there is little change, in others, considerable. Previously the code only went to 1990 and beyond. We have added two more decades on top of that meaning that now winSPMBT nations have an experience and morale evaluation every decade.

45 pages of suggested OOB changes and/or corrections have been reviewed , researched and applied to the game along with a number of changes we made to enhance OOB accuracy and / or completeness. A lot of work has been done to the USMC OOB both units and formations including all US army / USAF aircraft removed.

New Full (CD) Game only Features:

We have expanded the information displayed when you pass the mouse cursor over a hex for the CD version of the game. Previously, the only information about a hex was Height and the terrain types in it. The new display includes ground height, obstacle height , total height and Terrain Density displayed like this :

- Ground Height / Obstacle Height / (Combined Height) Density XX

And might look something like this in the game for trees

- Height 1/18/(19) Density 26

Ground Height and Obstacle Height are self explanatory but Terrain Density , while being an old concept for the game, it will be a new one to most players. Terrain Density or just "Density" for short is a value the game uses to determine how solid or transparent a bit of terrain is. For example, trees block Line of Sight (LOS) to the next hex when they are greater than >30 density. If they are under 31 LOS is deemed not fully blocked and you can see into the hexes beyond that hex.

Density is cumulative for purposes of LOS. A hex with trees that have a density rating of 20 will not block LOS to the hex beyond it but if that hex has trees that are also have a density rating of 20, LOS will be blocked beyond that hex. Theoretically you could have a number of sparsely treed hexes in a row before LOS would be blocked but typically in the game the maximum would be two but please note those two hexes do NOT have to be adjacent. The game has worked this way since SP1 was first released, we are just displaying to players for the first time.
While Ground Height and Obstacle Height might be self explanatory, how the game utilizes them together with Density requires some explanation.

- Ground terrain ALWAYS blocks LOS 100% and it blocks LOS when it is more than 3 "units" of height above the level your unit is on. For example, if your unit is standing on a hex that is base ground level (i.e. zero elevation) that units LOS will be blocked by ground that is 4 units or greater high.
- Obstacle Height combined with density also blocks LOS and once again it is cumulative. For this I will use tall grass as a general example. Tall grass is 2 units high and has an average density in the game of 10. If the ground the grass is on plus the grass itself is greater than a total of 4 units high LOS will be blocked when enough density is accumulated to do so. In some cases this might take quite a number of hexes to achieve if the terrain between each >3 units of total height hexes are <4 units of height high
- Each "unit" of height in the game is now considered to be roughly 24 inches (61 cm) so each 10 unit level of elevation in the game represents roughly 20 feet (6 meters)

The game now defaults to showing the formation IDs. This saves pressing the 5 key to turn the feature on each time you start the game. The 5 key can still be used to toggle the feature off and on if so desired.

The Game Options launcher programme now allows you to easily edit the INI value for the **AIAdjustpercent variable** on the Misc Tab. Set at 100% for the default points, 120 to give the AI a 20% points advantage and so on. (Free game users can see this value but not edit it unless they manually do so in the INI file as described in the Game Guide section on AIAdjustpercent).

Non-vehicle units with 2 or more MP remaining can now **voluntarily take cover** to break enemy line of sight at a cost of 2MP by pressing the ' C ' key. Taking cover especially if close to the enemy is **not a guarantee that they will break LOS**.

A **delete** button has been added to the main screen options to allow the deletion of no longer needed save games.

A facility to **change all units of a type** in the campaign rebuild screen has been added. Set the button to <u>change all</u> and the change from one type to another will be for all such units in the core. For example, select one of your T34/76 and change it to a IS-2 after toggling the change all mode. All your T34/76 will now be changed to IS-2 provided you have sufficient repair points. NB - if some tanks are same name, but different Unit Classes (e.g. centurion (CS MBT unit class) and centurion (MBT unit class), only the ones of the selected unit class will change.

In the deployment only, a new button is added to the Formation Menu to allow the **fixing of the formation leader**. If the platoon leader has been moved to a unit other than the 0 index, he will be exchanged back into place with that other leader. This is chiefly useful for repairing platoons in long campaigns. It is a manual and not an automatic function since some people will probably like the current leader assignment.

General Support and **Direct Support** off-map artillery types have been added for off-map artillery purchase. **Direct Support** costs 75% of a full Under Command battery and **General Support** costs 50% of a full Under Command battery.

Direct Support is less responsive than normal arty, **General Support** even less so. The delay is longer for calls for fire, other than onto gold spots or as a pre game bombardment (their main use). Shifting fires costs a little more for these type of batteries and they are less likely to be in radio contact as they are theoretically shared with other formations than yours. As well, they are less likely to fire counter battery fires if left idle. Strike air types may be bought in general or direct support mode if desired.

A button on the purchase menu cycles between artillery types. If **General Support** or **Direct Support** purchase is active, then only the appropriate formations are filtered to show on the arty page <u>and</u> the miscellaneous page (for strike air). Cycle this back to Under Command artillery to see the filtered-out formations again. **General Support** and **Direct Support** off-map artillery cannot be purchased for your core in a campaign

Timed objectives have been introduced.
A button has been added to cycle through the possible values and then back to no timed objectives. The values start at 3 and increment to 30 then reset to 0. The button is available at game set-up in the battle and campaign generators and in the scenario editor.

- In a meeting engagement the victory hexes start accumulating a timed score from turn 3 onwards.
- In an advance mission, the defender gets timed scores from ¼ of the game length onwards. In an advance the attacker wants to clear the enemy as fast as he can.
- In an assault, the defender gets the standard victory hex score credited from the 1/3 point onwards, then doubled at 2/3 into the game. Scoring this way allows the attacker some time to clear defensive obstacles etc.

The attacker does not get any timed hex score credit. He removes any potential future score from the defender by taking the victory hex as early as he can. Scenarios can be built with timed objectives, this includes those built into Scripted Campaigns but these will only be of use for full CD game owners. The last turn and accumulated scores for timed victory hexes are reported at the end turn phase once they have started to be credited for the battle type. The total is also now reported on the end game score sheet.

The standard 7 hex cluster of "non-shotguned" victory hexes will now be spread about in a wider "splatter" pattern approximately 1/3 of the time rather than being in the traditional tight cluster. This produces a more open objective cluster that may need more than a scout car to take and also defend than the "normal" close clusters do but less than the "shotgun" type clusters.

The standard roster button has been added to the deployment menu.

The display of wrecks In the game map can now be toggled on and off as with Victory Hexes in order to allow a less cluttered view of the map if needed. The "|" key (above the "\" key (That is the Victory Hex toggle on/off shortcut on a US/UK keyboard) is assigned to the function.

Obstacle height and density can now be adjusted in the map editor and extended map using the ' < ' key to adjust Obstacle height and the ' > ' key to adjust Obstacle density. This will be of use to map and scenario designers who wish to create sparsely treed hexes or areas of really tall grass or underbrush. We had planned to allow adjustment to building height (to block LOS) but the house code is more deeply entwined with other aspects of the code than trees or grass and we ran out of time this year to make and test the changes properly. We hope to have it implemented next year along with the ability to adjust the building code to allow the ground under buildings to be raised up so troops in them have the ability to overlook the surrounding terrain.

WinSPMBT version 1.0 - 6.0 Consolidation patch (Released December 2012)

Combines all of the previous patches into one. No new work added

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WinSPMBT version 6.0 Upgrade patch (Released March 2012)

21 New Scenarios
49 Revised Scenarios
7 Revised Campaigns
20 Revised Campaign files
1 New Map
701 New or revised Photos
194 New or Revised Icons
92 Updated OOB Files
22 New or Revised Icon Graphic files
3 New or Revised Text files
2 New Sound files
16 Revised picklists
Upgraded **SHPEdit**
Upgraded **MOBHack**
Upgraded **Cost Calculator**

Snipers can now target and destroy IED's. However, it is not a "one shot, one kill" type of thing and the heavy anti-material rifles work best.

AI controlled Helicopters will now occasionally pop up to high altitude to "look around" then drop down again.

Problems with close range Z fire scattering too far have been resolved. Firing at 3 hexes or less, even blind fire with no LOS, will not scatter onto the firing unit or stray wildly from the target hex

Destroyed or damaged core units now do not add back their full cost if their core formation is deleted. They will only return their cost minus the damage inflicted. Previously, if your core unit was worth 250 points for example and it was totally destroyed (0) or damaged (-110 damage points for example) then deleting the formation gave you back the *full undamaged value* of 250. This gave you "Free money" for destroyed or damaged units. With the current code, you will get 0 points returned if your formation is completely destroyed and any damage points will be deducted if it is just damaged

The code routine that calculates the number of turns in a game has been re-worked and now the game takes better account of wide (X) and high (Y) maps with extra turns added for large maps, and some deducted from smaller with added turns now given for attack and assault battles

A bug in the main code for regular and campaign games that affected defend battles for players with very large cores has been corrected. In the past if the core was near the maximum there would not be enough points available to assault a force that size. Now, if the core is too large to allow the proper ratio of attacker/ defender in a defend battle defend battles will be rejected and the game will select a different battle type so players with large cores especially in campaigns where they have added to their core force and increased their overall morale and experience levels to the point there were not enough points or unit's/ formations available to attack them with may never see a defend battle. What had been happening was when the core value became too high it broke through the maximum value allowed and wrapped around upon itself creating very small attack forces for the AI

Both games OOBs have been checked and standardised for the following items for ALL units in ALL OOBs in BOTH games

- **Infantry size.** ALL infantry units that are NOT scouts are now size zero if they are 4 men or under and scout units are size zero at 6 men and under. The rest are size 1
- **Hand grenades** have been standardised at 2 grenades per man for regular line infantry, 3 grenades per man for elite or specialist infantry like Paratroops and 1 grenade per man for second rate units like militia or partisans
- **Infantry rifle and LMG ammo** has been standardised to a scheme mechanically determined by code, not whim and has been applied to all applicable units. If, for example, Nation A has a section with 9 men it , every other 9 man section will have the same rifle and LMG ammo. Elite or second-rate classes may have a few more or less than a regular.
- **Infantry speed** checks were made for cavalry =speed 12 , bicycles=speed 9 and infantry limited to 6 movement points max if not a scout . Swim speed checks were done for infantry with all reset to 0 except for a very few specialist frogmen which are now swimspeed =1. Cavalry was standardised at swimspeed=1
- **Survivability**- This field has been zeroed for any Infantry , off-map artillery, or aircraft and helicopter classes that may have had a rating applied over the years for units in these classes do not use this rating
- **Heat armour**- If HEAT armour was less than steel for any facing the error was corrected

MOBHack has had more selective items added to the cut and paste section . Previously there was " Paste armour suite only" and " Paste as target Nation" to that we have added. All of these were added to streamline the process of ensuring a unit used by one nation, and the same unit used by another, stay the same where it is applicable to be so.

- "**Keep target unit dates**" -This allows you to copy a unit's data from one OOB and paste it into another existing unit and maintain the in service dates for the target unit
- "**Keep target unit weapons**" -This allows you to copy a unit's data from one OOB and paste it into another existing unit and maintain the weapon slots used for the target unit. Frequently, the same weapons use different weapons slots in different OOBs and this allows you to maintain the existing weapons used by the old unit
- "**Keep target unit Icons**" - This allows you to copy a unit's data from one OOB and paste it into another existing unit and maintain the Icons used by the target unit. Many vehicles have unique Icons used by different nations even if its just tan Icons used by desert Nations and green Icons by the others.
- "**Keep target unit UnitClass**"- This allows you to copy a unit's data from one OOB and paste it into another existing unit and maintain the UnitClass for the target unit. For example, a tank may be "MBT" class in one OOB and "Medium tank" in another. When faced with dozens of changes made to dozens of units in dozens of OOBs this comes in handy

These additions greatly helped speed up the process of standardizing or changing units and can be used in combination EXCEPT for " Paste armour suite only" which **must be used alone**

The code for snow vehicles has been altered so that these vehicle types are also now far less likely to get stuck in soft sand, volcanic ash, mud,water etc. This reflects the multitask use of the BV202/206 vehicles that mainly make up this class

A bug has been fixed where switching between the armour descriptions would change Helicopter altitude.

The Libyan now reverts back to the correct national flag after the fall of Ghadafi.

All on map TOWED arty over 155mm has been removed from the game leaving only off map arty and SP arty in that caliber now. All 150mm-155mm standard arty now has the same ROF. It had been 4 for some and 5 for others and is all 5 ROF for that size now . All towed artillery, both on map and off map, has had the ammo loadouts standardised by caliber so all nations using the same sized gun get the same amount of ammo with smaller caliber's having more ammo than larger caliber but now, all will be the same instead of one unit in one nations OOBs having 40 rounds and another unit with a similar caliber in the same OOB with 50 rounds and the same gun in a different OOB having 30 rounds. As well, all (+) double ammo loaded, on and off map artillery units, have been removed from both games and for winSPMBT 155mm is the maximum caliber for on map TOWED arty. Anything over that is now off map or , in some few cases, SP arty only. This was a major change in both games that took nearly a week to individually comb through every OOB to complete.

There has been a very large number of OOB changes made to the winSPMBT OOBs. The list of items completed this time around ran to 209 pages which is over double the average update. We estimate that there has been, at the very least , 25,000 individual data changes made with nearly 4500 items marked "done" with a great many of those issues requiring multiple data changes in a number of OOBs. This is why all of the new MOBHack utilities exist, to speed up the data changes that have been made to winSPMBT this time around. The end result should be more consistent and accurate OOBs

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WinSPMBT version 5.5 Upgrade patch (Released March 2011)

15 New Scenarios
30 Updated Scenarios
8 Revised Campaigns
36 Revised Campaign files
1 New Terrain type (Desert Houses)
337 New or revised Photos
530 New or Revised Icons

92 Updated OOB Files
40 New or Revised Icon Graphic files
12 New or Revised Text files
1 Revised map
43 Revised picklists
 Upgraded **Cost Calculator**
 Upgraded **MOBHack**, **MOBHack.INI** and **MOBHack Help** file
 Upgraded **ScenHack**
 Upgraded **Camo Map Editor**
 Upgraded **Game Options**

1/ Guns or vehicles loaded onto their transport planes in the game have their crews split off when loaded so they are dropped separately. Previously there was no way to rejoin them during the deployment phase. New code has been added so that in the deployment phase only, if you unload one of these units from a TRANSPORT AIRCRAFT, the crews will be re-united with their gun or vehicle by pressing ' J '.

2/ All Anti Tank gun unit classes have had their cost reduced by approximately 25%

3/ The GameOptions program will now auto-detect if your operating system is Windows XP or earlier or Vista / Win7 and any future OS Microsoft may release. If it finds you are running an operating system newer than Windows XP it will automatically run a command line that shuts windows explorer down briefly then restarts it ONLY IF you have the game set to run in FULL SCREEN MODE.

4/ There was a minor bug that allowed artillery falling on map in some cases to affect off map units. This has been corrected

5/ HQ's, scout classes, Forward Observers and ammo vehicles will now withhold opfire if they have not been fired on so these units will no longer give away their position prematurely. This makes scouts , for example, much more likely to be bypassed than in the past

6/ Anti Tank guns and flak units will also withhold fire on moving infantry and some soft vehicles as well but will not let the enemy get as close as Scouts etc.. This is an improvement on past code that tended to allow opfire from Anti Tank guns and flak units at moving infantry from long ranges when they should have stayed concealed.

7/ Non FLAK units in the delay or defence will not fire AAA weapons except if the fighter bombers are very close in the first 12 or so turns . This stops " recce by spotting AAMG fires '", if you put strike planes in as a pre-game deployment to find the enemy layout. Those units with AAMGs WILL fire at paratrooper carrying aircraft and gliders normally, however.

8/ There was a small section of code missing from the pre-game deployment screen (L)oad and (U)nload ALL UNITS routine where the (ESC)ape key did not allow you to change your mind but loaded or unloaded all units when the (ESC)ape key was selected. This has been corrected and the (ESC)ape function now allows you to back out of that situation

9/ Units on water that were destroyed were not being credited as kills. Now Corrected

10/ There is new min range code for artillery based on 1/5th of the units range with 5 hexes being the absolute minimum on map artillery units will target indirect, up to 20 hexes minimum. An on map gun , for example, with a 90 hex range would be able to target units a minimum of 18 hexes from the gun. All guns with a range greater than 100 hexes will only be able to fire at targets greater than 20 hexes from their location on the map. Mortar units on the other hand will have their minimum ranges determined by their sabot range with the absolute minimum mortars can target indirect now being 2 hexes.

11/ The PBEM long campaign was not supposed to have special battles, but a bug was allowing these through. The campaign loop now clears down the special battle flag in the correct place and these will no longer show up in PBEM campaigns.

12/ Widescreen support has been added to the game for CD owners. This will allow you to run the game at the same resolution as your normal desktop. If a player wanted to use a resolution OTHER than the current windows desktop mode (e.g. to run the game in 1024x768 full screen, with the desktop set to say 1280x1024) then he would need to set the windows desktop to the desired size before starting the game. (Click on desktop, settings, choose required windows mode).

13/ The game code has been altered to make it much more windows friendly when it comes to CPU usage. In the past the game wanted all the resources it could have all the time including that time you were away from the keyboard making a cup of coffee or thinking about what you would do next. Now, the CPU usage will drop considerably when the game is waiting for input from the human player. It still requires all the CPU usage it can handle when the AI is moving but once it is the human players turn many players with high end computers will notice their machine is not working nearly as hard as it used to be and the effects are more obvious the newer and faster your computer is

14/ There were numerous minor unit , weapon and formation changes made to the OOBs .

15 / SAMS are now filtered on warhead size versus spotter planes and UAVS. Large SAMs will no longer needlessly engage small spotter aircraft or UAV's. These will be left for the smaller SAMs

16 / SP ATGM classes allowed smoke if "main gun" ammo had a Warhead size greater than 3 which allowed SP ATGM units smoke when they should not have it. This has been rectified in the code and smoke will no longer be issued to those units

17 / Unit class #59 and #102 are tank classes than now allow up to 4 passengers to be carried as if they were APCs and are used specifically to allow Israeli Merkavas to carry 4 men internally

18/ All ON MAP rocket units that had a **minimum** range close to or exceeding 10km have been removed from ON MAP formations and now can be found solely in OFF MAP formations

19/ Reaction fire with HEAT being used as HE against non-vehicle targets was previously restricted only to close range targets (about 250 metres).Now, units will occasionally reaction fire HEAT as HE out to longer ranges of 1 km (20 hexes). This is especially likely for the CS-tank classes.

20/ A new terrain set has been added to the game that will place single hex desert houses when desert maps are called for on all auto-generated maps. For scenario design purposes either house type can be placed on maps simply by switching between desert and summer .

21/ Added Georgia and South Ossetia battle locations for RED (Georgia) versus Russia in 2008.

22/ Smoke was not being replenished in some cases in Campaigns. Now corrected.

WinSPMBT version 5.0 Upgrade patch (Released March 2010)

19 New Scenarios
53 Updated Scenarios
130 New photos
159 New or revised Icons
92 Updated OOB Files
2 New and **1** updated sound File
19 New and Revised Graphic files
19 New and Revised Text files
11 New maps
Complete picklist update
 Upgraded Cost Calculator
 Upgraded MOBHack and MOBHack Help file
 Upgraded ScenHack
NEWArmourCalc
NEWAPCalc

1) There has been a new "Demolition" class added to the game. These explosive devices can self detonate when enemy units are nearby and, in the case of IED's and Fougasse can be "command detonated" on the players turn who "owns" them, IF there is radio contact, by selecting the explosive charge then pressing "F"

2) Buildings that collapse into rubble for any reason will now cause casualties to anyone in the building with more potential damage if the building is stone. Previous to this there was no test in the code for such casualties.

3) Engineer type vehicles that deliberately rubble a building will show markedly less chance sticking than "bulldozing" buildings than regular tanks do.

4) Mobhack will now retain the nation when "Paste as target nation" box is selected when copying formations from one nation to another.

5) When tanks turn their hulls to face an enemy that is firing they no longer turn the hulls directly 90 degrees which generally increases their chance of survival by increasing the angle of attack for the shell.

6) Passengers who dismount into a hex with mines will now be tested to see if they set off a mine. Previously the only test was for the vehicle when it entered the hex. This change also applies to any passengers unloading from a helicopter or a helicopter landing in a minefield.

7) Players had been able to change from regular HE to Cluster munitions while a barrage was on it's way or in progress. That is no longer possible

8) There was an extensive comb though of the weapons list was done to corrected deviant and erroneous entries. All weapons of one type should now have the same stats in every OOB they are listed

9) There should be far fewer false move radius reports now.

10) Scout vehicles now provide protected carry to passengers if front steel armour is > 0

11) After a campaign river crossing, your core infantry will no longer be permanently assigned an inflatable raft.

12) When playing PBEM in basic security mode the game will now simply warn players if the OOBs are differ from the original without aborting the game.

13) A new batloc has been added for China vs India (Himalayas) that is hilly or mountainous with snow in winter months (October - March)

14) In campaigns it is no longer possible to change a dead unit and retain that dead units experience and morale for the new unit.

15) It had been possible to buy air stikes in campaign cores under some circumstances. This has been corrected and it is no longer possible

16) The code has been adjusted so that the V hexes , both cluster and "shotgun", are more evenly distributed to both sides

17) Experience and Morale are now presented in the same order on all screens

18) Artillery will now cause fewer craters than was the case previously

19) It is no longer possible to move, look around, then undo while playing against the AI. If you legitimately make an error in movement while playing the AI you can still undo but only if you do not look around to check LOS with the unit you just moved

20) Two of our game development programs have been included with this patch and can both be found in the main winSPMBT folder.

ArmourCalc is a very straightforward program. Enter the armour thickness and angle and press calculate and the answer is displayed in the Result box.The second program is named

APCalc and is a bit more involved. At the top of the screen is a "Select OOB" box where each nation can be picked. APCalc reads the weapons data in each OOB and displays the potential armour penetration at various range increments for AP and Sabot. HE and HEAT have only one result as they are not affected by range. There is also a "Best" results box for each type which will give you the best possible result from 1000 calculations .Re-sampling CAN give a different result sometimes, depending on the influence of the random factors the game uses to calculate penetration. Help files for both can be found in the main game folder along with the programs.

21) New code has been added to cut down the number of fires that start when flame weapons are used.

22) New code has been added to lower the number of "999" penetrations for flame weapons.

23) New animation code and graphics have been added for vehicle and infantry flame weapons.

24) A bug was discovered in the code that was not checking passenger status of units with Radar Fire Control which was allowing them to be targeted by aircraft armed with both PGM and ARM weapons while loaded as passengers This has now been corrected. While tracking down that bug we also discovered that an ARM hit treated a flak gun as a hard vehicle and this has been corrected as well

25) As with the previous patch, a large number of OOB corrections and additions have been made since v4.5 was released. The completed " to do" list would print out to over 110 pages so we won't detail everything that was done for every OOB . Iraq and North Korea have had a lot of work done but really, every OOB has had some work done to it. A number of "Future weapons systems" that were cancelled or delayed have been removed or moved back in some of the OOBs and a number of "what if" weapons have been removed.Scenario designers who may have scenarios not in the game but posted on various scenario depots on the internet may want to check them over with ScenHack for unit/weapon errors.The large number of updated scenarios in this upgrade are mainly due to OOB re-organization and it is a 99.8% certainty that any third party scenarios that are not included in this update **WILL VERY LIKELY** need to be revised by their designers. There was no way around this and we apologize for it but it's the price of improving the game. As usual with this game, OOBs are always a "work in progress" as new information is uncovered and also As usual we remind everyone that on going secure PBEM games WILL fail if this patch is applied while they are being played.

26) We found some inconsistencies between the number and modified dates of picklist in our master game files and the master patch game files so we are providing a full set in this patch to ensure everyone has the exact same files

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WinSPMBT version 4.5 Upgrade patch (Released March 2009)

25 New Scenarios
43 Updated Scenarios
84 New photos
99 New and Revised Icons plus terrain tile updates
3686 new Icon spots added
92 Updated OOB Files
10 Revised campaign files
31 New and Revised Graphic files (including Terrain SHP's)
28 New maps
41 New or revised picklists
 Upgraded Cost Calculator
 Upgraded MOBHack
 Upgraded ScenHack

1) A large number of OOB corrections and additions have been made since v4.0 was released. The completed " to do" list would print out to 117 pages so we won't detail everything that was done for every OOB but Russia and Iraq have had a lot of work done but really, every OOB has had some work done to it. A number of "Future weapons systems" that were cancelled or delayed have been removed or moved back in some of the OOBs. Scenario designers who may have scenarios not in the game but posted on various scenario depots on the 'net may want to check them over with ScenHack for unit/weapon errors. **ESPECIALLY if they used the Russian OOB**.The large number of updated scenarios in this upgrade are mainly due to OOB re-organization and it is a 99.8% certainty that any third party scenarios that are not included in this update **WILL VERY LIKELY** need to be revised by their designers. There was no way around this and we apologize for it but it's the price of improving the game. As usual with this game, OOBs are always a "work in progress" as new information is uncovered and also " As usual " **we remind everyone that on going PBEM games WILL fail if this patch is applied while they are being played**. You have been warned. As well, due to the large number of changes to the Russian OOB, saved games that use the Russian OOB, even if they are not PBEM, **WILL BE** affected.

2) 5 new fortified houses with "invisible" turrets for use with units that do not use an AT gun and are now capable of 360 degree fire. They are copies of existing houses in the game so blend right in . All OOBs that used fortified houses that did not have an AT gun have been upgraded to these new versions

3) Mobhack now underlines the name of any unit used as a formation template unit

4) Scenhack would not save changes to the game length correctly resetting the game to 90 turns has been fixed

5) Vehicles originally assigned to the AI were still, under certain circumstances, unable to move after popping smoke has been fixed

6) Helicopters would sometimes get "stuck" while retreating and just hover in place has been fixed. This was a large map issue and now all pathfinding code has been updated so this will no longer occur

7) The ' . ' (period) key can now be used to turn the hex grid on and off during deployment and while playing the game

8) "Golan" is now "arid" rather than "desert"

9) A bug with the map generator would not allow batloc zero to be entered has been fixed

10) Unit class #7 (Automatic Grenade launchers) did not generate a blast circle like MG sections do has been fixed

11) Changes have been made to the code so that if your vehicle kicks up dust due to movement then you can no longer undo that vehicle's action. (Note that this also applies for partial smoke that does not generate a smoke graphic in the hex).

12) In desert maps, hovercraft will kick up dust at any visibility

13) A new top attack inertial guidance weapons class added mainly for the MBT-LAW but useable for any infantry AT weapon that is top attack and is used by infantry squads rather than specialised AT teams. It has a built in boost for FC and RF

14) The weapon size no longer appears in the database, and 0 is inserted as well as having the field deactivated, plus a comment has been added that it is obsolete. "Weapon size" was not being used in the game but was causing some confusion with players who assumed it was .

15) Minelet artillery batteries are now no longer permitted to the assaulting player in a beach landings

16) Cluster munitions will now occasionally leave unexploded bomblets. These are treated as artillery mines.

17) On map rocket batteries with Cluster rockets are now treated as a greater warhead size than shown in the game for reloading from ammo carriers purposes ONLY. The game will ignore any warhead size entered for that class of weapon when reloading ammo and use a set value. Now two units using the same size rocket , one conventional and one CM will reload from an ammo carrier at the much the same rate which was not the case previously allowing CM rockets to reload too fast.

18) Naval artillery had a bit too much of a bonus for quick response. This has been toned down so they are only marginally faster than other off-map batteries.

19) A bug existed where if a core units AA radar was destroyed by an ARM it was not fixed in the repair has been fixed

20) A bug involving Thick Ice in winSPMBT only has been fixed

21) Missile units with stabiliser can now move a couple of hexes and still have shot(s). Previously any movement disallowed firing

22) Armoured car class now protects crew as APC in winSPMBT. This was a compromise because many APC's were being used by Armoured car classes and the infantry they carried were being treated as if they were riding outside the vehicle. Now any passengers carried by a unit in an "armoured car" class are treated as being in the vehicle and armoured cars that do not have inside carry capacity have generally been given zero carry capacity. There were actually very few true "armoured cars" in MBT with carry capacity anyway and this is more fair for the bulk of the units now using this class

23) Some units that should not have been on map were deployed on map in the PBEM long campaign has been fixed

24) A number of long standing issues with the ' W " shortcut key that allowed players to fire only one weapons have been corrected and the feature now works correctly. This had never really worked right but now it does. Information on how to used ' W ' can now be found in the Tutorial section of the game guide CLICK **HERE**

25) Gliders that land are now abandoned, not destroyed

26) The AIAdjustpercent INI variable now applies to generated battles, and for both sides if set to AI player control

27) A bug with all units of a side being destroyed leading to screen flicker has been fixed

28) A Bug with all units of a side being destroyed but the game did not end even if all objectives taken cleared has been fixed

29) Problems with the AI counter attacking too early in assaults and defends has been fixed

30) Problems with the core units not getting their smoke rounds back in the PBEM long Campaign has been fixed

31) A bug (and serious cheat) with arty command units and fire delays had been fixed by removing arty command units from units allowed to observe.

32) Cluster ammo costs for tubed artillery have been increased roughly + 50%. As a result a number of off map artillery units have had their cluster ammo reduced to keep them from exceeding the 999 points limit in the game

33) The delay for adjusting the fall of shot for both on and off map artillery landing out of the observing units line of sight has been increased and in most cases now means only one adjustment can be made without delaying the next fall of shot an extra turn.

34) A small bug fixed for generated and PBEM campaigns, where it was possible, if the campaign was set to run in the same year, to set an end month that was earlier than the start month (or start month later than the end month). The game would not run time backwards but it would only run the latest month

35) A new feature for CD holders only allows players to check the location on the map of the other units in a formation with a HotKey. Click **HERE** for more information

36) Crewed weapons such as AT guns, howitzers and mortars when loaded onto a paratroop transport for air dropping now split into the crew and uncrewed weapon which drop separately and you must now reunite the surviving crew and the unmanned weapon before being able to use it. This change also applies to vehicles and re-crewing is handled the same as any abandoned vehicle......the crew must be in the same hex as the vehicle when the turn ends and at the start of the next turn the two units will recombine. There is also a new one **(1)** vehicle per air transport limit in effect. This prevents players from overloading air transports with far more vehicles than was possible. This does not prevent more troops from being loaded in a vehicle carrying aircraft that may have more carry capacity though.

37) A PBEM campaign bug existed where on 3 failed attempts at entering the password a PBEM campaign ended the turn (and saved off the files) instead of aborting. Now the player is returned correctly to the main menu.

38) In Campaigns, core formations were able to cross-attach to non core formations. This has been corrected. You cannot now attach a core unit to a support formation.

39) A bug existed in PBEM Campaign Games where the turn 0 artillery was replayed before player 1 was asked for his password allowing player 2 to watch this turn on his machine has been fixed. Player 1 must enter his password in order to see the turn 0 bombardment. Player 2 cannot now run this turn.

40) A bug in PBEM Campaign Games has been fixed that showed the units of player 2 to player 1 during the pre-game (turn 0) bombardment

41) A bug in PBEM Campaign Games where any unspotted player 2 units caused to retreat by the turn 0 bombardment were shown to player 1 was fixed.

42) Off map artillery will now have a chance of losing radio contact and when they do they will not appear in the bombard menu. However, if a fire mission has been plotted and you lose contact the turn before the fire mission is scheduled to go in the fire mission will go in as scheduled but because it dropped off the bombard menu just before it did you will not be able to cancel it or shift fire.

43) "Tank Riding" passengers now have a greater chance of more casualties if caught on the tank when they are fired on.

44) A further **3686** new Icon spots added bringing the total number of available slots in both winSPMBT and winSPWW2 to 8383

WinSPMBT version 4.0 Upgrade patch (Released April 2008)

13 New Scenarios
37 Updated Scenarios
1 New Campaign
422 New photos
210 New and Revised Icons
92 Updated OOB Files
10 Revised campaign files
31 New and Revised Graphic files
20 New maps
122 New or revised picklists
Upgraded Cost Calculator
Upgraded MOBHack
Upgraded ScenHack
Upgraded CampaignHack
Upgraded GameOptions

1) A large number of OOB corrections and additions have been made since v3.5 was released. The " to do" list would print out to over 60 pages so we won't detail everything that was done for every OOB but China and Japan have had work done as has the Russian OOB but really, every OOB has had some work done to it. Scenario designers who may have scenarios not in the game but posted on various scenario depots on the 'net may want to check them over with ScenHack for unit/weapon errors. The large number of updated scenarios in this upgrade are mainly due to OOB re-organization . As usual with this game, OOBs are always a "work in progress" as new information is uncovered.

2) Previously radios were given to almost every platoon leader and section leader no matter what the radio codes in the OOBs were set to . This has changed in both WinSPMBT and WinSPWW2. Now every company, platoon and section reads the radio codes and if the OOBs are set up with low radio chance then that's what you'll see in the game. The main HQ unit will always get a radios. This change affects two things mainly. 1) Calling for artillery will not be as easy as it once was and units from a formation will not be able to wander far from their "0" unit lead. If they do it becomes harder to rally. This is no different that the way the game has played in the past but in the past most units had radios. Now there are fewer units that do especially in the WW2 and just post WW2 era. One example would be snipers. Snipers in the game have acted as scouts, Forward observers and snipers. There are far fewer snipers in this version of the game that have radio contact with artillery. We expect that this change will take some players who were used to picking almost any command unit as a Forward observer a bit of time to get used to . The effect is far less in the game on "modern" era armies

3) You will see a further addition to the HQ menu. You will now see ' R ' or ' * ' in the HQ menu list of units. The leaders with the R have a radio and as always in SP only leaders (the x0) with radios can call arty so if you see a x4 unit with a radio it doesn't mean he can contact the artillery only leaders can do that. That aspect of the game has not changed but this change makes finding he leaders with the radios easier. As well these are colour coded and match the messages you would see at the bottom of the battle screen when you click on a unit. A white ' R ' or ' * ' means " in contact" and all that means is they have C&C link to their immediate superior. A yellow ' R ' or ' * ' means there is radio contact and a red ' R ' or ' * ' means the unit is out of contact with it's immediate superior. All of this is handy to know at a glance. If you are playing with a nation that has few radios you'll probably want to be careful where you put them. This allows you to find them without having to check every leader in the game

4) A further change has been made to the "Passenger" report you see in the main battle screen at the bottom left of the screen.

Previously the unit named there would be the last unit loaded onto or into whatever is carrying them. Nice if you only have one unit loaded but useless if there are more than one. The only way to know for sure what you had loaded was to check the information screen and then all units loaded would be listed but in a game clicking on a APC and seeing "sniper" wasn't that informative when you might have three scout teams and a sniper loaded. This is all less of an issue when loading tanks or halftracks but it has always been a problem with large capacity transports like landing barges or helicopter and even though you might know what's loaded in you never really knew how many more units you could load except by trial and error

This has been changed. Now, on the main battle screens your passengers are listed something like this

LOADED: 10 (of 13)

When dealing with infantry this tells you that you have 10 men loaded into or onto a vehicle that has a 13 man capacity. You no longer have to guess. For vehicles loaded into units like landing barges the game reads the carry cost of that vehicle so a tank in a landing barge might be reported as something like: LOADED: 30 (of 50). Now you know exactly how many other points you can put in. Large helicopters are handled the same way.

5) The move cost for infantry (foot class) has been increased by 1 for wooden and stone buildings. Buildings will no longer be treated like open terrain

6) Units will only charged a movement penalty on entering a slope hex from a lower altitude so travel down hill is no longer penalised.

7) It had been possible to buy an attack helicopter in a campaign core then delete it and be able to buy aircraft for the core. This has been corrected

8) In assault battles a bit of code that had previously been added so landing barges etc could call arty in beach assaults was allowing any unit with a radio to call arty in a beach assault. This has been corrected .

9) Multibarrelled type weapons like Gatlings or GSh-30-6 have been given a +6 point increase in their existing accuracy
 for their high ROF. This change allows us to better model the effects of these weapons that is fair when used in both aircraft and helicopters.

10) Bug found in MOBHack where deleting unused weapons would also delete weapons that are still being used. Now fixed.

11) Tanks from Unit Class 135 would not load into barges. Now fixed

12) Units in retreat or route can no longer use a radio to contact artillery

13) SP arty units have given a minimum of 5x their ROF for ammo for all nations that were affected by low ammo for some SP arty

14) Pre-revolutionary Iranian flag added

15) The enemy passengers loaded in or on a vehicle was reported on the info screen you get when right clicking on a unit. This has been removed.

16) The "phantom arty" bug that was causing regular artillery missions to not fire after some types of air attacks had been made has been found and corrected.

17) A text overrun bug that would intermittently show up on the HQ menu screen after purchasing has finally been squashed for good (we hope....)

18) There was a bug we traced back to the original code that was cancelling out the full effect to Multiple MG's on aircraft and only calculating for one gun. Now fixed.

19) All units in the game now have a photo assigned to them. Previous to this, 485 units in the game had photos missing.

20) PBEM Campaigns have been added to the game for CD holders. You can read more on this by clicking **HERE**

21) New Top attack HEAT weapons class to generally cover light infantry Anti tank weapons that are not ATGM like the British MBT LAW.

22) In some cases enemy bunkers could attempt to fire at targets outside their weapons arc which triggered an opfire event by friendly units. This has now been fixed.

23) A rare bug where crews carried as passengers could turn into enemy crews has been fixed.

24) HEAT ammo previously could sometimes overpenetrate it's nominal penetration value to a significant amount and this could give some weapons abilities that they did not have in reality. The code has been adjusted so this is far less
 likely to occur

WinSPMBT version 3.5 upgrade patch (Released April 2007)

2 Additional Scenarios
2 Updated Scenarios
103 New photos
153 New and Revised Icons
92 Updated OOB Files
126 Revised campaign files
159 .WAV format sound files added
 Upgraded CampaignHack
Updated MOBHack

1) Numerous OOB corrections and additions have been made since v3.0 was released.

 2) A New Hovercraft class replaced an old class that was not being used in any OOB. This was done because the old way allowed hovercrafts to be bogged down in swamps which is, of course, one terrain type these vehicles excel at
 crossing. All Hovercraft Icons in the game have been redone and new ones added to various OOBs

3) CampaignHack had a bug where it was not transferring all moved files from one slot to another. Now fixed

4) The campaign code had a bug that affected only some of the players that would prevent them from deleting a campaign core formation after purchase. Now Fixed

5) "ARENA" is now renamed "CIWS" or in the full message string--"Close In Weapon System defeats Missile".

6) The Icons for Gliders and Helicopters were not always displaying correctly in the purchase and encyclopaedia screens. It used to show rotor separately, with armour all around as if it were a tank. It now shows the rotor joined to the
 helo body as it should be. In non-encyclopaedia screens it shows the Helo at 2/3 size as with bombers so larger Helos now fit the screen better. The "armour" shown is now in "aircraft style" i.e. durability(toughness) like 12(2)

7) The "second rate company" formation is now called "Combat group"

8) All 5.xx mm LMG/SAW weapons for all nations that used them in the game that had a range of 8 hexes now have a 10 hex range

9) A full set of WAV sound files have been included and a new sounds.ini has been set up to read them. We found far too many people were still having trouble with the MP3 sound files so the decision was made to include a WAV set
 with this upgrade. The MP3 files that were included with the original game will still be in your WinSPMBT\Game Data\Sounds folder and can still be accessed by setting up the "MP3Sounds.ini" file also included with this patch as the

default "Sounds.ini"

10) A bug was found that allowed AA guns with EW of 1-4 to deploy either "CIWS" or "ARENA" missile defences. Now fixed.

WinSPMBT version 3.0 upgrade patch (Released January 2007)

25 Additional Scenarios
89 Updated Scenarios
6 Additional previously released Campaigns
29 New Maps and **1** Updated Map.
113 Updated AI Picklists
1 Updated Leader Name File
6 Updated Ranks File
695 New photos
 Over **400** New and Revised Icons
92 Updated OOB Files
Upgraded Cost calculator
Upgraded MOBHack

1) GPS and laser Range Finder have been integrated into the game for use by FOO officers and vehicles. When Artillery observers or FO vehicles are using a Laser RF and **IF** the target hex is in LOS the shell scatter will be less. A FOO with a Range Finder rating **20 and above** is considered to have a Laser Range finder. If the observer or FO vehicle is fitted with GPS the scatter will be less again. A FOO with an EW value of 15 has GPS. . Forward observers with both GPS and Laser Range finders are not cheap but they do have added uses in the game (see point 2)

2) The game no longer automatically issues 10 artillery priority hexes per side except for scenario design. Priority hexes are issued based on the type of battle and the number of Forward Observers and the equipment the forward observers have available. Click **HERE** for more info.

3) Retreat/Rally hexes have been added to the game. Click **HERE** for more info.

4) Opfire filtering has been added as a bonus for players owning the CD version of the game. Click **HERE** for more info. As well, ScenHack and CampaignHack, which were issued with the last version of WinSPWW2 for CD holders of that game, have both been rewritten for use by CD holders of WinSPMBT and have been included as well. Click **HERE** for more info.

5) Multi Charge HEAT has been added as a new weapons class so RPG-7VR, RPG-29 , PzF 3T DC and PzF 3 IT-600 DC are modeled correctly now as well as the Russian 125mm Tandem HEAT ammo

6) An Optional AI force level adjustment for Campaign games has been added An INI file variable has been added (optional) for users to use to boost (or even reduce!) AI points in campaign games . Information regarding this variable can be found in the WinSPMBT\Game Data folder in the file "Campaign AI Point Adjustments.txt" **OR** by clicking **HERE**

7) HEAT ammo now has a secondary HE abiltiy. Units with HEAT ammo can fire HEAT/HE at 66% if the effect of the regular HE round for that weapon. Units will reserve the last 4 HEAT rounds for anti-tank purposes, and are more reluctant to fire HEAT/HE against soft units in the reaction fire in the opponent's turn unless at 1-2 hexes or so. (in close combat you throw everything into the fight). HEAT/HE cannot be area fired (Z-Key) nor does it have effects in the surrounding hexes like regular HE might, for larger warhead sizes.

8) All HE ammo has been removed from RPG type weapons that had them added in to simulate the change mentioned above. This fixes the problem of two man AT teams carrying 10 or 12 (or more) RPG rounds. Typically now they carry half what they did before.

9] A "View All" key has been added to the game to show all hexes currently visible to your unit and saves clicking in all 6 directions.

10) The Light helo class is now classed as an arty observer and has all the same abilities as the Leg FO and FO Vehicle classes with the exception that the 15 EW value for other FOOs is not used, as that interferes with AAA self-defence EW.

11) Arid maps Changes . Arid maps (e.g. Iraq) were sometimes being referenced as a "summer" map, so the desert icons were not being used and the "green" set was used instead. Desert icons are now used (if they have them) by units in Arid maps.

12) Artillery effectiveness against armour was too high and the following changes have been made to the code

- Only units in the shell explosion hex will receive top hits (except cluster munitions)
- Penetration in the blast circle outside the shell explosion hex has been reduced for shell splinters (except cluster munitions)
- Armoured units may now suffer a suppression-only hit (hit by shell splinters message)
- HE penetration on armour now needs more overpenetration to be certain of a penetration effect. If equal, 25% will go through, if overpenetration of 6, 90%
- More chance of immobilisations (track hits) rather than kills especially if the shell size is small

13) Short range effects in infantry combat was a bit too high and the following changes have been made to the code

1. The bonus effect for fire at 50m reduced, and takes more consideration of firer suppression
2. The bonus for being unspotted (ambush fire at short range) has been reduced and takes more consideration of firer suppression level
3. The panic fire chance at 50 metres takes more consideration of suppression to the firer

14) Barge Changes-- Barges were creating a new barge in the barge carrier when save games were re-loaded. Fixed. One one barge per barge carrier now.

15) The coding for Smoke shells in campaign game upgrades was wrong and has been fixed. In campaign battles beyond the first, units will have correct smoke shell loads.

16) When "clone all" was selected in the scenario editor where the cloned units had weapons deleted ("-"), the game initialisation code was wrongly loading the template weapons for all the cloned units if the scenario was reloaded in the scenario editor, or when the scenario was played as a game. FIXED. The cloned units will now retain their weapon changes

17) Maximum game points has been increased from 50,000 points to 65,000 points. Previous versions of the game allowed 65,000 points only in one specific case. We now allow the 65,000 maximum in all cases.

18) New Iran - Iraq war battle locations added

19) AI picklist revisions

20) MoBHack database checks expanded

21) Infantry and vehicles may now enter -1 water hexes. Previous to this change they could enter -1 hexes but only if they are classed as "land". There are sticking penalties for vehicles moving though these water hexes similar to swamp or mud. Infantry move one hex per turn. The game will now also accept entering -1 into a water hex with the map editor and the change will stick. Previous to this it would not.

22) Infantry costs have increased. The increase can range from 30% -60% on average and the greatest increase has been to the "low end" infantry units.

Plus many other small tweaks and adjustments

WinSPMBT version 2.0 upgrade patch (release September 2005)

The version 2.0 patch contains **all** the version 1.01 changes that were included in the CD version release plus all the additional changes made after the CD was burnt. The v1.01 changes are listed first (1 - 25) then the v2.0 changes (26- 66)

1) Points were not correctly charged for elite or second-rate troops when bought by the human player -FIXED

2) The cost calculation was done in floating point, leading to rounding down when e.g. a squad at 15 was revalued to 15.75 points, was reduced back to 15 when converted back to integer. Now rounds up to 16 before returning.

3) Combat sounds had short delays after them left over from the old DOS sound system which only played one track at a time. These have been removed, as well as reducing some delays on user messages appearing during combat sequences. Sounds should be quicker, and the delay when a unit was destroyed is gone.

4) A problem in XP which could cause a crash (and very rarely in Windows 98) when deleting formations on purchasing when the formation spanned 2 pages was fixed. Now when a formation is deleted, the entire list is recalculated.

5) Air weapons were not showing correctly in the scenario editor change weapons dialogue. The weapons list now shows all potential weapons, and since there was only room on the screen for 120 weapons we have added 3 "pages" accessed by entering negative numbers as the page number. -1 for page 1, -2 for weapons 120+ and -3 for weapons 200+.

6) Casualties for paratroops landing has been revised. Small one man teams should have less casualties on landing, as should vehicles especially the "airborne APC" class. Ammo containers no longer explode when dropped

7) Numerous OOB fixes - UK , Netherlands, India, and east Germany have had more work that some but a number of nations using 'Carl Gustaves" had them classed incorrectly in the weapons list and those have been corrected. There were a few other minor issued that resulted in all OOBs being point recalculated.

8) I new Scenarios added #107 Raid into Honduras 1986

9) 2 Scenarios reworked . Scenario #1 has been extensively revised and scenario #28 has had minor alterations

10) Game Options master Control Programme now exposes 2 variables that were only available through INI file editing.

- A] Graphics delay is the minimum wait time between screen redraws

- B] Unit Move delay controls the time units wait between multiple hex moves.

11) Game Messages Delay has been changed to work in roughly 1/4 second intervals and not 1/2 second. In addition, a user-editable modifier has been added to the INI file [game] section for those who require to radically alter the base messages delay level.

12) Instructions have been added to the sub folder of \Game Data\Sounds for people who may encounter sound problems on their computers when using the MP3 sound files in the game. We did not include WAV files as comparable quality WAV's would have added 144MB to the amount of HD space used by the game but we have included step by step instructions for those few players who may encounter difficulties

13) There have been a few minor alterations to some vehicle SHP files

14) a few photos used by the OOBs have been revised

15) a correction has been made to the Sounds.INI file that prevented the PPsh sound FX from playing in the game

16) two in game help texts have been revised

17) The game manual has been corrected to give you more information on the additional controls added to the GameOptions Misc page

18) UAV now considered high flyers, above rifle and AAMG height and require proper AA guns and SAM to engage.

19) Bugs with Allied units showing the wrong experience level and ID tag were fixed.

20) Bug with points not being correctly charged for unit experience and morale levels fixed.

21) Bug where pressing previous page after a formation was deleted in the purchase screen occasionally crashed the PC fixed.

22) Bug where having more than 23 of a particular unit type simultaneously available caused the units to be unpurchaseable fixed. Now if more than 23 of a type are available at the first time, only the first 23 are displayed rather than declaring a formation invalid.

23) In the advance or delay with the traditional victory hex clusters, occasionally these were displayed off the bottom of narrow maps under 40 hexes tall. -FIXED

24) Bug where pressing escape in the map save screen after changing your mind on the selected save slot -FIXED

25) A bug whereby units in a campaign which used ARENA or VIRSS did not have the shots restored -FIXED

The following changes were added after the v1.01 CD release and were included in the 2.0 patch

26) Iraqi Picklist altered to give a more accurate " insurgent" type force composition for the AI. A further revised OOB

27) NVA Picklist altered to give a few armoured vehicles to the AI once in awhile while US forces are still engaged plus added APC infantry after the USA departed

28) There was a bug when the AI was buying 1/50th of the force value as mines in defence then 20% more if it was a river crossing or beach assault. - in campaign battles only. -FIXED

29) added "Dragons teeth" to hex mouse-over, if DT's are in the hex and added "Mines" to hex mouse over if mines detected in a hex

30) AI was sometimes deploying units in lakes. FIXED

31) A "mission" button has been added to the deployment screen (Useful if you saved during deploy, and came back 2 weeks later and forgot your mission)

32) In scenarios, if the "reaction turn" is set to "turn 98" units will hold in place for the entire game and not counter attack to re-take V-Hexes. This includes both advance and assault and delay and defend scenarios"

33) New Icons include a Merkava MICV "Nemer", USMC "EFV" , British/Dutch Scarab, USA desert M3a3, German Dingo and Fennek Icons added along with a new Challenger 2 uparmoured Icon and a new 2S6 Tunguska Icon series

34) AA radars will now spot planes and helos at ranges beyond the firing unit's ground vision rating

35) The list of a campaign core force units on the upgrade/fix/review screen between battles (if allowed to refit) - was indexing incorrectly - in large cores you only saw 2-3 pages because the bug was skipping pages in the middle and showing first, second and last generally- FIXED

36) There were occasions when some maps said "town" or "city" etc, but none appeared or only a few villages seemed to appear. FIXED

37) Changes made to "Carry capacity" and "Carry cost" did not stick when changed in the editor. FIXED

38) Visibility can now be changed from the "View Map" screen. Previously this could only be changed before starting a battle. This allows players a second chance to do this while setting up a game (for PBEM for example) and now allows campaign players the option of adjusting the visibility during campaign games

39) There was a minor bug in the "View Map" screen where pressing ESC would not allow you to back out of that function without selecting a map number first. FIXED-- Pressing ESC while in the "Change Map ID" subscreen of the "View Map" screen will now properly exit that screen without having to enter a map ID number first

40) Updated South African and USMC AI Picklist

41) There was a bug that was preventing units from clearing mines after a save. FIXED

42)Thermal imaging sights (TI) will now have some LOS blocked by a fire hex (usually 2 or more fire hexes are needed for significant LOS degradation), and heavy smoke reduces LOS penetration very slightly, causing some "shadows". usually 5-6 hexes of freshly laid (full) smoke is needed to reduce TI penetration level slightly. Fire and smoke hexes do NOT reduce radar AA Fire Control LOS against aerial targets.

43) There was a difference between the way Scripted Campaigns and Generated Campaigns allowed you to change (upgrade) units . This has now been standardised for both campaign types. The Unit list menu is now an "active" menu for both campaign types allowing you to select units to change from there

44) Mike Torrance's Campaign "Silver Lions" has been added

45) There was a bug where flak units firing at enemy aircraft increased the kill count with every hit even though no kills were made. FIXED

46) A bug where a fire mission could not be cancelled has been fixed.

47) A Bug where player 2 in a scenario could see player 1's troops during the pre game bombardment, if player one was the AI fixed.

48) A safety feature has been added to the scenario editor. The scenario editor will now auto saves to slot 999 on exit with title "AUTO SAVED SCENARIO"

49) The mini map was not centring on the location of the unit in use on the main map. FIXED

50) Vehicles and artillery pieces "dug in" in a hex showing a sandbagged revetments can now regain dug in status one turn after entering. They are not restricted to their original revetments and can enter any "sandbagged" hex to regain hull down status

51) The vehicle Load / Unload screen would not allow you to scroll around the map. FIXED

52) The game maps can now be scrolled in all directions using the up, down, left and right arrow keys. If accessed from the numeric keyboard Numlock must be OFF

53) AAA reaction fires has been tweaked a bit . If they are hidden they will fire at very short ranges only or if the to-hit is better than 9%. Therefore,- hidden tanks will not pop off at passing planes unless these spot them by flying close enough, or if the aircraft or Helo gets to a 9% to hit OR at 3 or so hexes, they will blaze away as the thing is too close.

54) There has been a slight adjustment upwards for spotting hidden vehicles when using vehicles with a Vision rating of 40 and above especially if the "hidden" tank fires

55) Spotting with TI (vision 40+) decrease slightly with speed. You'll spot things a bit better if you are not moving at top speed

56) There have been slight alterations to the accuracy numbers for smoothbore guns. The length/calibre cals did not give accurate numbers with shorter barrelled smoothbores like the German L44 or the US M256 and the longer Russian barrels gave them slightly higher accuracy than reality. As well. Fire Control (FC) and Range Finder (RF) ratings were not quite giving the added benefit to higher end equipment that they should have so the formulas have been slightly altered to give greater benefit to the vehicles with the higher end equipment. Each of these factors, if overdone, have a HUGE effect on gameplay and we have endeavoured to strike a fair and balanced compromise. Sometimes even slight changes can make a noticeable difference so we've been careful not to overdo it

57) An additional PBEM security type has been introduced. "Basic" security will not kill a game (in the most common cases) if it detects something wrong. It will allow players to play on two machines (on a laptop then back home on the desktop for example) and it will not stop a game if both players are using different OOB sets. This is "Security lite" for those players who trust their opponent and just want password protection to prevent peaking and / or wants to play at work and at home and cannot with the more stringent regular PBEM security. However, it will NOT allow you to rename the save slot number of the PBEM. If you do it will kill the game.

58] A new message will appear when ground units fire at aircraft and Helicopters indicating whether the aircraft / helo was hit by ground fire. The code has always run tests to see if a hit would cause damage but until now you had no way of knowing if you were taking hits or not before the damage occurred. Now you will see a message indicating that a hit has occurred. If Damage is taken a second message indicating the damage will appear right after the hit message

59] Artillery and aircraft bomb collateral blast damage has been adjusted. Artillery cluster munitions have a minimum blast radius of 1 now and air-dropped cluster bombs have a radius of 2 hexes (speed and height of delivery, larger footprint). Previous versions of the executable had blast damage into surrounding hexes as well but we discovered a bit of code that was reducing this after it had been applied. That bit of code has been commented out and now you will find aircraft weapons and large calibre arty gives blast effects out to , in the case of 2000 lb bombs, a potentially lethal area of 200 yards around the point of impact. As well, there is a new game function that allows you to see the potential blast radius while the artillery barrage or airstrike is going on. Pressing the "R" key while in the bombardment or "Z" key menu will turn on or off the blast radius markers. There are white circles that show the maximum blast radius and there are yellow circles that show when known enemy units that are within the main blast radius are damaged by the blast effects. It is important to remember that even though the blast effect for some weapons like 2000 pound bombs may be quite large this does **NOT** mean that every hex and unit within the blast effect area is affected by the blast. This addition allows players who are interested to see just how the blast area works in the game. Blast effects are reduced by the distance from the impact hex, and by the usual effects of dug-in status, being in cover etc. Cluster munitions are more evenly distributed over the blast area than an HE round, so range effect is reduced for them. Armoured vehicles more than 1 hex from the impact will tend to be supressed by blast rather than be destroyed by fragments, except with cluster munitions. Click **HERE** for more information and screen shots

60] Units retreating and routed will now surrender a bit more than previous when the situation is "hopeless". There is less chance of a routed unit retreating into an enemy occupied hex now

61] There was a bug which deselected the current unit if you went to the HQ menu and then exited as player 2 in a game. In certain circumstances you could then examine player 1's artillery menu, and his force structure. FIXED

62] The CostCalculator (and all the OOBs) has been altered to give extra cost for high-tech equipment (Vision, Range Finder, Fire control etc) . Generally this penalizes modern kit more, with early kit staying about the same, especially if fitted with high end range finder, stabiliser, FC 35+, thermal vision etc. - TI type sights (vision>=40) cost more (about a 40+ point raise) - Range finder costs more, esp. range 20 or so plus - FC, esp. over the 35 value, cost more - stabilizers cost a bit more - Electronic warfare (EW) more costly per point - AAA radar FC more costly (sees planes through smoke now) - Open topped armoured vehicles a few points cheaper For example. A M1A2 SEP Abrams previously cost 443 points (that is the BASE cost unadjusted for morale and experience). It now costs 526 points. An Iraqi T-72G with Vision 30 was 236 points it costs 244 now so it's really only the higher end equipment that gets the increases.

63] Cluster munitions costs and ICM (arty AP rounds) have been revised. They were not being charged very much. That has been changed upwards They are also more effective now.

64] 34 new scenarios ! Ten new scenarios from Bill Wilder and Twenty four from Ulf Lundström plus 20 new Maps

65) Some problems with ARM and PGM fired from planes in stand-off attacks resolved. (Plane would fire a missile and have a round detected, but nothing happened).

66) Aircraft PGM (not ARM which will still search for enemy radars anywhere on map) targeting modified. PGM will only be targeted on a 15 hex circle round the original target hex. There is no longer a "magical" detection of previously unspotted units, so you should aim at areas with located enemy units. COIN fighters will me more likely to attack detected infantry than other strike planes, as usual. All planes will prefer AAA type units if detected in the 15 hex radius, over any others since the rationale is they are things that attack planes, so the pilots give them a higher priority. (They also like ammo carriers, and the enemy HQ if they can see it).

67) Mostly, planes which launched a PGM or an ARM will then exit the map, without making the normal bomb run over the map to the target hex. Exception - a non-wild weasel type plane which launches only an ARM is considered to be firing that to aid its run-in to the map, so it will continue on with the plotted bomb run, unlike a wild weasel, which will pull off at long range. Planes which make a stand-off attack are only subject to fires from long range AA weapons (>100 hex range) - usually SAMs. A strike plane with say 2 Mavericks in the same weapon slot can therefore make 2 completely stand-off attacks, provided each such attack launched a missile, and only then (if it has some bombs) need it enter the map to deliver these in the normal manner. i.e you can "plink" at targets from off map, especially if the enemy have no long ranged AA.

WinSPMBT version 1.0 (Released July 2005)

Conversion of the old MSDOS game engine to Microsoft Windows.

Complete removal of all the old problematical MSDOS sound, mouse and graphics problems.

Optional DirectX or Windows GDI based graphics.

Option to use DirectX Full screen mode, or operate in a window on the desktop.

Windows-compliant sound and mouse routines.

Game size is no longer restricted to merely 640 by 480 pixels. User can choose from 640x480, 800x600, and in the enhanced CD version 1024x768, 1152x864, 1280x1024 and 1600x1200 modes.

Completely re-organised game screens

Arid and Savannah type terrains added to the map generator. They replace many maps that used to be desert but really shouldn't have been

New zoom-in level added

3 New Scenarios
 1 New Campaign
 5 Updated Scenarios
 8 New Maps

10 **NEW** terrains added

- Bare Earth (Arid Soil)
- Red Earth
- Brick Cobblestones
- Stone Cobblestones
- Beach Sand
- Sparse Grass
- Grass (variant)
- Leaves (Forest Groundcover)
- Autumn trees (October)
- Autumn Orchards (October)

The Map Autogenerating routine has been upgraded to use the 10 new Terrain types

12 Terrain tile sets totally re-done

- Green Grass
- Rough
- High grass
- Snow
- Soft Sand
- Desert Rough
- Sand
- Paved Roads
- Pavement
- Winter light snow
- Winter Snow Drifts
- Mud

- 92 Updated OOB Files
- Two new nations added (Paraguay and Uruguay)
- 3 Updated Leader Name File
- 5 Updated Help Text
- 5 Updated Picklists
- 66 New and 20 revised Vehicle Icons

- Revised Game palette
- Railways will now occasionally be generated on maps
- Barbed wire added for defensive battles. The AI will place Wire when it defends
- Loading and unloading of passengers now costs Movement points for both the vehicle AND the passenger units
- Custom OOBs can now be easily loaded and the default set of OOBs can just as easily be restored
- AI may now target any smoke signatures with artillery
- Vehicles may now reverse while while keeping the vehicles front pointed towards the enemy

Plus dozens hundreds of other small tweaks, bug fixes and adjustments to game play

Some notes on the new AI "Artillery Interest" routines.

Previously, the AI arty routines targeted those troops which were spotted in its own phase and would then fall-back to the routines to beat up objectives, or approach roads etc. Thus you could do the "hill dance" of moving up from behind a ridgeline, firing and popping back down, drawing only normal return op-fire while exposed but ending your move out of LOS, so the AI would not assign arty on these units. The new AI artillery interest routine is linked to events which the human player is told about during game play, but which previously the AI was ignorant of. Basically - anything which generates a message that your human opponent (in a PBEM) could use against you, the AI now knows about as well. The AI artillery interest routine takes events which the human player would spot, and assigns a chance for the AI to assign available artillery to the general area of this event. Trigger events include flipping an objective hex, making direct fire smoke, making smoke from dust trails from vehicle movement, direct fire events (including direct area fire with the Z key), normal on-map artillery firing indirect fires (which generate smoke in the hex), missile (SAM and ATGM) fire events, and engineering clearance operations. All things reported to a human opponent, and now available for the AI to assign delivery of a few "presents" to as well, just as your human PBEM opponent would.

Also previously the AI was a bit reluctant to plot its on-map artillery assets, usually mortars. Often, a mortar unit with 60 or so original rounds would end the game with perhaps 45 or so rounds remaining. There is now a routine to check
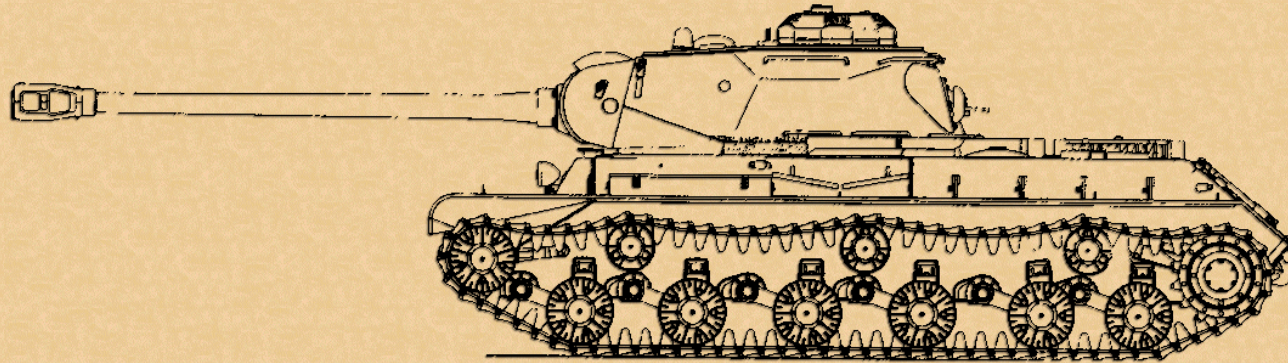
for possible mortar (includes all on map arty including say SP-MRL) targets, with the AI focussing on detected enemy units close to objective hexes as the prime search criteria. The on map arty assignment also tends to fall-back on enemy held objectives if nothing better is located, so it then drops searching fires around these. Thus, "camping out" near objective hexes will be somewhat more interesting for the human player!.

<div align="center">

Addition features of the enhanced CD version only

(for more information on the added features available on the extended CD version click **HERE**)

</div>

- Cut and paste Map editor
- Secure Tournament play
- 640x480, 800x600, 1024x768, 1152x864, 1280x1024 and 1600x1200 windowed and full screen modes.
- 250 Secure PBEM save slots
- Encyclopaedia Sorting functions

SPMBT Version 3.01 (Released September 2004)

1 New Scenario
15 Updated Scenarios
2 New Maps
1 Updated Map
7 Updated Picklists
41 New Unit & Formation Texts
1 Updated Help Text
1 Updated Leader Name File
224 New LBMs
24 New Desktop Shortcut Icons
92 Updated OOB Files

Many tweaks and adjustments to the code including:

-UnitClass 138=Heavy Transporter reported as being "Bridgelayer" -FIXED now properly reports as being "Heavy Transporter"

-UnitClass 139=Self-Propelled Gun reported as being "Ark" -FIXED now properly reports as being "Self-Propelled Gun"

-Initial Move Radius showing on Rice Paddy terrain was wrong -- it showed the movement possible as if Clear. -- FIXED

-During the deployment phase the AI opponent would opfire during deployment if you did something that triggered opfire-- like unloading in LOS - FIXED

-In PBEM games a player could spot the enemy during deploy on smaller maps. -FIXED

-Auto deployed barges sometimes ended up deployed on land - FIXED

-Units unloaded during beach assault set ups had been programmed to drown at the end of the first turn after deployment in beach assaults but they could still fire at beach targets while unloaded during the first turn then reload into Landing craft and continue to the beach. FIXED. Units left out of landing craft will "drown" at the start of the first turn now

-Random seeming game crashes mostly affecting XP users have been eliminated.

-SABOT range added to indirect fire artillery was also acting as the minimum indirect fire range- FIXED. On-map artillery now has a 20 hex minimum range for all guns. This is unchanged from before but now Sabot range does not affect that minimum

-Revised Game palette

-80 new single hex houses have been added (the original 40 removed). This doubles the number previously available. In addition, 12 wooden multihex buildings and 12 stone multihex buildings have been redone for the v3.01 Supplemental Patch. These additions had been planned for the next full release but we decided to add what we had done so far to the patch.

SPMBT Version 3 (Released July 2004)

Completely new set of larger format OOBs (Order of Battle files) with many thousands of revisions and additions. New format OOBs can now hold 999 Units and 999 Formations. An additional 36 Unit Classes have been added as well. The OOBs have been extensively researched and availability dates, ammunition loadouts and formation design has been finetuned throughout. New units and new formations adorn many of the OOBs.

Many tweaks and adjustments to the code & AI picklists have been made to fine tune & refine gameplay

533 New Pics
420 New & Revised Icons in 34 SHP files
28 New Scenarios
40 New Maps
51 New Text files
64 New Sounds

Finetuning tweaks to existing scenarios.

Update modifications made to several existing maps.

One updated Campaign: Thunder in the Sinai, October 6-17, 1973. You will command an Egyptian armoured force during the Yom Kippur War in October 1973. Prepare to fight the greatest tank battles since World War II as entire armoured brigades thunder across the deserts and passes of the Sinai! The campaign covers 5 battles: Shovich Yonim, Lituf, Ras Sudar, Chinese Farm, and Deversoir.

New "Player_MBT_Scenario.xls" file listing all scenarios, maps, and campaigns in the Game Notes folder.

All Scenarios and Maps are now numbered in the game selection screen, and maps also have their size listed.

The map code auto-generator has been extensively enhanced and the coded routines greatly embellished.

13 totally new terrain features have been added, as well as 4 old terrain types being completely revised. Transition months between seasons are now more accurately detailed and varied in terrain. As well, the transition between terrain types adjacent to each other has been refined.

The 13 new terrain types are Ice, Frozen Streams, Marsh, Ploughed Field, Red Sand, Red Sand Rough, Grey Sand, Grey Sand Rough, Arid/Fall Grass, Arid/Fall High Grass, Winter Crop Field, Mid-Winter Snow Field, and Bare Winter/Late Fall Trees

The 4 completely revised terrain types are Green Crops, Yellow Crops, Rice Paddies and Early Winter Fields.

A map generator that allows maps to be auto created using 19 different variables has been added, and is accessible from the Map Editor as well as the Battle and Campaign Unit Purchase screens so that you can customise your maps before each battle to further enhance your gameplay. You can even Save the maps you design on the fly, or load previously saved map -- even from the View Map screen of the Purchase Units section!

Maps can now be created as small as 20x20 (1 kilometer square) and can be expanded in 10 hex increments (half kilometers) seperately in both the X and Y axis up to 200x160 hexes (10 kilometers by 8 kilometers).

A number of important changes have been made to the "View Map" screen of the Deploy menu for generated battles and PBEM (all changes detailed within the Game Guide)

- Redraw the Map for the Current Opponents (use different battle location for these opponents and date)
- Redraw Map for the Current Battle Location (use same battle location)
- Change Map ID (specifically change battle location to another one by indicating batloc ID number)
- Redraw V-Hexes without changing terrain
- Change Game Length

MOBHack will now allow entering different Icon numbers for summer, winter and desert terrain and the game code has been revised so these will show up in the game at the appropriate times. Due to the lack of available time in this last development phase, not many units take advantage of this new feature in WinSPMBT. But we plan on fully developing this in future releases.

In defend battles the Defender can not only place trenches, but remove them once placed in order to achieve a special effect. Laying & Removing trenches is used to simulate previous defensive engineering efforts to remove trees, bulldoze rough areas and otherwise improve Line-Of-Sight and strengthen the defenses because when a trench is removed the hex (in most cases) becomes Clear Terrain. Trenches can be laid and removed anywhere on the Defender's half of the map. Trenches laid in Water terrain will create a small island to put the trench on.. Trenches can also be placed on the attackers side of the map to simulate forward area anti-tank trenches or the previous front lines. Trenches cannot be removed once placed on the opponents side of the map because doing so gives the Defender too much control over the terrain and tilts the play balance in favour of the defender.

Victory Hex Point allotments can now be reduced down to 5 points and up to 250 points in 5 point increments. Victory Hexes worth less than 50 points will be ignored by the AI, and can be used by scenario designers to develop special battlefield situations and tweak AI and Player movement.

The ammunition loads of vehicles with auto-cannon have been reviewed, resulting in a steep drop of shots available to these weapons. Many auto-cannon armed vehicles do not carry much ammunition, and have high rates of fire, so they have to choose their shots carefully. The importance of the secondary weapons of these vehicles in the antipersonnel role is now much more apparent because of the ammunition limitations of the auto-cannon. Equally apparent is the superiority of certain IFVs because they have been designed to carry much more ammunition for their auto-cannons than other vehicles, and thus can fire more shots (bursts) during the course of a game.

Automatic weapon and autocannon ratings have been revised and refined based on new formulas that have been extensively researched in order to bring more realism to combat tactics, strategies and results. As well, ammunition loadouts of autocannons have been researched and an appropriate number of "shots" have been assigned instead of the generic loadouts of previous versions (which was actually much too generous). Each in-game "shot" is the equivalent of short bursts. The new loadouts and weapon ratings illustrate how quickly autocannons eat up ammunition and also how deadly they are. Many auto-cannon armed vehicles do not carry much ammunition, and have high rates of fire, so they have to choose their shots carefully. The importance of the secondary weapons of these vehicles in the antipersonnel role is now much more apparent because of the ammunition limitations of the auto-cannon.

Tank ammunition loadouts fine-tuned according to new data uncovered.

Surface to Air Missiles (SAMs) have been completely redone and no longer have any legacy SP2 ratings. All SAMs from all countries, whether shoulder-fired or launched from a stationary missile platform have all been rated to be relative to each other. This levels the playing field across the board for all countries air defense. The legacy ratings were no doubt arrived at with very little hard evidence to help the designers. There is still very little hard evidence out there, but at least there is more than what the SP2 designers had available to them. We anticipate refining these numbers even more over the next releases, but are very happy with the results as they amply demonstrate the strengths and weaknesses of the many SAM systems.

Vehicle Dust Trails have been revised to begin appearing in desert terrain and summer months at higher Visibility settings than previously.

A new Map Editing feature whereby you can add "Clear Terrain" (Grassy Plain) to a hex, and still keep the height contours of the existing map. You no longer have to add Clear Terrain to a contoured section of the map by removing all the terrain features of the hex, including height. If you move to the second page of map editing buttons you will note that when you pass the cursor over the "Clear Terrain" button on that page it reveals that it will "Add clear terrain to hex following the contours of the existing map." The "Clear Terrain" button on the first page remains the same as it always was-- it clears all terrain and all height from the hex.

Armament loadouts of planes have been revised and varied loadouts created for use in different mission types. A huge effort was made to review the weapons loads on fixed wing aircraft and helicopters (many thanks to Jakub Jaraczewski). Dozens of different air-to-ground rockets were identified and established as weapons in the game. These were matched to aircraft of the appropriate nationality and period. As an example, the SU-25 ("Frogfoot") can now fire 57mm, 80mm, 122mm, and 240mm rockets depending on the player's mission and availability of purchase points. Likewise, depending on the period, an American forces player might have 5-Inch Forward Firing Aerial Rockets, 5-Inch High Velocity Aircraft Rockets, or 5-Inch Zuni-series rockets to bring to bear on ground targets. A parallel effort was made to identify the characteristics of the aircraft cannon and their ammunition loads. Thus, players with an eye to detail will appreciate the use of "20mm Colt Mk.12" instead of the old generic "20mm-cannon." This detailed approach highlights the capabilities of a large weapon like the 30mm GAU-8 found on A-10 Thunderbolts, and allows it to be contrasted to an older, less effective weapon such as the 30mm ADEN cannon. On the rotary-wing front the same care was taken so that Russian Hind attack helicopters are loaded with a variety of rockets suitable for any mission that provide fire support ranging from "harassing" to "obliteration".

New armour values and penetration ratings for weapons. Many armour ratings were reviewed and modified, as were the capabilities of key anti-armour weapons in the games. This resulted in all-encompassing changes that enhance the dynamics of tank combat in the game. For more information see the Notes on the V3 Weapon System Changes immediately following this section.

Changes to Range Finder ratings. In many cases Range Finder ratings have been increased to better reflect the capabilities of the actual gun sights and range finders. This is especially evident in the latter decades in which many of the modern units have
laser range finders. The improved RF ratings make the tanks more deadly during the opening rounds of an engagement. However, performance drops as suppression rises amid the battlefield chaos, making achievement of first hits a high priority.

Standardization of cannon rates of fire. To a large degree, the rates of fire of tank guns, anti-tank guns, and artillery pieces have been standardised. This corrects the problem of like weapons having different ROFs from OOB to OOB.

A "Player's Info" text file included in the Data/Design folder to help modders build new OOBs using the same basic rules that we do, and also to give an insight on how the game works.

The Boats Get Stuck Under Bridges Bug has finally been eradicated. Now boats can ply the waters under bridges, but their icons will appear on top of the bridge solely for ease of locating. If the boat icons are allowed to go under the bridges, they can become hidden from view very easily and the Player might lose track of his units. So we have made the icon appear above the bridge -- but it is simply a matter of visuals, and the boat does not add movement costs for traversing the bridge or otherwise exhibit any adverse effects in the game. For all game purposes the boat is under the bridge and in the water.

The code controlling troops dismounting from APCs and other vehicles was tweaked to allow more realistic engagement by opponent forces that are in LOS of the dismount.

Helicopters allowed to be part of the starting core force in campaigns. Air Cavalry user & generated campaigns are now possible.

Frequency of fords in streams was revised, and fords are made to flash yellow on the mini-map for easy identification. The chance of getting stuck at fords was also revised downward a little.

Road code finetuned.

Many small code tweaks to finetune the frequency of various results.

Notes on the V3 Weapon System Changes

Autocannons are a significant weapon in WinSPMBT that cover four classes of weapons -- anti-aircraft, small cannon, aircraft cannon, and autocannon. A brief survey of practically any OBAT will show at least several autocannon in service. It was essential, therefore, that the autocannon ratings reflected both the effectiveness of these weapons against various targets and their effectiveness relative to one another.

Research about these weapons considered over 100 different aerial and ground-based platforms, and spanned the era from the cannons of the 1930s to modern weapons such as the ATK 30-mm Bushmaster II. Thus, weapons like the Hispano 20-mm cannons carried in WWII-era fighters are reflected accurately and in proper relationship to a Russian GSh-23-6 multi-barrelled cannon.

Two key aspects of the weapons definitions are the HE Kill rating and the armour penetration ratings. HEAT rounds play a small role here, although some weapons, like the 30-mm M230, fire a high explosive dual-purpose round that incorporates a shaped-charge warhead.

In the case of autocannons, the HE Kill rating is driven the amount of "metal on target", a way of measuring the sheer amount of metal and explosives the cannon project in a given amount of time. Some cannon, like the GAU-8/A on the A-10, fire something like 25 Kilograms (about 55 pounds) of depleted uranium and high explosive at a target every second! Cannon with higher amounts of "metal on target" are given appropriately higher HE Kill rating in the game.

armour penetrating rounds for small cannon have traditionally been full-caliber AP and sub-caliber APDS, but fin-stabilised APDS rounds are becoming more common. APDS appeared before the end of World War II; the German 3.7-

cm BordKannon on Stuka tank-killing aircraft fired an APDS round with a tungsten core. A peculiar aspect of the small caliber AP rounds, particularly for aircraft, is that their armour piercing ratings are not often disclosed. Fortunately for designers, some of the rounds are documented, and, in general, the muzzle velocity and general type of round tend to imply certain penetration capability. Depleted uranium rounds are give a boost in their AP rating, as are Gatling-style cannon with very high rates of fire.

Larger post-WWII AP rounds, such as those used by tanks and anti-tank guns, are not that well documented and are subject to a large degree of designer interpretation. The problems with determining a specific penetration rating are legion. armour quality varies and there are different kinds of armour plate. Projectile design varies and interacts with differently with various types and qualities of armour. Complicating the mix is the game's use of the AP value of the projectile immediately as it leaves the muzzle -- a penetration rating not often quoted (usually pen ratings are given at a range such as 1000 meters).

Doubtlessly, those with extensive knowledge of projectiles and armour penetration will want a discussion on some of the ratings used in the game. We will be glad to accept any revelatory evidence that can be used to refine our ratings in future versions of this game. The design standard we used was to represent the projectiles in terms of their performance against a given quality of armour.

The performance of these rounds is difficult to determine at times. Even the performance of creaky old items like the 90-mm rounds used by U. S. M-47 and M-48 tanks are hard to track down, and when quotes are found, they sometimes make little sense -- such as implying that U. S. postwar 90-mm round penetration was less effective than the rounds used during WWII. In spite of these difficulties, the projectiles were assessed and assigned what **The Camo Workshop** believes to be realistic ratings. Many different methods were used to assess projectile performance including use of penetration quotes from sources such as Janes (and in many cases, the military forums on the internet and national military websites), trending "backwards to zero" from known data, comparison to similar projectiles, confirmation of predicted performance by the use of formulae, and actual projectile performance in battle.

Infantry and artillery weapons were simpler to standardize as their performance is usually documented, although the effective range of infantry weapons can vary depending on the opinion of the author. The difficult part here was the sheer quantity and variety of these weapons. Some of the weapons are also a bit obscure, such as the Spanish Alfa machinegun - but our OBAT depicts both the 7.92-mm and 7.62-mm versions of this weapon. For those players looking for a good deal on weapons references, I recommend querying www.abebooks.com for older editions of Janes publications. They can be had for good
prices, and often, the older editions were more comprehensive in the data they presented. For example, older editions of Janes Armour and Artillery had weapons, ammunition, and specific turret applications data all in one volume - but, for the latest edition, one must obtain three separate volumes to cover the same ground. In our case, we used many different sources, from Janes to Hogg & Weeks to many others, continually cross-referencing and debating the differences

Armour ratings were also intensely re-researched to incorporate new data, as well as to find the best up-to-date estimates of the armour that is still classified secret. Tankers from a number of countries were questioned, and their experiences in T-55's, T-72's, M48's, M60's, Chieftain's and others were instrumental in compiling anecdotal evidence as the starting point for more scientific research where publicly available hard data is virtually non-existent at any price. Armour and tank forums and websites on the internet were mined for as much information as possible. Inter-library loan librarians were kept busy for months searching for copies of military manuals and other published data on modern armour. Indispensable was www.bublos.net for finding the best price on all manner of publications -- which is very important in a free project with absolutely zero budget. And as always, the Players themselves were invaluable in digging up and translating Cold War and modern military manuals from their respective countries. Information was obtained from Eastern Europe that probably has not otherwise been seen publicly in the West before. While the future will reveal more hard data for us to incorporate in later versions of the game, this release goes a long way to getting the armour values into perspective across the entire range of eras and countries that the game makes available for your enjoyment and education.

The Camo Workshop hopes you are pleased with the weapons and armour interaction in the game. It is no exaggeration to state that hundreds of hours, if not thousands, have been used to identify the unique characteristics of the weapons depicted in the game. For those interested in good sources of information on modern weapons, there are several good sites on the internet (try searching on something like "N-37 37mm"), and standard references like Janes and Brassey's are invaluable in the assessment of weapons performance.

SPMBTv2.01 Supplement (Released August 2003)

Changes/Additons to SPMBT in the Supplement

A completely new set of OOBs with numerous changes and additions

A new Cost calculator with the following corrections:

- - changes to ERA costs (applicable to SPMBT only)
- - changes to flame weapons costings (long range flame weapons increased)
- - EW cost changes (+) (applicable to SPMBT only)
- - off map and on map HE shell costs were reversed - fixed
- - sabot ammo was using the AP range, not sabot range- fixed
- -off map planes with missiles were using off map HE costs which were too high- fixed

2 new scenarios

120 new or revised Icons (41 revised SHP files)

Revisions to some of the Name and Rank data files as well as an additional 77 encyclopeadia text files

30 additional PIC's

Many tweaks and adjustments to the code including:

- -helicopters could not unload on a bridge on lake hexes - fixed
- -other units on a bridge on a lake hex could not unload passengers - fixed
- -mine points rolling over to a very high number for dragon teeth buy when 0 fortification buy points- fixed
- -reinforcement mortars off map fired if under AI control - fixed
- -bomber aircraft were not dropping the last cluster bomb - fixed
- -some small maps caused a crash
- - was due to the random trees placement code not being changed to allow for map X and Y changes -fixed
- -mortar ROF was decided to be too high - reduced. Mortar ROF is ROF+1 if warhead>4
- -indirect artillery was using the direct fire graphic when attacking armoured targets, causing the incorrect graphic and or a shot to appear from -1,-1 to target - fixed.

- -Artillery indirect fire circle size tightened up slightly
- -Ammo units - boosted load of weapons with warhead size <4
- -road bridges over lake hexes were reporting as rail bridges if any rail bridge present on map - fixed
- -In Scripted Campaigns, if the map size was > 100 in width, the non fixed troops were deployed on column 98 still. Fixed.
- -Infantry speeds in MPH sometimes went down on 3rd hex moved - fixed.
- -Vehicles which were reported correctly as dug-in on the deploy turn or in scenario editor were losing dug in status in turn 1 onwards.-Fixed.
- -Infantry were not being charged for soft sand - now +1 MP is charged for moving in a hex with soft sand.

SPMBTv2.0 (Released June 2003)

Most OOBs have had numerous additions and adjustments and as well, 16 nations have been added (Japan, Australia, Canada, Algeria, Thailand, Bosnia-Herzegovina, Cambodia, Croatia, Chad, Ethiopia, Sudan, Lebanon , Kenya, Indonesia, Malaysia and Somalia.)

40 new scenarios and 1 New Campaign have been added. Included with the new scenarios is a Beginners tutorial in the first slot.

400 new Vehicle and Aircraft Icons added

New MOBHack Database checking utilities and OOB Price Calculator

ALL units have been re-priced with the new calculator (which can now be found in the "Cost Calculator" folder)

Numerous small code adjustments have been made to fine tune gameplay.

Checks have been added for aircraft (planes,helicopters etc) in cores - these are automatically stripped now.

A bug has been fixed where if a formation had non aircraft in slot 1, planes could be added in subsequent sections and this would then fool the air selection code and allow either unlimited planes or to add such formations to cores.

Battle location have been updated for new and existing nations. Indonesia is mainly in Borneo for the emergency vs UK, Australian, Malaysia nations in 46 to 66, post this Australians get Timor as a location as well

Iraq locations and types updated to reflect latest conflict (expect more urbanised bias to locations)

Korean war locations have been updated, certain key location areas added (e.g. Seoul City in both 9/50 (going up) and 3/51 (coming back down again!), Pyongyang City in 9/50, "North of The Yalu" and N Korea locations in 10/50 to 12/50 period. Also corrected were some nations who were getting China locations in Korean war period instead of Korean locs. Additionally to this, Korean war LC changed to disallow China pre the official start date in the generated campaign if date is in the Korean war period AND at least 1 of the 3 slots is allocated to NORTH KOREA, until post the correct introduction date for Chinese "volunteers". Set up a Korean War LC now with china in 1 or 2 slots (As desired) and NK in the remainder and if the code generates a Chinese battle prior to Chinese entry date it overrides that with NK as an opponent.

All AI picklists have been re-checked and adjusted. For example, UK and Argentine pick lists and code changes for Falklands will now generate reasonably correct force structures for both sides, e.g. UK is a light infantry army with Gazelles as main helo support, Argentineans there are conscripts and marines.

The surrender option has been removed.This proved to be a cheat in PBEM..

Some rework of the AI pick code to buy tanks a bit more in non tank heavy if lots of free buy points available.

The AI helicopter landings hex selection routine was redone to accomodate the new map sizes

Mines were not able to be laid on the RHS of larger maps - now fixed as well, mines are now deployable in the UC if bought.

SPMBTv1.5 Upgrade Patch (Released December 2002)

The game now allows 135 map sizes. Maps can now go from a minimum of 20 hexes wide and 40 hexes high to up 160 hexes wide and 200 hexes high. All maps are fully playable in generated, campaign, PBEM or scenario based games. AI deployment routines for units and victory hexes have been re-written to accommodate every map size. Campaign players now have the added bonus of pre-selecting map size before every game to allow them to tailor map sizes to fit their campaign core size.

Area fire can now be targeted through smoke filled hexes. No longer will smoke act as a barrier to fire however, accuracy and effectiveness is far less than aimed fire against a clear hex but this new system works quite well for harassing advancing enemy infantry.

Using direct HE fire, all units in the target hex now receive splash damage while in direct fire by HE weapons. This includes the original target if missed, but the shell still lands in the target unit's hex. (The original code ignored the original target if a miss was scored). This slightly increses HE effect in direct fire.

The code has been changed to favour solid shot over HEAT provided it has a decent chance at range fired, but HEAT still preferred for armoured targets with low frontal armour.

The "exploding paratrooper" problem is fixed

The retreat code has been altered to give more realistic retreat paths in most situations

A new "Infantry colour" has been added to the game.

Points changes made in the editor will now "stick"

Over 300 new Icons added

All OOBs extensively upgraded with four more nations "activated" (Nigeria, Eritrea, Tanzania and Uganda) The balance of the Work In Progress nations will be issued with our next patch of the game. Our Player Community was the origin of many OOB tweaks. While we may not respond to every issue raised on the message boards, we do read and research every bit of information and opinion that the games generate.

A new pricing formula has been used for all units

New ammo loadouts for all non-vehicular mortars, howitzers and naval guns have been implemented to smooth out inconsistencies between OOBs that resulted in unfair advantages/disadvantages for some countries.

A bug in the computer purchased forces points values was found and eliminated. The troops were bought at the correct cost but the units point value field was left the basic OOB book value rather than the adjusted cost for + or - experience/moral. Any forces bought by the AI or human player using the computer buy routines will now reflect the correct cost adjustment for Experience and Morale rating.

Campaign core force points values had remained at the original purchase cost throughout the campaign thus not properly reflecting their changes in Experience and Morale over time. This bug has now been isolated and eliminated. Core forces will be shown at purchase book value for their template formation at the beginning of their first battle but will be individually priced at the end of their first battle depending on their true individual Experience and Morale rating. As they further progress through the campaign they will gain value as they gain experience and moral.

There was a bug whereby campaign core forces morale jumped to the 80's after their first battle. This has been eliminated, and therefore core forces morale will now properly improve with successful battles

The internal routines that calculated points value variance from the default 70 produced very skewed results when the difference was 10 or more points either way. The formula was revised to a flatter range.

Six new scenarios have been added to the game for this patch as well as 1 new Scripted Campaign.

The **SPMBTv1.01 Patch** (Released July 2002)

Contained a large number of OOB corrections plus code changes to fix a Y2K type bug in the campaign generator as well as a 26,000 point cap on defender purchases which will now allow the attacker to purchase the correct proportion of points. Plus, there was a fix for a bug that was appearing when mixed cluster and HE missions were plotted simultaneously and another fix for a bug that was not giving the correct base experience ratings for various nations.

SPMBT Version 1.0 (Released June 2002) was entitled the **preview version**. SPMBT was supposed to be a simple extension to SPWW2 that would only take 3 or 6 months work. (**how wrong we were !**)That work started in 2001 and has since grown into something much more extensive. A great deal of work has gone into the OOBs. They have, literally, been created from the ground up to be consistent with the system we set up for SPWW2. There have been over 2000 new Icons added to what was the SP2 Modern Icon set . Code work has also been much more extensive than we had originally planned with many new additions not found in our previous releases plus much new code to better represent modern weapons as well as improved AI performance

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Credits and Information

ORIGINAL SP SERIES DESIGN AND PROGRAMMING
BY
Gary Grigsby, Keith Brors and SSI

This section lists everyone who has contributed to this game in one form or another from the latest version all the way back to the very first version of the game released in 2001

WinSPMBT v13 (**released as WinSPMBT version 10.0 - version 13.0 Consolidation patch) (March 2019**)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN : Marcin Kaluza, Don Lazov, Jose Logroño, Maciej Jonasz, G. Olson, Abraham Shahadi

Also, from the **83** missing/lost scenarios that Don Lazov resurrected and updated the folllowing scenario authours--- (**please note** that in some cases names could not be found but most were presented in the order I found them--) --- Matxer , Al Sandrik , Mr. Dalleer , Luigi Varriale , Frank Kontowicz , E. Jarnefeld , Jose Logroñ, Ulf Lundstrom, kmjordan47906 , Jagdtiger , Tom DeShetler , William H Wilder Jr , Lleij Samuel Schwartz , Alexander V. Byrikhin , Ism , Henty Kreer , Mike Cuozzo , MikMyk , alexkick , Henk Dutchiexx Neumann , Daniel Toftemar , Keith Hadsall , Jonah Zryd , Michael Vik , Mike Torrance , Gallo Rojo, Rami Sihvo

A very special **Thank You** to Don Lazov who along with Tom Chartoff's help, resurrected and updated a large number of older scenarios that otherwise would have been lost

PLAYTESTING: Andy Gailey, Don Goodbrand, Don Lazov, Tom Chartoff

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: G. Olson (Suhiir) for her work with the USMC OOB and it's multitude of picklists and many thanks to **all** the contributors on the game forum who have helped make the OOBs, and the game, better.

WinSPMBT v12 (**released as WinSPMBT version 10.0 - version 12.0 Consolidation patch) (March 2018**)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand, Joe Reiger

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN :Thomas Garlock, Chris Ireland, Marcin Kaluza, Jose Logroño, G. Olson, Abraham Shahadi

 MAP DESIGNERS (Known******): Chris Ireland, Marcin Kaluza and many others..

**PLEASE NOTE:: many map makers are unknown as few "sign" their work and until this release there were no txt files for information about the location the map represents or the designer who created it so I can only add the names of the designers I know contributed maps . Many maps added this year came from "The Blitz" map archive so we apologize to anyone who's name I missed crediting but with our new text feature you can now add a text file to the fill in details of the maps you may have made and we will endeavor to get those in to any future updates. Our intent was to give these maps a wider audiance by adding them to the update, not to avoid crediting their authours.

PLAYTESTING: Andy Gailey, Don Goodbrand

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Joao Paulo Martins Maganinho for his work re-working the Portugal and Paraguay OOB's, and K Areil for his additions to the Austiran OOB and, as usual, many thanks to **all** the contributors on the game forum who have helped make the OOBs, and the game, better.

WinSPMBT v11.01 (**released March 2017**)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN :Thomas Garlock, Don Goodbrand, Marcin Kaluza, Jose Logrono, Ulf Lundström, G. Olson, "OpArt222", Al Sandrik.

PLAYTESTING: Andy Gailey, Don Goodbrand

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Many thanks to all the contributors on the game forum who have helped make the OOBs, and the game, better.

WinSPMBT v10.0 (**released as** **WinSPMBT version 7.0 - version 10.0** Consolidation patch) **(April 2016**)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN : Marcin Kaluza, Jose Logrono, Ulf Lundström, G. Olson, Tomas Volka.

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Many thanks to all the contributors on the game forum who have helped make the OOBs, and the game, better.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v9.0 (**released as** **WinSPMBT version 7.0 - version 9.0** Consolidation patch **April 2015**) -------- **WinSPMBT v9.1 Released May 2015**

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN : Thomas Garlock, Jose Logrono, Robert Mendoza, G. Olson, Bulos Qoqish, Abraham Shahadi, Mike Torrance, Tomas Volka

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Many thanks to all the contributors on the game forum who have helped make the OOBs, and the game, better.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v8.0 (March 2014)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO AND CAMPAIGN DESIGN : Marcin Kaluza, Jose Logrono, Ulf Lundström, Joel Radunzel.

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Many thanks to all the contributors on the game forum who have helped make the OOBs, and the game, better with a special thanks to G. Olson (Suhiir) for her work this year with the USMC OOB and picklists.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v7.0 (April 2013)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand , Matt Reeves (Mujahideen flags)

OOB Photos: Michal Derela, Don Goodbrand

SCENARIO DESIGN : Andy Gailey, Abraham Shahadi, G. Olson

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Many thanks to all the contributors on the game forum who have helped make the OOBs, and the game, better.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v6.0 (March 2012)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand

OOB Photos: Don Goodbrand

SCENARIO DESIGN : Christopher W. Berry, Jose Logrono, Ulf Lundström, Cam Murdoch**,** Abraham Paul

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Thanks to all the contributors on the Shrapnel Games forums and a special thanks to Patrick Conklin, Michal Derela, Richard Hopkins and Marcello Invernizzi who have helped make these OOBs better.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v5.5 (March 2011)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand, Joe Rieger, Tangui de Saint Hilaire

OOB Photos: Don Goodbrand

SCENARIO DESIGN : Christopher W. Berry, Andy Gailey, Marcin Kaluza, Ulf Lundström

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Marcello Invernizzi (Iraq, North Korea), Patrick Hunziker (Switzerland OOB). Thanks to all the contributors on the game forums and a special thanks to John Pryor ("Imp") for the further work he did in providing the spreadsheets highlighting the remaining errors and inconsistencies in the weapons database for winSPMBT. I'd also like to thank Patrick ("Fastboat Tough") Conklin for all the information he has provided in the past year that has helped make these OOBs better.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v5.0 (March 2010)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey, Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand, Tangui de Saint Hilaire

OOB Photos: Don Goodbrand

SCENARIO DESIGN : Christopher W. Berry, Ulf Lundström

MAP DESIGN: Ulf Lundström

PLAYTESTING: Andy Gailey, Don Goodbrand

OOB CONTRIBUTORS: Marcello Invernizzi (Iraq, North Korea) , "Zaphod72" (Greece) Thanks to all the contributors on the game forums and a special thanks to John Pryor ("Imp") for the work he did in providing the spreadsheets highlighting the errors and inconsistencies in the weapons database for winSPWW2 and winSPMBT.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v4.5 (March 2009)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey, Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

ICON DESIGN : Don Goodbrand, Tangui de Saint Hilaire

OOB Photos: Don Goodbrand, Ulf Lundström

SCENARIO DESIGN : Ulf Lundström

MAP DESIGN: Ulf Lundström , Marek Tucan

PLAYTESTING: Pyros Lambert, Artúr Székely-Takács, Mike Torrance, Jason Young

OOB CONTRIBUTORS: Tangui de Saint Hilaire (Turkey), Marcello Invernizzi (Iraq) , Maxim Yegorov & Timothy Igoshin (Russia) with special thanks to all the members of the WinSPMBT Sharpnel Games Forums for ongoing discussion, support and research.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v4 (April 2008)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey, Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

PLAYTESTING: Marc Buchsbaum, Tom DeShetler, Mike Ely, Chaim Krause, Pyros Lambert, Artúr Székely-Takács, Mike Torrance, Jason Young

ICON DESIGN : Don Goodbrand, Tangui de Saint Hilaire

OOB Photos: Don Goodbrand, Ryan Crierie , Patrick Hunziker

SCENARIO DESIGN : Ulf Lundström , Artúr Székely-Takács, Andy Gailey

MAP DESIGN: Ulf Lundström , Andy Gailey, Marek Tucan

OOB CONTRIBUTORS: Patrick Hunziker (Switzerland OOB) ,Ryan Crierie (China OOB), Tangui de Saint Hilaire (Japan OOB) with special thanks to the members of the WinSPMBT Sharpnel Games Forums for ongoing discussion, support and research.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v3.5 (April 2007)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey, Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

PLAYTESTING: Marc Buchsbaum, Tom DeShetler, Mike Ely, Chaim Krause, Pyros Lambert, Artúr Székely-Takács, Mike Torrance, Jason Young

ICON DESIGN : Don Goodbrand, Tangui de Saint Hilaire

OOB Photos: Don Goodbrand, Cam Murdoch

SCENARIO DESIGN : Artúr Székely-Takács

OOB CONTRIBUTORS: Patrick Hunziker (Switzerland) ,Cam Murdoch (Canada) with special thanks to the members of the WinSPMBT Sharpnel Games Forums for ongoing discussion, support and research.

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v3.0 (January 2007)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey, Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

PLAYTESTING: Marc Buchsbaum, Tom DeShetler, Mike Ely, Chaim Krause, Pyros Lambert, Artúr Székely-Takács, Mike Torrance, Jason Young

ICON DESIGN : Blazej Ciepluch, Don Goodbrand

OOB Photos: Blazej Ciepluch, Don Goodbrand, Cam Murdoch

TERRAIN TILE ART: Don Goodbrand

SCENARIO DESIGN : Tom DeShetler, Chris Ireland, Ulf Lundström , Fabio Prado, Andy Weaver, William H Wilder Jr, Jason Young.

CAMPAIGN DESIGN : Tom DeShetler, Exequiel Lopresti, Artur Szekely-Takacs, Mike Torrance, William H Wilder Jr

OOB CONTRIBUTORS: Blazej Ciepluch (Poland) . Cam Murdoch (Canada) with special thanks to the members of the WinSPMBT Sharpnel Games Forums for ongoing discussion, support and research.

MAP DESIGN: Blazej Ciepluch, Ulf Lundström

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

WinSPMBT v1.0 (July 2005) **, v1.1, v2.0 and v2.5** (September 2005)

PRODUCERS: Andy Gailey, Don Goodbrand

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK and UTILITY APPLICATIONS PROGRAMMING: Andy Gailey.

PLAYTESTING: **The Camo Workshop**-- Boris Ajdukovic, Dr.Helge Bertram(Ph.D), C B Blackard, Dick (Boomer) Burleigh, Tony Engelsen, Andy Gailey, Don Goodbrand, Dale Hight , Edward R. Mortimer.

PLAYTESTING: **Shrapnel Games** -- Simon Baxendale, Davide Bendazzi, Marc Buchsbaum, Mike Ely, Dr Gary Galbraith (Ph.D), Chaim Krause, Pyros Lambert, Duri Price, Todd Rossel & Stefan Weniger (Lead Tester)

ICON DESIGN : Don Goodbrand (v1.0, v1.1, v2.0, v2.5), Pierre Arnoldy (v2.0)

TERRAIN TILE ART: Don Goodbrand

SCENARIO DESIGN : C B Blackard (v1.0 and v1.1), Tony Engelsen (v1.0), Ulf Lundström (v2.0, v2.5), William H Wilder Jr (v2.0, v2.5)

CAMPAIGN DESIGN : Pyros Lambert (v1.0) & Mike Torrance (v2.0)

MAP DESIGN: Boris Ajdukovic (v1.0), Don Goodbrand, (v1.0), Bitxo (v2.0) Pyros Lambert (v2.0) Ulf Lundström (v2.0).

SOUND F/X EDITING: Don Goodbrand

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand

SPMBT Version 3.0 (July 2004) **and v3.01** (September 2004)

PRODUCERS: Andy Gailey, Don Goodbrand & SP Camo (Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer, Bill Wilson).

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand & SP Camo (Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer, Bill Wilson).

GAME PROGRAMMING: Andy Gailey and Don Goodbrand.

MOBHACK PROGRAMMING: Andy Gailey.

COST CALCULATOR PROGRAMMING: Andy Gailey.

PLAYTESTING: SP Camo (Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer, Bill Wilson).

OOB DESIGN and CO-ORDINATION: Edward R. Mortimer

WEAPON DESIGN and CO-ORDINATION: Bill Wilson.

ICON DESIGN and CO-ORDINATION: Fernando Giorlando, Don Goodbrand, Edward R. Mortimer

SCENARIO DESIGN and CO-ORDINATION: Doug McBratney.

CAMPAIGN DESIGN and CO-ORDINATION: Doug McBratney.

MAP DESIGN and CO-ORDINATION: Doug McBratney.

LBM DESIGN and CO-ORDINATION: Tony Engelsen.

TEXT FILE DESIGN and CO-ORDINATION: Boris Adjukovic.

INTERNET FORUM and EMAIL GROUP CO-ORDINATION: Miguel Guasch Aparicio.

SOUND CO-ORDINATION: Edward R. Mortimer

INTERNET FORUM REPRESENTATIVE: Miguel Guasch Aparicio

ADDITIONAL DESIGN: Don Goodbrand, Andy Gailey, SP Camo (Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer, Bill Wilson), and end user's suggestions.

RESEARCH AND OOB DATA DEVELOPMENT: SP Camo (Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer, Bill Wilson), Don Goodbrand and Andy Gailey.

OOB CONTRIBUTORS AND CONSULTANTS: Paul Bellerive, Luke Bennet, Dan Bowen, Alessandro Bonanni, Blazej Ciepluch, Nermin Dupovac, Antonio Giubergia, Richard Hopkins, William Hutchinson, David Hysky, Jakub Jaraczewski, Sven Kessen, Yegorov G. Maxim, Gorka Martinez Mezo, Pavel Novak, Jim Nutter, Jo van der Pluym, Rahman Setiawan, Rami Sihvo, Jerry Sindle, Laurent Touchard, Eurico Viegas, Victor Vondrasek, Massimo Zampini and with special thanks to The SPCamo Yahoo! listmembers for ongoing discussion, support and research.

ICON ART: Blazej Ciepluch, Fernando Giorlando, Don Goodbrand, and Joe Rieger

TERRAIN TILE ART: Don Goodbrand

LBM ART: Blazej Ciepluch, Nikolay Dimitrov, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Don Goodbrand, Richard Hopkins, James E. Martin Jr, Edward R. Mortimer, Magnus Rosander and Rahman Setiawan.

OTHER ART and GRAPHICS: Don Goodbrand and Edward R. Mortimer

SCENARIO AND CAMPAIGN DESIGNERS: C.B. Blackard, Frank Kontowicz, Don Lazov, Ulf Lundström , Doug McBratney, von Rom and Bill Wilson.

MAP DESIGNERS: Boris Ajdukovic, Steve Fields, Sven Kessen, Doug McBratney and Edward R Mortimer

TEXT FILES: Boris Ajdukovic, Blazej Ciepluch, Tony Engelsen, Don Goodbrand, Doug McBratney, James E. Martin Jr, Edward R. Mortimer, Felix Schulz, Eurico Viegas and Bill Wilson.

SOUND F/X EDITING: Alessandro Bonanni, Scott Littleton and Edward R. Mortimer.

GAME MANUAL AND DOCUMENTATION: Edward R. Mortimer.

GAME MANUAL HTML DESIGN AND GRAPHICS: Edward R. Mortimer.

BEGINNERS TUTORIAL: Douglas McBratney.

GAME CONSULTANTS: Don Goodbrand and Andy Gailey.

HISTORICAL CONSULTANTS: Dimitar Boikov, Jakub Jaraczewski, Don Lazov, Jim Nutter, Yegorov G. Maxim, Jo van der Pluym, Rahman Setiawan, Felix Schulz and the SPCamo Yahoo! Listmembers.

SPCamo PLAYTESTERS:(SPWW2 & WinSPMBT) Boris Ajdukovic, Jake Cornmesser, Tony Engelsen, Fernando Giorlando, Miguel Guasch Aparicio, Doug McBratney, Edward R. Mortimer and Bill Wilson.

INTERNET FILE DISTRIBUTION SUPPORT: Dave Roberts.

SPMBT Version 2.0 (June 2003) and **2.01** (August 2003)

PRODUCERS: Don Goodbrand, Andy Gailey.

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand, and the Playtesters.

OOB DESIGN and QA CO-ORDINATION: Andy Gailey, Don Goodbrand

ADDITIONAL DESIGN: The Playtesters, and end user's suggestions.

PROGRAMMING: Andy Gailey, Don Goodbrand.

RESEARCH AND OOB DATA DEVELOPMENT: Edward R. Mortimer, Bill Wilson, Boris Ajdukovic, John Turesson, Andy Gailey, Don Goodbrand, Dick (Boomer) Burleigh, Fernando Giorlando.

ADDITIONAL OOB CONTRIBUTORS : The SPCamo Yahoo listmembers for ongoing discussion, support and research with special thanks to Antonio Giubergia (South American nations), Jim Nutter (Southern African nations), Felix Schulz (East Germany) and Eurico Viegas (Portugal) and Jakub Jaraczewski .

MOBHACK OB DATA EDITOR & COST CALCULATOR PROGRAMMING: Andy Gailey.

ART AND GRAPHICS: Don Goodbrand, Fernando Giorlando & Joe Rieger. (additional Polish Vehicles in the **Supp** by Blazej Ciepluch)

ADDITIONAL INTRO SCREEN COLOUR PHOTOS: Jim Hair

SPCamo PLAYTESTERS:(SPWW2 & SPMBT) Andy Gailey, Don Goodbrand, Edward R Mortimer, Bill Wilson , John Turesson, Helge Bertram, Dick (Boomer) Burleigh , C B Blackard, Dale Hight, Boris Ajdukovic, Tony Engelsen, Claus Bonnesen and Douglas McBratney

SCENARIO DESIGN CO-ORDINATION: Edward R. Mortimer & Dick (Boomer) Burleigh.

SCENARIO AND CAMPAIGN DESIGNERS: C.B. Blackard, Bill Wilson, Douglas McBratney, Edward R Mortimer, Dick (Boomer) Burleigh, Fernando Giorlando, Alexander V. Byrikhin, Steve Goodmansen and Ulf Lundström .

MAP DESIGNERS: Edward R Mortimer, Dick (Boomer) Burleigh, Boris Ajdukovic

GAME MANUAL AND DOCUMENTATION: Andy Gailey, Don Goodbrand.

GAME MANUAL HTML DESIGN AND GRAPHICS: Don Goodbrand, Andy Gailey.

BEGINNERS TUTORIAL: Douglas McBratney and Dick (Boomer) Burleigh

CONSULTANT: Dale Hight.

SPMBT Version 1.5 (December 2002)

PRODUCERS: Don Goodbrand, Andy Gailey.

DESIGN AND DEVELOPMENT: Andy Gailey, Don Goodbrand, and the Playtesters.

OOB DESIGN and QA CO-ORDINATION: Edward R. Mortimer

ADDITIONAL DESIGN: The Playtesters, and end user's suggestions.

PROGRAMMING: Andy Gailey, Don Goodbrand.

RESEARCH AND OOB DATA DEVELOPMENT: Edward R. Mortimer, Bill Wilson, Boris Ajdukovic, Tony Englesen, John Turesson, Andy Gailey, Don Goodbrand, Helge Bertram, Dick (Boomer) Burleigh , C B Blackard, Nick Hyle, Dale Hight, William Hutchison.

ADDITIONAL OOB CONTRIBUTORS : Jarkko Vihavainen, Tong Yan, Daryl Noonan, Rami Sihvo, Eurico Viegas, Jim "Troopie" Nutter, Halstein Sjølie and Fernando Giorlando. As well, special thanks to the **SPCamo** Yahoo listmembers for ongoing discussion, support and research.

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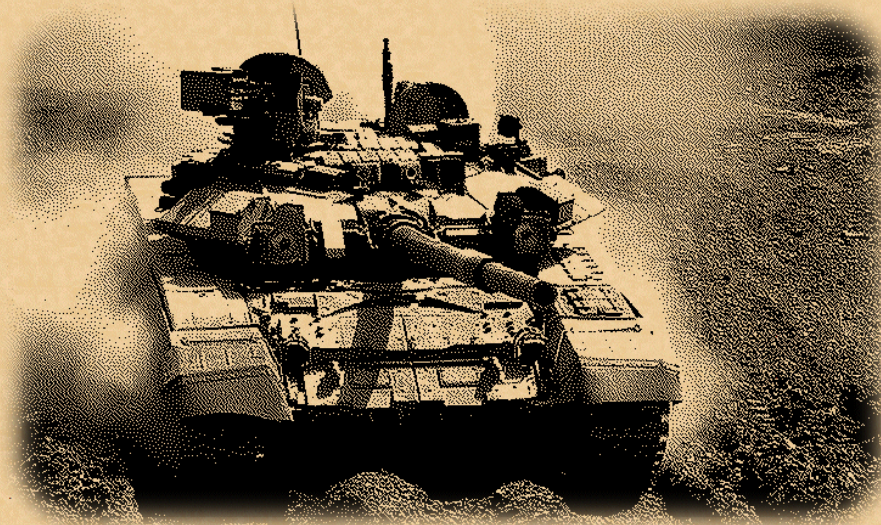
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Without Freds SHPEdit to get things started, NONE of this would have happened.

ON LINE HELP

First thing to do is to read this manual **thoroughly**, try using your browser's search utility to look for a word, if you cannot find what you require from the links in the left pane. See the section on **using the guide** at the start of the document..

If you have questions, register at the WinSPMBT group **HERE** . Look through all the message traffic, as your question is quite likely to have already been covered, if not, then post a message and someone will try to help you out.

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Discussion Groups-- http://forum.shrapnelgames.com/forumdisplay.php?f=201

Internet File Distribution-- http://www.gamersfront.com/store/winspmbt-main-battle-tank.html

We'd like to thank Shrapnel Games for sponsoring us, and our dedicated Player Community for supporting us. The best way we can show how we appreciate both of you is to bring you together. Please visit their website at **http://www.shrapnelgames.com/** *and have a look at the games they have to offer dedicated wargamers.*

CD - Extended Features

These additional Game Features are only available on the extended features CD version available from Shrapnel Games

To Order the Extended version of the game either via Electronic Download or as a Safe Box (CD) Version Please click **HERE**

Display settings

The regular game allows you to play in **640x480** or **800x600** screen resolution in both full screen and windowed mode.

The additional extended features on the CD allow you to set the screen resolution to **1024x768**, **1152x864**, **1280x1024** and **1600x1280**. The maximum game resolution is determined by your systems display resolution. If you have your monitor set to 1152x864 then that is the maximum size for the game as well.

When **v5.5** was released **DESKTOP widescreen support was added to the game for CD owners.** This allows players to run the game at the same resolution as your normal desktop.. If a player wanted to use a resolution OTHER than the current windows desktop mode (e.g. to run the game in 1024x768 full screen, with the desktop set to say 1280x1024) then he would need to set the windows desktop to the desired size before starting the game. (Click on desktop, settings, choose required windows mode).
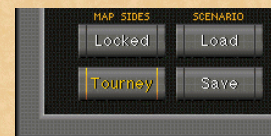.

PBEM Tournaments

The PBEM tournament feature supplied with the extended CD version game is intended to allow a tournament organiser to set up a scenario for competitive play amongst a group of players. The scenario is encrypted, and a password is set for the second player. Therefore, neither player can open the tournament scenario in the scenario editor to see the setup, and the password provided for player 2 prevents player 1 from continuing the scenario as player 2 and thus seeing his deployment.

Tournament scenario games are also useful for any situation where 2 players want to play a PBEM game which a third party has set up, and which they have no editor access to - a "blind" game.

The tournament organiser creates a tournament scenario by following the following procedure

- Open the scenario editor and Load the scenario you have created for your tournament just as if you were going to edit it
- Once the scenario is loaded into the editor you will see the "Map Size" SWAP button has changed to **TOURNEY.**

- Click on the **TOURNEY** button and you will be brought to the "Tournament Scenario Save List". Enter the scenario into any empty slot and press ENTER on your keyboard. This initiates the encryption process.
- You will then be brought to a screen titled " Setting P2 Initial Password" and asked for an **initial password** (IP) for player 2. The save game process will abort if this is not supplied (Hit the Escape key to abort the initial Password screen). It is the **TOURNAMENT ORGANIZERS RESPONSIBILITY TO ENTER THIS PASSWORD AND PASS IT ON TO PLAYER 2!!!** Once the password has been entered press **CONTINUE .** Once the game is saved to a slot, the tournament organiser should exit the scenario editor, as this process may affect some scenario global variables. If he wishes to edit scenarios, once he has used the tournament game set up process, he should quit the game and restart for safety.
- Tournament game scenarios are saved in the \tournaments folder under the game main folder. The organiser can use the **TOURNAMENT GAMES** button on the *UTILITIES* tab of GameOptions to zip up the DAT and CMT files for the tournament game and send it to all player **ones** in the tournament. To all his player **twos**, he will send an email which details the initial password they will be using when they receive their first turn from their opposing player

one. **Player twos should <u>not</u> get the tournament scenario**, or they will be able to see player one's set-up as the player one set up is not password protected as for player 2.

This completes the Tournament Organizers section. The game is now in the hands of Player 1

On receiving the fileset for the tournament game, the player ones should unzip to their own \tournaments folder. They should then contact their respective player 2 opponents and negotiate which PBEM game save game slot to use in the forthcoming competition battle, if not already done so. Once he has this information, each player one can start the tournament scenario. Each player one should ensure that his preferences are set to those detailed by the competition organiser (if he has done so) or to that agreed with his player 2 opponent. To find the game, press the saved games button to cycle to the tournament scenarios folder, then locate the appropriate scenario. Select it and press start. Player one will enter the password of his choice (tournament scenarios must be password protected secure PBEM games), and when the opportunity to save comes, he saves it in the agreed secure PBEM game slot. (He has no further use for the tournament scenario at this point, unless he is playing against multiple opponents etc.). Player one now sends the secure PBEM game DAT and CMT file set to his opposing player two for him to continue. As the game is now a normal secure PBEM, he will find the files in the \PBEM Games folder under the main game folder.

Player 2 now gets the files from his opposing player 1. He unzips the files to the \PBEM Games folder and loads the game from the EMAIL GAMES page (press save games button to cycle to this page as usual). he should have the initial password supplied by the tournament organiser to hand, as it is required to pass the forthcoming stage!. Player 2 now loads the game. He will be prompted for the IP which the tournament organiser entered when he set up the secured tournament scenario. Once he has successfully entered this, he is then prompted for his **OWN** new password of his **OWN** choice. **What follows is very important to remember >>>** Player 2's ONLY use the password supplied by the Tournament organizer to open this ONE screen so they can set **THEIR OWN PASSWORD**. Player 2's **DO NOT** use the initial password for anything else. On pressing continue, the game will be automatically saved to the proper PBEM game save slot. Player 2 now passes the files back to Player 1 for the next stage of the process . From here the game proceeds exactly as for a normal game scenario being played PBEM.

Note to tournament organisers: As there are plenty of save slots for tournament scenarios, each organisation should probably mark off a block as theirs. (Say 50-75 is bigwargamers.com's traditional set of slots). It'll make it easier for players to find the scenarios, for one thing!. Remember that secured tournament scenarios cannot be reloaded back into the scenario editor (they are encrypted), so don't lose the original scenario!. **Remember to ensure that all prospective players have the full CD extended version of the game, as those with only the free download will not be able to participate in the competition.**

Note to players: The only fixed slot is the one that the original "template" tournament scenario as dispatched to you by the tournament organiser. Player one can save the game to any secure PBEM slot of the 250 on hand on setting up the game. The scenario is encrypted, so will not load into your scenario editor - there is no point in taking a peek! 😊

Tournament Save games Screen

Tournament saved games are used when setting up tournament scenarios. You can read about tournament games by clicking **HERE**

PBEM save slots available in the CD

There are **250** Secure PBEM saves slots (numbered starting with 000) in the extended version of the game. This is up from 5 in the regular version of the game

Camo Workshops Map Editor

This new map editing tool allows map editing in ways only dreamed of in the past!

At start up you will see....

Two **Nations flag buttons** - Selects two opposing nations . This works with the RND MAP button and the MAP LOC button. You don't NEED to set this up when building a map unless you plan to do some random map

generating at some point

Preferences - gives access to the same game preferences screens we use in the game and allows you to set the map dimensions

Summer/winter/desert button - same as the editor in the game now. It allows you to pre-select the terrain type

Date Dial - Self explanatory. It is needed to set up some of the fall and spring terrain so it's always best to set it for the month you want before starting a map

Load Map button - Allows access to the custom map files

Edit map button - Gets you into the editor

Exit button - Exits the editor

Select a custom map if you like or just press Edit Map

You are now in a screen that looks pretty much what you are used to in the game scenario map editor.

(The screen shot below is just a section of the actual screen)

None of the actual map editing buttons is different than in the game. If you need info on these click **HERE**. There new buttons and what they do is as follows:

Help- Will bring up a new Map editor help text screen

Snapshot- Shortcut Key ":" (colon)- Now we get into the new stuff. This allows you to save an image of the map IN MEMORY for use later. Further down I'll detail how that can be used. A snapshot is essentially a copy of the entire map saved off into your own private clipboard. Use when loading another map to grab a part of the new map, take a snapshot, load the new map and copy a chunk of that, then hit Restore, you are back at your original map, with a section of the second map ready to paste in the normal clipboard.

Restore- This button will only appear AFTER you take a snap shot. This allows you to restore your map to the time you took the Snapshot.

Undo- Shortcut Key "(" (left round bracket) - There are 12 undos. You no longer have to rebuild a map section if you make a mistake. If you place a terrain and then decide you don't like it..... no problem...press undo and it goes away. This is not just used for single terrain . If you place a stream from one corner of the map to the other corner then don't like it ..... no problem...press undo and it will go away. The same applies to Roads or Railways, hedges or trenches. This is set up so once you get to 12 terrain placements the 13th will overwrite the first (and the 14th will overwrite ..and become--- the second undo) so it's a constant loop. It does take a bit of getting used to but this is mainly there to give map makers a little wiggle room to make mistakes and correct them
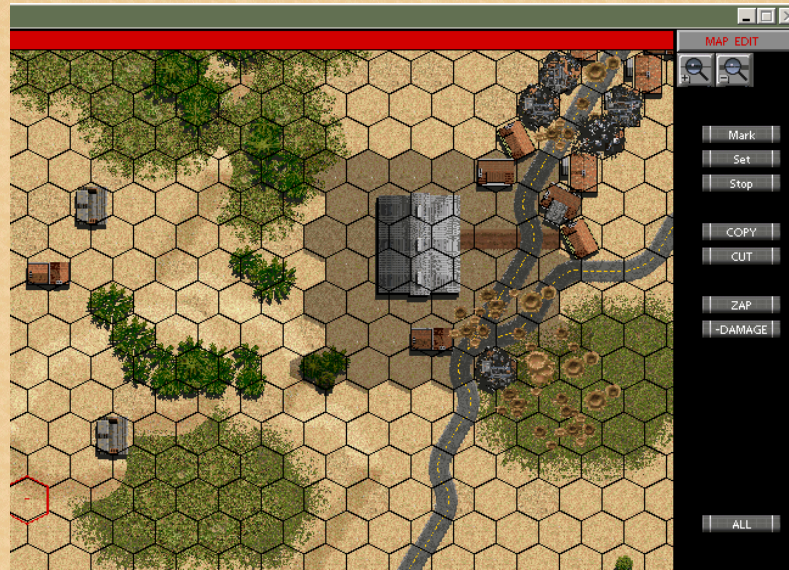
Redo- Shortcut Key ")" (right round bracket) - Try placing 6 bits of terrain on a map then press Undo 6 times and they will go away. Press REDO 6 times right after that and they will re-appear. This is a undo for the undo<g>

Load Map- Shortcut Key "L" - This allows you to load pre-existing custom map while editing another map. That is also explained below

Select- Shortcut Key "Z" - Now the fun begins. This is the start of the cut and paste routine. It may be easier at the start to load one of the maps you are familiar with and play with that or just build something quick on a blank map if you like. Once you have a map with something to cut and paste press SELECT and a new screen will appear.

(The screen shot below is just a section of the actual screen)

Mark- Shortcut Key "A" - This sets the first x/y co-ordinate for the cut-and-paste routine. Go to the map and for this test select a smallish 10x10 hex area. Click the cursor on the map in the upper left part of the area you want to cut out then AFTER you have clicked on that point of the map Press MARK. You will see that hex go dark. Now pick the LOWER RIGHT point of the cut out area you want and click on the map at that point then press...

SET - Shortcut Key "S" - You will see the entire zone you selected turn dark as in the example above. Now press......

Copy -Shortcut Key "C" - You have now copied that section of the map. When you press **copy** you will see a message appear (depending on how long you have your message delay set for), then you will be returned to the main editing page.

That message tells you if the X or Y co-ordinate was even or odd. Roads, streams, trenches etc etc etc. NEED their X and Y co-ordinates to be the same even/even, odd/even/ even/odd, odd/odd paste point as their cut point otherwise the road/trench/stream etc looks like exploded spaghetti. It is a factor of the hex mapping system used by maps, especially for vertical roads which can be offset from the hex the graphic appears in. There are safeties built in that prevent you from pasting the copied section in the wrong place but you need to be aware of the issue. If you try to paste it into the wrong place the editor will shift it to the nearest point that DOES match the paste X/Y even/odd scheme.

I digress..... You now have a section copied and you want to paste it someplace. If you read the message it may have told you the X co-ordinate was odd and the Y was even. Again.. this is NOT critical. The editor will fix it if you do paste it wrong so for now find another spot you want to paste this section. Click on the desired target location with the cursor and the hex will highlight in red. IF this IS the hex you want to paste to now press **PASTE**. A message will appear on the lower left of the screen. Paste Here? Y/N. If this is where you want it press Y. IF the spot you pressed was out of sync with the X/Y Odd/Even offsets it will tell you which was out and it will select the next closest point that DOES match the clipboard section's X/Y Odd/Even offset. After a few tries, you will get the hang of how the offsets work, and where to select the original cut or copied section from and where it is valid to paste these sections to.

That completes your cut and paste. If you don't like where it went....press UNDO and it will go away. There were other buttons on that Mark and Set Select screen..

CUT- Shortcut Key "V" - Use this to REMOVE a section of map to the clipboard and replace it's selected area with base terrain

STOP- Shortcut Key "Q" - Stops the process of cut and paste and takes you back to the main screen

ZAP- Shortcut Key "Z" - Clears ALL terrain from the selected section and replaces it with the base terrain for whatever season you selected on the first page. It is a CUT without the copy of the selected terrain to the clipboard, if say you want to clear a zone, but not lose what is currently in the clipboard.

-DAMAGE - Shortcut Key "P" - On this page this button removes all damage from the selected area (including any stray infantry fire trenches or vehicle revetments that may be left over if this was a scenario map)

ALL- lets you select the entire map. This can be handy when selecting a small map to paste into a new larger map.

Now back to the main screen where there are a few buttons left to explain

(The screen shot below is just a section of the actual screen)

PASTE. Shortcut Key "~" (tilde) - A message will appear on the lower left of the screen. Paste Here? Y/N. If this is where you want it press Y. IF the spot you pressed was out of sync with the X/Y Odd/Even offsets it will tell you which was out and it will select the next closest point that DOES match the cut's X/Y Odd/Even offset. After a few tries, you will get the hang of how the offsets work, and where to select the original cut or copied section from and where it is valid to paste these sections to.

Clr Cursor (Clear Cursor) Shortcut Key " " (space bar) - Allows you to "wash your brush" of whatever terrain you had been using so you can click on the map without placing whatever terrain you had been working with. In other words it returns your cursor to a selection item and not a terrain placement tool.

-DAMAGE. Shortcut Key "!" (exclamation mark) -Removes ALL damage from everywhere on the map. This can take some time - there is a progress meter to let you know the progress.

RND MAP- generates a random map for the two nations you have selected based on climate and month

MAP LOC- Allows you to call up a Battle location OR the Random map generator

QUICKSAVE- Allows you to save your map quickly in slot 999. If you have been working with the editor as you read through this email you will have noticed that the maps are already being Autosaved in slot 999 every five minutes. This gives you a quick way to save the map without needing to go through the full save screen process.

There are ways to use this that may not be obvious until you play with it a bit. For example. If you are building a map but want to use features from three other maps. **NO problem.**

1] from your new base map press Load map
2]Copy the section from the new map you want to paste into the new map
3]Press UNDO three times..this brings you back to your new base map
4]Pick a point on the base map then press PASTE and the section of the old map in now pasted to your base map. If you are happy with that press SNAPSHOT to save the new map in memory and press Quicksave to save it in Slot 999 (or use the red save button and save it wherever you like)

This way you can cut and paste from as many maps as you like

You can also trim maps to fit. Where there is a big empty area on one side of the map the "active" area of that map can be cut out and pasted to an empty map in about 15 seconds. You CAN use the grey border hexes as Mark and Set points if you like.

Note on Damage removal. Destroyed bridges will not be restored, you will have to rebuild them manually. Buildings can be a problem as when these are destroyed, the associated building markers are removed. The repair damage code looks for particular building icons and tries to rebuild from that information. It may well have problems on multiple hex buildings. You should mouse over your biding after a damage repair, to ensure that they report as stone or wooden buildings as expected, and are not reporting as rough as well. Any such problem cases would need to be bulldozed manually and rebuilt.
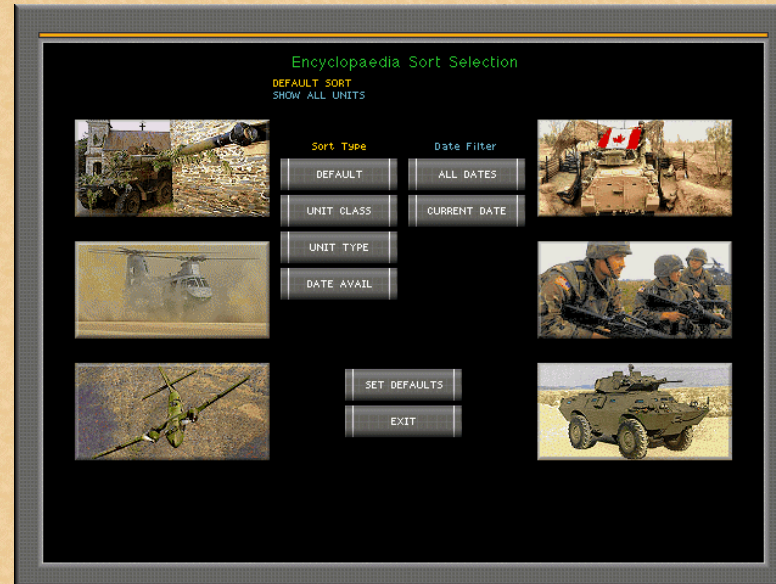
Encyclopaedia Sort Screen

The Encyclopaedia Sort screen is only available on the CD as an extra bonus.

This screen allows you to sort the Encyclopaedia data in several view modes. When you click on the "SORT" button this screen will appear

SORT TYPES

There are four ways to sort

DEFAULT sorts in the order the units are entered into the OOB database from first to last. This is the normal view of units in the game.

UNIT CLASS sorts all units from the lowest to the highest unit class number, with each unit of that class then sorted by OOB slot nimbi, lowest first. This means any "Fortifications" (Unit Class 0) will appear grouped first on the list with any "Mortar(Sub Type D) (Unit Class 255) you may have in that nations OOB , last . You can see the list of Unit Classes by clicking **HERE**

UNIT TYPE sorts the units by Type. This is a bit different that sorting by CLASS and it can be a bit confusing until you are used to it. It's based on internal game code and nothing you can see with Mobhack for example. Each Unit Class is assigned a corresponding Unit Type in the code. The unit types, in order of appearance are:

- AFVS
- APCS
- GUNS
- INFANTRY
- TEAMS
- TRUCKS
- BATTERIES

AFV classes are the "tanks" - MBT, light tanks, armoured cars etc. APC classes are the wheeled, tracked and half-track APC, Mine Proof AVF and so forth. Infantry are most riflemen, snipers, commandos and so on. Teams are MGs and so forth. Trucks are soft skinned transport. Guns are on-map artillery assets. Batteries are off map artillery classes, and also the game classes ship and barge types as such. Fortifications are considered an AFV type, as are aircraft and helicopters.

Each class is then sub-sorted on Unit class, with each unit class then sorted on OOB slot number, lowest first. This view is probably the most useful, as it groups like categories of units together.

DATE AVAILABLE- This sorts your units from the earliest to latest with the first ones being units that are in continuous service from 1946 and the last ones, in many cases, units that have not entered service as yet

DATE FILTER

There are two ways to filter information

ALL DATES allows you to see everything in the OOB from the first in service year to the last. This is the default game view.

CURRENT DATE allows you to see units that are available for the current scenario date. When playing a game this is the current battle date, and when in the scenario editor it is the date you have entered for the scenario's date. **NB** - When on the main game screen, it is usually the default battle date you set in the Game Options programme, sometimes the date of the last battle played. In this case, should you want to examine "what is available for OOB X at date D" then it is best to go into the scenario editor and set the desired date D and OOB X, then press the **BUY** button and then select the Encyclopaedia button that appears on that page and set the sort. You now have the set of troops

available to X at battle date D. Exit to the scenario editor front screen to change the date then re-enter buy mode to view the set available at that new date.

SORT TYPES and DATE FILTER are used together so If you want to sort all the OOB entries by unit class and only view the ones available for the date you have set in your battle you can. This is handy to use if you want to see quickly see what your opponent could possibly have bought for the battle you are fighting. What tanks does he have to choose from in June 1978? No problem sort by Type and current date and only those models available for that month and year will show up

SET DEFAULTS resets the standard encyclopedia view (Default sort and all availability dates)

EXIT - accept changes and exits

SCENHACK

A utility for WinSPMBT scenario maintenance.

Renumber Tab

Provides functions to delete, move scenarios to another scenario slot (i.e. renumber), or to copy an existing scenario to another slot. Source Scenario is selected on the left panel. This is all that is required for a delete operation. For copy or move operations, you must now select a Target slot in the right hand side panel. Now select the operations button in the centre (move or copy). NB - Using an existing scenario slot will result in the overwriting of the existing scenario!.

Scenario Fixer Tab

Provides repair and editing functions for existing scenarios. First you need to load a scenario, by highlighting its name in the list and then double-clicking it or pressing the Load button. Main scenario data is now loaded in the grid. Columns with a "*" are available to edit in the grid. (The grid will allow others to be edited, but these columns without a * will NOT be saved). NB - descriptions of these fields values and use can be found in the Mobhack help file, and some in the main Game Guide.

- UNIT - The Unit slot ID within the game.
- Name* - The name of the unit. Editable. Usual SP string rules apply (Strictly USA ASCII, no umlauts or cidillas or other local language features, or the game may crash). -INACTIVE- for slots not used in the scenario.
- Player - 0 (player 1) or 1 (player 2).
- OOB* - Which OOB the unit came from (may differ from the player oob e.g for captured units). Editable.
- Nation - Informative text of player 0 or 1's nationality.
- Changed? - If edited in the scenario editor (anything, whether weapons or even the name - it is no longer a stock OOB database item) this flag is set.
- Auxiliary? - Is this unit set as an AUX unit in this scenario.
- Id Tag* - nationality of the unit's ID tag. Editable.
- Icon, Desert Icon and Winter Icon. - The 3 icon types, usually you are only interested in changing the one for the scenario weather.

- Formation - Information. Gives formation number for that side, and the ID letter(s).
- Form Leader - Information. If a formation leader - gives the sides formation number and letter, otherwise says no.
- Experience* - Unit Experience. Editable.
- Morale* - Unit Morale. Editable.
- Men* - Number of men in unit (crew). Editable.
- OOB Index.- Handy when you need to find the unit with MOBHack
- Problem? -Highlights that a *POTENTIAL* problem has been found

Buttons

Nation. Re nationalisation button. Brings up a dialogue box which allows you to re nationalise units of nation X to new nation Y, and check boxes to apply this to the unit ID tags and any Victory hexes which were assigned the nation X flag.

Rename. Dialogue to change unit names from any target string to a new string.

Scenario. Dialogue that allows you to:

- - Change location name string
- - Edit scenario length
- - Change player map sides
- - Change scenario date
- - Change Scenario visibility
- - Provides a memo component which allows you to edit the scenario text. (usual formatting rules apply - see game manual for details). The Save Scen Text does precisely that - i.e this save is independent of the main SAVE button, since the scenario text is a separate file.

Press OK to accept changes, cancel to drop them (any saved scenario text is unaffected)

Formations.

Brings up a dialogue dealing with leaders and formations.

Formations Tab -Shows both sides formation numbers and names, and their level. Level can be set individually (select from the drop down combo, the press the green tick mark to save), or as a batch operation via the "update checked to level" button. To use this button first check off the check boxe(s) you want to apply the operation to in the list, then select the desired level, and finally press the "Update checked to level" button.

The update level is mainly of use in old scenarios where company's, batallion HQ etc may all be marked as level 0 platoons.

Leaders Tab

Shows unit leaders. Unit leaders can be formation leaders as well. Columns with a * are editable (saved by save routine)

- Active? - is this leader slot active.
- *Name - Leader name.
- Nat ID - nationality number of the leader .
- Nat Name - Name of that nation
- *Rank - Editable. Rank level.
- *Rally - Rally level. Editable.
- *Inf CMD - Infantry command rating. Editable.
- *Arm Cmd -Armour command rating. Editable.
- *Art Cmd - Artillery command rating. Editable.
- *Kills - Kill count. Decorative item in scenarios. Editable.
- Unit ID - Which unit this leader commands.
- Associated Unit - the name of that unit.
- Unit Morale - the unit's morale.
- Unit Exp. - The unit's experience.
- Re nationalise button - change all leaders of nation X to nation Y.

Icon Search button. Brings up a dialogue to search for icon numbers used by units - lists these in the message pane.

Replace tab - allows bulk replacement of all icons with a new icon number, with filtering on icon, winter icon, and desert icon slots. Unckeck desert icons, and any that column is not searched/replaced against.

Ratings button brings up a ratings dialogue. This allows you to assign a spread of values for each of the key ratings or just a sub set.

1. select the nationality of the leaders to modify.
2. tick or untick the various ratings you are interested in. Only ticked items will be processed
3. now for each of the items, Select low and high value ratings if you want a random number in that range to be applied OR untick the "use XX range" tick mark to use the low value as a FIXED value to apply.

OK - apply these values

CANCEL - quit

Save - save modified scenario data (confirmation yes/no).

Application (window) icons:

- Minimise button - minimise application
- Maximise button - expand to screen size
- Exit Button - close application.

Change Button

Brings up this screen

which will list every unit on both sides of a scenario. This screen is useful if a problem unit has been found or if you with to change a unit. There are check boxes at the bottom

- Show only Problem units - Blanks out all the rest of the units to make finding the ones with the problem easier
- Show only problem unit classes - Lists all units from the same unit class as the problem unit
- Keep existing unit names- Handy if the name has been edited to a historical unit name and you with to keep that name

New features added 2019

The Search tab

ScenHack Scenario Utility for WinSPMBT V3.0 - CD Version

Renumber | Scenario Fixer | Sort | SQL | Search

Search for text in scenario text files

[USMC]   [Search]

scenario 032 - 32 Counterattack at Khafji 2/91 <<< usmc advance versus iraq delay° >>>
scenario 037 - 37 Wolmi Do Landing: 9/50 (Revised) <<< battle type: usmc assault vs north >>>
scenario 088 - 88 USMC Armor in Korea #1 8/50 <<< usmc armor in korea #1 8/50° >>>
scenario 089 - 89 USMC Armor in Korea #2 9/50 <<< usmc armor in korea #2 9/50° >>>
scenario 090 - 90 USMC Armor in Korea #3 9/50 <<< usmc armor in korea #3 9/50° >>>
scenario 091 - 91 USMC Armor in Korea #4 9/50 <<< usmc armor in korea #4 9/50° >>>
scenario 092 - 92 USMC Armor in Korea #5 11/50 <<< usmc armor in korea #5 11/50° >>>
scenario 105 - 105 Operation Starlite 8/65 <<< usmc starlite | 8/65° >>>
scenario 118 - 118 The Cornered Rat 9/053 <<< battle type: usmc advance vs >>>
scenario 158 - 158 Heroes or Fanatics 11/50 <<< usmc advance° >>>
scenario 162 - 162 At Their Finest #1 -12/50 <<< usmc assault vs. chinese defend:° >>>
scenario 167 - 167 Shepherds in the Snow-12/50 <<< meeting engagement: usmc vs. >>>
scenario 169 - 169 Finding the Way Home-11/2004 <<< usmc vs insurgents° >>>
scenario 203 - 203 Masters of our Enemy 6/09 <<< battle type: usmc assault vs north >>>
scenario 207 - 207 The Australians Attack 6/09 <<< advancing usmc the australian >>>
scenario 223 - 223 Bi Phu 12/65 <<< battle type: usmc delay vs viet >>>
scenario 232 - 232 Battle of the Barricades 9/1950 <<< usmc attack vs. north korea >>>
scenario 243 - 243 The Sacred Duty 7/09 <<< usmc assault° >>>
scenario 265 - 265 Afghan Wars - A01 Ambush 11/70 <<< best played from the usmc side only. >>>
scenario 273 - 273 Fox Hunt 2/2013 <<< battle type: usmc assault vs al >>>
scenario 275 - 275 Retaking Khafji 01/91 <<< are provided by the usmc, along with >>>
scenario 285 - 285 Red Dawn: Marines at Texana <<< battle type: usmc delay vs. cuban >>>
scenario 288 - 288 Red Dawn: Ednas Surprise <<< us/usmc vs. cuba° >>>
scenario 304 - 304 Cuban Crisis - Norway 10/1962 <<< norway/usmc defend° >>>
scenario 305 - 305 RLS Alpha Co 1/6 9/12 <<< ___   1xusmc rife squad°° >>>
scenario 326 - 326 The Tank Experts 8/85 <<< usmc forces battle their way through >>>
scenario 327 - 327 The Walking Dead 9/1967 <<< battle type: usmc defend vs. >>>
scenario 330 - 330 Red Dawn: No greater pride 9/84 <<< vs. usmc/us army° >>>
scenario 331 - 331 Red Thunder: Cardenas 11/62 <<< battle type: assault/defend, usmc >>>
scenario 335 - 335 USMC : Mo-i-Rana 8/85 <<< usmc forces are there to provide >>>
scenario 346 - 346 Marines in Germany? 8/1985 <<< battle type: usmc defend vs. soviet >>>
scenario 347 - 347 Blue Bat - Beirut 1958 <<< usmc assault >>>
scenario 348 - 348 Street Fight - Beirut 1958 <<< usmc: lebanese government & >>>
scenario 356 - 356 Vital Airfield - Gotland 7/1989 <<< sweden/usmc counterattack° >>>
scenario 357 - 357 Chinese attack at Yudam-ni, 1950 <<< chinese assault vs usmc defend° >>>
scenario 400 - USMC Alpha 1/6 Marjeh 1200h <<< usmc alpha co 1/6 marjeh 1200hrs° >>>
scenario 414 - The Bridges of Jonava 9/99 <<< usmc° >>>
scenario 419 - Isla de la H4x0r 8/2016 <<< battle type: usmc amphibious >>>
scenario 442 - At Their Finest #2 -12/50 <<< usmc assault vs. chinese defend:° >>>

The new Search text files feature allows players the ability to find specific text references in the Scenario description text files. In the example above we used USMC and any scenario that uses "USMC" in any part of their scenario description will be shown listed in order of scenario number with the name of the scenario, it's slot number in the game and a brief snippet of text related to the seach string entered

Once the list is completed you can click on one that seems to relate to what you are interested in and scenhack will take you to the Scenario you clicked on in search in the Scenario Fixer screen. Once there you can click on the Scenario button and that will show you the complete text of that scenario. If that isn't what you were looking for your can click on the Search tab again and it will take you back to your original list and you can choose another or further refine your serach using a different search word or phrase but be aware the more specific your seach becomes the smaller number of results that will be displayed generally

The SQL Tab

Renumber | Scenario Fixer | Sort | SQL | Search

Make Tables   Run SQL
Write CSV   Load SQL
               Save SQL

```
SELECT DISTINCT ScenID AS ScenarioID, Title, sMonth, sYear, P1Name AS Player_1,
P2Name AS Player_2
FROM ScenData.db
WHERE P1ID = 13 AND sMonth BETWEEN 1 AND 12
ORDER BY sYear, sMonth;
```

ScenarioID	Title	sMonth	sYear	Player_1	Player_2
1	1 Obong-Ni Ridge 8/50	8	1950	U.S.M.C.	N.Korea
88	88 USMC Armor in Korea #1 8/50	8	1950	U.S.M.C.	N.Korea
37	37 Wolmi Do Landing: 9/50 (Revised)	9	1950	U.S.M.C.	N.Korea
89	89 USMC Armor in Korea #2 9/50	9	1950	U.S.M.C.	N.Korea
90	90 USMC Armor in Korea #3 9/50	9	1950	U.S.M.C.	N.Korea
91	91 USMC Armor in Korea #4 9/50	9	1950	U.S.M.C.	N.Korea
232	232 Battle of the Barricades 9/1950	9	1950	U.S.M.C.	N.Korea
92	92 USMC Armor in Korea #5 11/50	11	1950	U.S.M.C.	China
162	162 At Their Finest #1 -12/50	12	1950	U.S.M.C.	China
167	167 Shepherds in the Snow-12/50	12	1950	U.S.M.C.	China
442	At Their Finest #2 -12/50	12	1950	U.S.M.C.	China
347	347 Blue Bat - Beirut 1958	7	1958	U.S.M.C.	Red
348	348 Street Fight - Beirut 1958	7	1958	U.S.M.C.	Syria
304	304 Cuban Crisis - Norway 10/1962	10	1962	U.S.M.C.	Russia
331	331 Red Thunder: Cardenas 11/62	11	1962	U.S.M.C.	Cuba
105	105 Operation Starlite 8/65	8	1965	U.S.M.C.	Viet Cong
223	223 Bi Phu 12/65	12	1965	U.S.M.C.	Viet Cong
327	327 The Walking Dead 9/1967	9	1967	U.S.M.C.	Vietnam
285	285 Red Dawn: Marines at Texana	9	1984	U.S.M.C.	Cuba
330	330 Red Dawn: No greater pride 9/84	9	1984	U.S.M.C.	Russia
335	335 USMC : Mo-i-Rana 8/85	8	1985	U.S.M.C.	Russia
346	346 Marines in Germany? 8/1985	8	1985	U.S.M.C.	Russia
109	109 Come to Papa Bear 2/91	2	1991	U.S.M.C.	Iraq
414	The Bridges of Jonava 9/99	9	1999	U.S.M.C.	Russia
77	77 Marines return to N. Korea 1/04	1	2004	U.S.M.C.	N.Korea

The SQL tab is not new for 2019 but it has been expanded to allow players with knowledge of how to write SQL (Structured Query Language) the ability to both save any they write in a new folder in the game named SQL but also the ability to load those saved SQL's so they do not have to be re-written every time. We have included a few sample SQL's with both games in the SQL folder to be used as guides/examples. SQL query's may not interest the average player but with the increase in the number of scenarios in the game it allows anyone with the knowledge of how they work to fine tune inquires to zero in on specific scenarios that may interest you. However, the avearge player may find the basic searches offered by the Sort tab to be all they need but if you want to learn more about using SQL's this would be a place to start **http://www.sqlcourse.com/intro.html**

There is included with the 2019 patch a general SQL inquiry that seaches for "shermans" as an example of titled : **Template SQL example with all data fields.SQL**
This SQL includes all the fields of data that is gathered by a search using that SQL screen

```
select distinct
ScenNum,
sTitle,
Unit,
uName,
nation,
oobindex,
uclass,
Player,
uClassName,
icon,
DesertIcon,
WinterIcon,
Auxiliary,
Changed,
problem
from sData
where ( LOWER(uName)  like "%sherman%")
order by ScenNum
```

By using (LOWER(uName) you can seach for names without having to use capitols in the exact way they are actually used which is handy when you need to find "SdKfz" you can type in all lowercase as 'sdkfz'
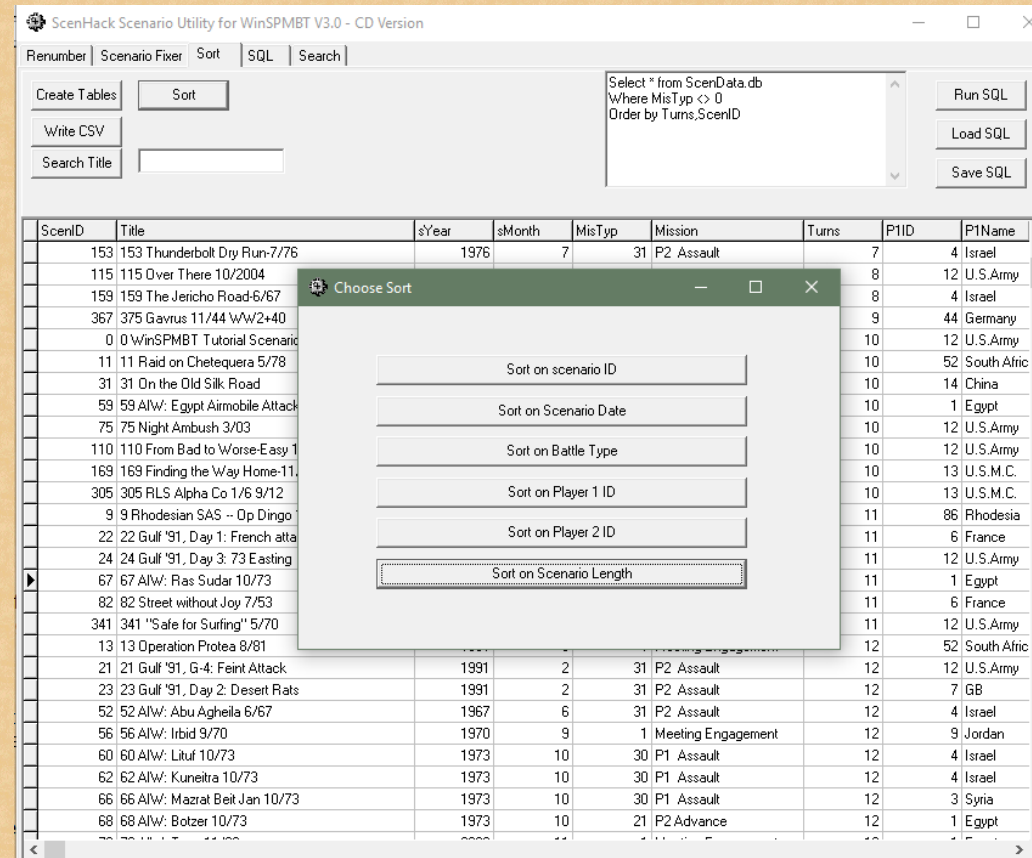
Just remember when making a list, all different data fields **_need to end with a comma except the last one_** and also an SQL as above can also be written...

select distinct
ScenNum,sTitle,Unit,uName,nation,oobindex,uclass,Player,uClassName,icon,DesertIcon,WinterIcon,Auxiliary,Changed,problem
from sData
where (LOWER(uName) like "%sherman%")
order by ScenNum

Please also NOTE that to use the ability built into this that allows you to click on a result and be taken to that scenario in the Scenario Fixer screen the **ScenNum** field <u>must</u> be present , otherwise you <u>will</u> get an error if you click on a result line and it tries to open the appropriate scenario file.

The Sort Tab

| ScenHack Scenario Utility for WinSPMBT V3.0 - CD Version | — □ ✕ |

Renumber | Scenario Fixer | Sort | SQL | Search |

Create Tables   Sort

Write CSV

Search Title   [   ]

Select * from ScenData.db
Where MisTyp <> 0
Order by Turns,ScenID

Run SQL

Load SQL

Save SQL

ScenID	Title	sYear	sMonth	MisTyp	Mission	Turns	P1ID	P1Name
153	153 Thunderbolt Dry Run-7/76	1976	7	31	P2 Assault	7	4	Israel
115	115 Over There 10/2004					8	12	U.S.Army
159	159 The Jericho Road-6/67					8	4	Israel
367	375 Gavrus 11/44 WW2+40					9	44	Germany
0	0 WinSPMBT Tutorial Scenario					10	12	U.S.Army
11	11 Raid on Chetequera 5/78					10	52	South Afric
31	31 On the Old Silk Road					10	14	China
59	59 AIW: Egypt Airmobile Attack					10	1	Egypt
75	75 Night Ambush 3/03					10	12	U.S.Army
110	110 From Bad to Worse-Easy 1					10	12	U.S.Army
169	169 Finding the Way Home-11.					10	13	U.S.M.C.
305	305 RLS Alpha Co 1/6 9/12					10	13	U.S.M.C.
9	9 Rhodesian SAS -- Op Dingo					11	86	Rhodesia
22	22 Gulf '91, Day 1: French atta					11	6	France
24	24 Gulf '91, Day 3: 73 Easting					11	12	U.S.Army
67	67 AIW: Ras Sudar 10/73					11	1	Egypt
82	82 Street without Joy 7/53					11	6	France
341	341 ''Safe for Surfing'' 5/70					11	12	U.S.Army
13	13 Operation Protea 8/81					12	52	South Afric
21	21 Gulf '91, G-4: Feint Attack	1991	2	31	P2 Assault	12	12	U.S.Army
23	23 Gulf '91, Day 2: Desert Rats	1991	2	31	P2 Assault	12	7	GB
52	52 AIW: Abu Agheila 6/67	1967	6	31	P2 Assault	12	4	Israel
56	56 AIW: Irbid 9/70	1970	9	1	Meeting Engagement	12	9	Jordan
60	60 AIW: Lituf 10/73	1973	10	30	P1 Assault	12	4	Israel
62	62 AIW: Kuneitra 10/73	1973	10	30	P1 Assault	12	4	Israel
66	66 AIW: Mazrat Beit Jan 10/73	1973	10	30	P1 Assault	12	3	Syria
68	68 AIW: Botzer 10/73	1973	10	21	P2 Advance	12	1	Egypt

Choose Sort   — □ ✕

Sort on scenario ID

Sort on Scenario Date

Sort on Battle Type

Sort on Player 1 ID

Sort on Player 2 ID

Sort on Scenario Length

The sort tab is another feature of Scenhack that is not new for 2019 but it does have added features but first we need to explain the basic sort features. There are six basic sort inquiries as seen in the example above. When you select one and click on the button the Choose sort menu with disappear and a list will be created. When that list is created you will see the window at the upper right has changed as well. What you see there is the SQL that button was "programmed" to use and anyone with SQL knowledge can then further refine that search using that window then clicking on Run SQL. Clicking on any scenario that appears on that list will bring you to the Scenario fixer tab and while there clicking on the scenario button will show you the scenario description write up for that scenario. The SQL window in the sort screen does the same job as the SQL screen just as an added convience to players with SQL usage knowledge.

Please note that the Sort SQL uses a different table from the SQL tab, and the key field here is **ScenID** which must be present to allow you to click on a result line and open the scenario you want to look at feature to operate properly.

Important to remember
If you make any changes or add new scenarios you need to press the "Make tables" or "Create Tables" buttons so scenhack can find what you are looking for !

CAMPAIGNHACK

Provides Scripted Campaign management functions for WinSPMBT.

Red X - exits programme.

This programme is implemented as a Tool Window - so cannot be resized or minimised.
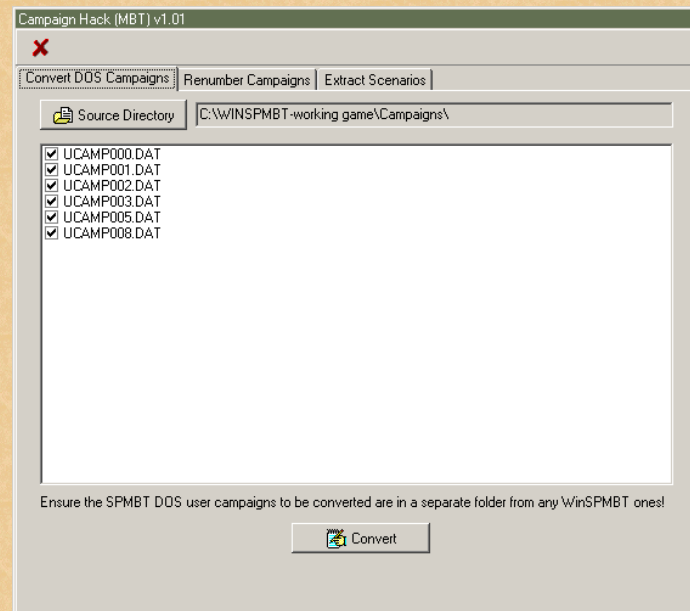
Convert DOS Campaigns Tab

(NOTE this was an early function of the program that is no longer used but left in "just in case" an old campaign surfaces)

Navigate to the directory containing the DOS SPMBT campaign(s) to convert. if any found, these will be listed in the CheckListbox control. Tick off those you want to convert, then press the CONVERT button.

NOTE!

This utility does **NOT** have any way of telling if campaigns are in DOS or Windows format, so always ensure that ONLY DOS SPMBT campaigns are in the target folder.

This is the ONLY tab which works on DOS SPMBT Campaigns, Do not use the other tabs on un-converted scenarios!.

Renumber Campaigns Tab.

Navigate to the directory containing the campaign to renumber. Any found are listed on the LHS column. Select a target slot number in the RHS column, and press RENUMBER. Campaign is now renumbered (i.e. moved) to the new campaign slot.

Extract Scenarios Tab

Utility to extract the constituent scenarios from a campaign. Select the target campaign on the LHS column. Now, select the start scenario number to extract to, or leave at the default scenario slot of 800. Extracted scenarios will be written to this lot in ascending order. Press EXTRACT to start the process.

OP-FIRE FILTERING

Allows players to preset the type of targets they wish their units to engage

You get to this with the Y key or by pressing the "Set Firing range" button. or by pressing the 0 (zero) key.

Once that screen appears press FILTR button ...

.....and the opfire filtering screen will appear. If you are in the deploy screen and normal map screen the "0" (ZERO) key will get you directly to the filtering screen without need to go through Y key screen. When you exit the opfire screen you will be brought back to the main menu NOT back to the Y screen

A unit has TWO op-fire hexes!

1) the normal circle based on unit's position

2) an **OVERWATCH** hex which is displaced elsewhere and can have separated filtering . If these overlap the regular (#1) opfire will have priority.

An example of an OPfire hex

The cursor will be shown as a cross hair if the hex is in LOS, or blank if not . An additional new feature can be found by pressing the "Unit View" button. This allows you to see every hex visible to that unit on the entire map without having to search 360 degrees with the unit. Click on the "Find Opfire overwatch hex "button (the binoculars) and the overwatch hex is displayed as an arty bombard symbol with the radius of interest as a red circle around that.

Button row 1: zoom in map, zoom out map, find unit, next unit, prev unit, next formation and find unit's overwatch hex on map

Overwatch hex block

The button is used to change the radius (-1 to clear overwatch hex) buttons for interest - if these are ON, targets in the circle will be engaged

- AFV ? (which will use the front armour limits)
- Soft skin ?
- Infantry ?
- ATGM ?

Information for each button is displayed at the top of the screen in the red bar when active.

Range from current unit Hex

- **Steel armour front max** - press to set the upper limit of steel front to engage (**NOTE** The maximum *must* be set before the minimum if both are zero)
- **Steel armour front min** - press to input number of the minimum armour to engage
- **Armour engagement range** (in Hexes) -This is like the Y key but just for armour meeting the above filter category.
- **Infantry Engagement range** - separate range for infantry. (in Hexes)
- **Soft vehicle engagement range** - separate range for trucks etc. (in Hexes)
- **ATG and ATGM** - separate range for ATG and ATGM. ATGM-carrying units are also included here even if a soft vehicle or infantry, plus the ATGun unit class (in Hexes)
- **AAA Weapons Hold** -Allow a unit to engage an Air unit or not. This is a simple Yes or no button

3 (red) load buttons - These are used to load one of three different filtering set ups and are read from an INI file

3 (blue) save buttons - These allow players to save a filtering protocol in the INI file, overriding one of the 3 default settings.

"Clear Dark" and "Unit View" buttons

Clear Dark - Clears any darkend hexes on the map. Useful after using the new Unit View button

Unit View - Shows every hex the unit you have selected can see on the map. Very handy for checking all around LOS.

Bottom button row: "action" buttons

- **Clear filter** - clears filter status of unit but *NOT* any ranges etc that have been set that a player may want to keep those for the next unit
- **Apply to this unit (saluting man)** - use these values for this unit and set op-fire filter flag ON
- **Clipboard button** - use these op-fire filter settings for the entire platoon.
- **Red up arrow button** - exits the screen

PLEASE NOTE

If you are using the DL version of the game the only "action" buttons that are active are the "Clear Filter" and the "Exit" button. The "Clear Filter" button is active to allow DL version players the ability to clear any opfire filtering (if they so desire)that may be added to a scenario by scenario desginers in the future. When using the DL version the opfire settings can be set but they cannot be saved so they will not be applied to your units.

PBEM CAMPAIGN

Plays like a normal campaign but for two players. Press the Campaigns button in the main menu and if you have the CD version you will see a "PBEM Campaign" button active. This allows from 3 to 21 battles with start and end dates just like a regular campaign. Player 1 begins by choosing his core force in the same manner as a regular campaign but when you are done choosing your core the game will ask for a password. Once that is entered you will see that "Basic Security" is choosen and is in fact the only security mode available for PBEM campaigns. Pressing "Continue" will bring player 1 to a new screen that prompts you to choose a PBEM save slot. These are the same save slots you would use for regular PBEM games.

When the files are sent to Player 2 and he opens them he will be prompted to choose a password. Once that is done and he presses "Continue" he will be able to choose his core force. Once that is done and he presses "Done" the game will be autosaved in the same save slot player 1 originally choose for this game and player 2 will be prompted to send player 1 the files.

Once the files are returned to Player 1 and he opens them he will be asked for his password. Once that is entered he will be able to choose his support forces. Once that is done and Player 1 presses Done he will be prompted for a password and once that is done he will be able to deploy his forces. Pressing "Quit Deploy" will autosave the game.

Once the files have been sent to Player 2 he will be prompted to enter his password and then player 2 can select his support troops. Once that is done he will be asked again for his password. Once that is done he can deploy his troops and once he has deployed his troops pressing "Quit Deploy" will autosave the game

When the files have been sent back to Player 1 he can begin playing in the same manner as any regular PBEM game

When the game ends a PBEM Campaign Summary screen will appear that looks like this

Unlike in a regular campaign against the AI, in the PBEM campaign each player has an individual score and points are scored even for a loss.

Here is the point structure

Decisive Victory - 5 points
Marginal Victory - 4 points
Draw - 3 points
Marginal Defeat - 2 points
Decisive Defeat - 1 point

In addition, unlike in the regular campaign the loss of your headquarters does not lead to the termination of your campaign, nor are there any special battles, and also you will not be able to view the end game map and inspect your opponent's forces as that would give you too much intel on your opponents core force.

After viewing this screen and pressing "Continue" you will be able to rebuild your damaged forces . Once done press continue and the game will be autosaved. Send those files to your opponent and he will see the battle report screen and then the PBEM Campaign Summary screen and once he presses Continue he will be prompted for a password and then he will be able to rebuild his core . Once that is done he can begine picking is support force for the next battle.
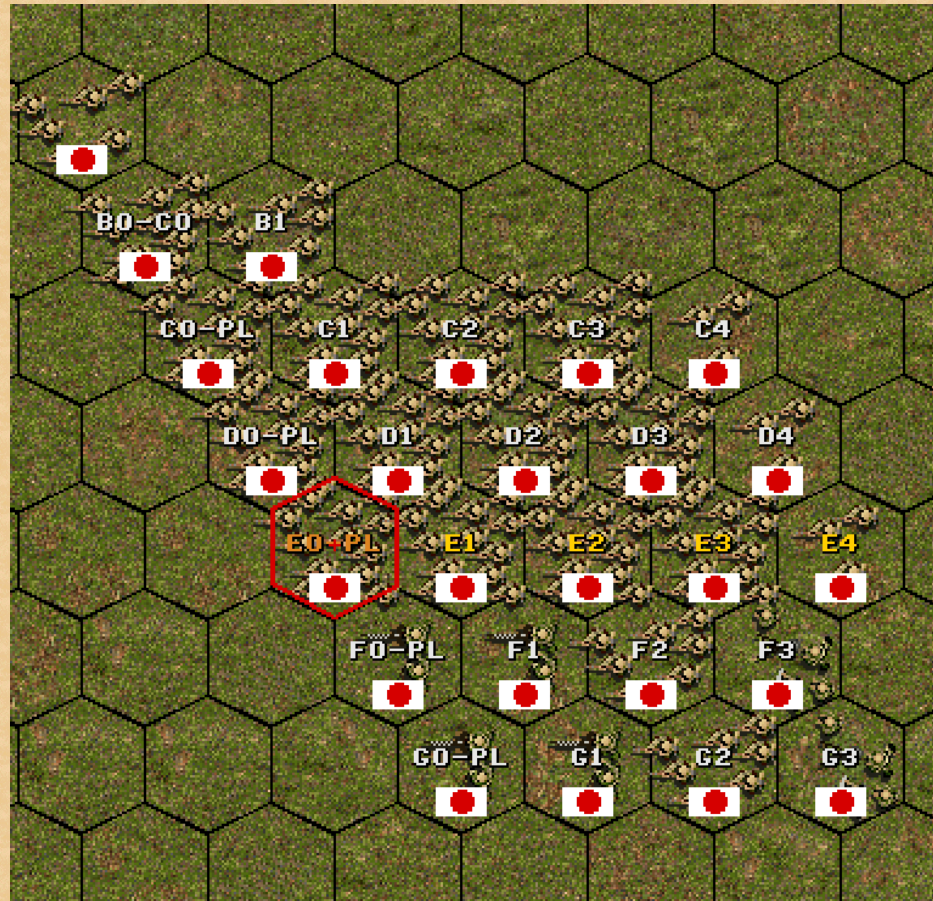
PLEASE NOTE

The first 3 battles in a PBEM Campaign will always be meeting engagements. This allows for the standard 3 battle limit to be used for a fair and open competition (all 3

Show/Hide Formation ID's

Allows players to view all the units under a formations command (B0, C0, D0 etc) either by pressing the "Show/Hide Formation IDs" button in the HQ menu or by pressing the ' 5 ' key on your keyboard. Press once for on and again to turn this off. It allows players to see at a glance where all the troops under the direct command of a x0 are located

In the example above the B0 unit is a company commander (B0 - CO) and it's direct subordinate unit is B1. The actual selected platoon of this company is shown in Yellow. The platoon commander (E0 - PL) will slowly flash gold/yellow to indicate it's status as leader and the other units under it's command will be shown in regular solid Yellow (E1, E2, E3, E4), The unit at the top without ID at this time is the Battalion commander (A0). Had that been selected it would show as (A0 - BN) and any units directly under its command would show up as well. In some cases quite a number of units come under the A0's direct command and these are shown

New for **2013** -- The game now defaults to showing the formation IDs. This saves pressing the 5 key to turn the feature on each time you start the game. The 5 key can still be used to toggle the feature off and on if so desired.

New Extended (CD) Game only Features for 2013

We have expanded the information displayed when you pass the mouse cursor over a hex for the CD version of the game. Previously, the only information about a hex was Height and the terrain types in it. The new display includes ground height, obstacle height , total height and Terrain Density displayed like this :

Ground Height / Obstacle Height / (Combined Height) Density XX

So the above example tells you the ground level is 1 unit high and the trees are 14 units high so the combined height of the ground and obstacles in that hex above base ground level (zero) is 15 units high and the trees have a density of 27 which means you can see through them into the hex behind.

Ground Height and Obstacle Height are self explanatory but Terrain Density , while being an old concept for the game, it will be a new one to most players. Terrain Density or just "Density" for short is a value the game uses to determine how solid or transparent a bit of terrain is. For example, trees block Line of Sight (LOS) to the next hex when they are greater than >30 density. If they are under 31 LOS is deemed not fully blocked and you can see into the hexes beyond that hex.

Density is cumulative for purposes of LOS. A hex with trees that have a density rating of 20 will not block LOS to the hex beyond it but if that hex has trees that are also have a density rating of 20, LOS will be blocked beyond that hex. Theoretically you could have a number of sparsely treed hexes in a row before LOS would be blocked but typically in the game the maximum would be two but please note those two hexes do NOT have to be adjacent. The game has worked this way since SP1 was first released, we are just displaying to players for the first time.

While Ground Height and Obstacle Height might be self explanatory, how the game utilizes them together with Density requires some explanation.

Ground terrain ALWAYS blocks LOS 100% and it blocks LOS when it is more than 3 "units" of height above the level your unit is on. For example, if your unit is standing on a hex that is base ground level (i.e. zero elevation) that units LOS will be blocked by ground that is 4 units or greater high.

Obstacle Height combined with density also blocks LOS and once again it is cumulative. For this I will use tall grass as a general example. Tall grass is 2 units high and has an average density in the game of 10. If the ground the grass is on plus the grass itself is greater than a total of 4 units high LOS will be blocked when enough density is accumulated to do so. In some cases this might take quite a number of hexes to achieve if the terrain between each >3 units of total height hexes are <4 units of height high

Each "unit" of height in the game is now considered to be roughly 24 inches (61 cm) so each 10 unit level of elevation in the game represents roughly 20 feet (6 meters)

Game Options **for 2013**

The Game Options launcher programme now allows you to easily edit the INI value for the AIAdjustpercent variable on the Misc Tab. Set at 100% for the default points, 120 to give the AI a 20% points advantage and so on. (Free game users can see this value but not edit it unless they manually do so in the INI file as described in the Game Guide section on AIAdjustpercent).

Take Cover ! for 2013

Non-vehicle units with 2 or more MP remaining can now voluntarily take cover to break enemy line of sight at a cost of 2MP by pressing the ' C ' key. Taking cover especially if close to the enemy is not a guarantee that they will break LOS.

Delete button for 2013

A delete button has been added to the main screen options to allow the deletion of no longer needed save games.

Change all units for 2013

A facility to change all units of a type in the campaign rebuild screen has been added. Set the button to change all and the change from one type to another will be for all such units in the core. For example, select one of your T-72 and change it to a T-80 after toggling the change all mode. All your T-72's will now be changed to T-80's provided you have sufficient repair points. NB - if some tanks are same name, but different Unit Classes (e.g. centurion (CS MBT unit class) and centurion (MBT unit class) so *only the ones of the selected unit class will change*.

Formation Menu for 2013

In the deployment only, a new button is added to the Formation Menu to allow the fixing of the formation leader. If the platoon leader has been moved to a unit other than the 0 index, he will be exchanged back into place with that other leader. This is chiefly useful for repairing platoons in long campaigns. It is a manual and not an automatic function since some people will probably like the current leader assignment.

General Support and Direct Support off-map artillery for 2013

General Support and Direct Support off-map artillery types have been added for off-map artillery purchase.

Direct Support is less responsive than normal arty, General Support even less so. The delay is longer for calls for fire, other than onto gold spots or as a pre game bombardment (their main use). Shifting fires costs a little more for these type of batteries and they are less likely to be in radio contact as they are theoretically shared with other formations than yours. As well, they are less likely to fire counter battery fires if left idle. Strike air types may be bought in general or direct support mode if desired.

Direct Support costs 75% of a full Under Command battery and General Support costs 50% of a full Under Command battery.
A button on the purchase menu cycles between artillery types. If General Support or Direct Support purchase is active, then only the appropriate formations are filtered to show on the arty page and the miscellaneous page (for strike air). Cycle this back to Under Command artillery to see the filtered-out formations again. General Support and Direct Support off-map artillery cannot be purchased for your core in a campaign

Timed objectives for 2013

Timed objectives have been introduced.
A button has been added to cycle through the possible values and then back to no timed objectives. The values start at 3 and increment to 30 then reset to 0. The button is available at game set-up in the battle and campaign generators and in the scenario editor.

In a meeting engagement the victory hexes start accumulating a timed score from turn 3 onwards.

In an advance mission, the defender gets timed scores from ¼ of the game length onwards. In an advance the attacker wants to clear the enemy as fast as he can.

In an assault, the defender gets the standard victory hex score credited from the halfway point onwards, and double from the thee-quarter point on. Scoring this way allows the attacker some time to clear defensive obstacles etc.

The attacker does not get any timed hex score credit. He removes any potential future score from the defender by taking the victory hex as early as he can. Scenarios can be built with timed objectives, this includes those built into Scripted Campaigns but these will only be of use for full CD game owners. The last turn and accumulated scores for timed victory hexes are reported at the end turn phase once they have started to be credited for the battle type. The total is also now reported on the end game score sheet.

Victory Hexes for 2013

The standard 7 hex cluster of "non-shotguned" victory hexes will now be spread about in a wider "splatter" pattern approximately 1/3 of the time rather than being in the traditional tight cluster. This produces a more open objective cluster that may need more than a scout car to take and also defend than the "normal" close clusters do but less than the "shotgun" type clusters.

Roster button for 2013

The standard roster button has been added to the deployment menu.

wreck display- ON/OFF for 2013

The display of wrecks In the game map can now be toggled on and off as with Victory Hexes in order to allow a less cluttered view of the map if needed. The "|" key (above the "\" key (That is the Victory Hex toggle on/off shortcut on a US/UK keyboard) is assigned to the function.

Obstacle height and density editing for 2013

Obstacle height and density can now be adjusted in the map editor and the extended map editor using the ' < ' key to adjust Obstacle height and the ' > ' key to adjust Obstacle density. This will be of use to map and scenario designers who wish to create sparsely treed hexes or areas of really tall grass or underbrush.

New Extended Game (CD) only Features 2014

Programmed barrage 2014

We have added a programmed barrage option for owners of the extended features version. This new feature is only available as a pre first turn set-up option so is only available when the player is advancing or assaulting . It can be set up to start at any time from initial bombardment to the limit of the turns set for that battle. Programming is easy. Assume for this example you want to set up an pre game bombardment with any number of guns that would deliver artillery just in front of a planned advance. You would choose the hex you want to start the bombardment just as you normally would then , once that was done you would advance the Artillery bombardment turn button (the one with the large +) to the next turn you wanted bombardment from that gun to land. It could be the next turn or it could be any number of turns in advance. When you click on the map for the next bombardment hex the first one you placed will disappear but be assured it has not been lost. You can continue on for as many turns as the guns have ammo for and it can be used by scenario designers as well. The AI will will sometimes use this feature in the attack and assault in the extended features version.

Please note that once a pre-planned bombardment has been set it cannot be stopped until complete, and **any guns assigned on a programmed task are not available to the player until their part of any programme is complete but the entire programme may be cancelled by pressing the "cancel Programme" button on the bombardment screen**. This button is provided to free game users as well, since they may want to do so in a scenario with an advanced programme that was made by a CD owner. The cancel bombardment button is also the only way to clear any programme you are creating (in the setup turn 0 of an advance or assault, or in the scenario editor) - it's all or nothing. Therefore plan your programme and plot it with care as this is the only way to cure a mistake.

Map editing in the "View Map" Screen 2014

Full map editor functionality is now made available on the "View Map" Screen, for any desired tailored tweaks of a randomly generated map for the extended features version only.

Larger text option 2014

A larger text option has been included for the extended features version only. This uses a new font we developed for many of the screens that makes them easier to read in many cases. This new feature can be switched on or off though GameOptions / Misc . The spin off effect of this was many screens needed slight adjustments to allow both the old and new font to work equally well which lead to further adjustments that balance text display better in either mode

New Extended Game (CD) only Features 2015

Cloning Icons and photos in scenarios 2015

Icons and photos can now be changed for scenarios in the in-game editor using the Miscellaneous button and cloned to similar units using the Cloning feature

New Nation added..... GEORGIA 2015

Georgia will now show up in the extended version of the game starting May 1991

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New Extended Game (CD) only Features 2016

Additional new status information is now shown at the bottom of the screen. If the status is pinned, the status line is yellow, if retreat or worse, it is red. If suppressed more than 1, that is highlighted in yellow and Damage is now shown. In green if 0, otherwise in red.

Scenhack has a new SQL sort facility. This will allow extended game/ CD holders to sort scenarios by the follow methods

- **Scenario ID** - (the current default sort)
- **Scenario date** - creates a list of all the scenarios in the game sorted earliest to latest. Handy for anyone interested in a specific time period
- **Battle type** - if you are only looking for assault scenarios for example this is will give you a list with all battle types grouped together
- **Player 1 ID** - if you are looking for all scenarios with Poland (for example) as player 1the list will order all scenarios by player 1 nation ID
- **Player 2 ID -** as above but the list will be ordered with the priority being Player 2.... If you want to find all the scenarios Great Britian is the opponent the answer is now one click away
- **Scenario length** - If, for example, you only have time for a short game and don't want to spend an hour of more looking through every scenario to find one for you to play with one click a list will be provided of all scenarios in the game ordered by length from shortest to longest

You can also search by scenario title if you know it

PLEASE NOTE:

When you press the **SORT** tab for the first time the game creates information tables based on what you have in you scenario folder. Not everyone will have the same info as not everyone only has the stock scenarios in their Scenarios folder so players need to be aware that during the reading phase that usually takes under a minute, any extra scenarios that may have been created or modified will also be added to this list so remember this is not just a list of the standard as released game scenarios but every scenario in your scenario folder. Players should also remember that this reading of scenario data ONLY occurs when you first press the SORT tab.....any new scenarios you add after that will not be automatically read into the list so as you add new scenarios you will need to remember to press the **CREATE TABLES** button to get those scenarios into the data base

Pressing the **WRITE CSV** button a "Save As" screen will appear and you will be able to save a printable CSV record of this information

Pressing **SEARCH TITLE** will produce a list of all scenarios with a key word......for example of you recall a scenario you played had the word "hill" in the title.... a search for "hill" will produce a list with all the scenarios with "hill" in the title.

You will also see a **RUN SQL** button. That allows players to further refine their search using the data headers. For example the default for search title is ORDER BY Scenid and the list will be produced in scenario ID order but if you wanted to create the list by year you would change "ORDER BY Scenid" to ORDER BY syear and the list would show scenarios by the year they are representing

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TARGETING WITH NLOS WEAPONS

NLOS weapons can only be targeted by the force HQ (A0) and dedicated artillery Forward Observers (includes Scout helicopters). The '0' units that can normally call artillery cannot in the case of NLOS. Note that an A0 unit that has been changed to a non HQ Unit Class (e.g. by you in an ongoing campaign, or by a scenario designer) is no longer of the HQ Unit class, and thus cannot call NLOS fires.

To target an NLOS unit first press the " I " key. You will now see a list of the NLOS firing units available on the Right. You can click on any of the listed NLOS units to select it as the current firing unit. Once you have the firing unit unit you want you can click on a target on the map or use the ' N(ext) ' or 'P(revious)' keys to go to the next or previous target. Once you have your target and firer pair as you wish it, then press the ' F ' key to fire the unit and the firing sequence will begin. NLOS units that have used their shots for that turn will disappear from the list of available units

NLOS TARGETING

H0▷ Pereh NLOS
H1▷ Pereh NLOS
I0▷ Pereh NLOS
I1▷ Pereh NLOS
J0▷ Pereh NLOS
J1▷ Pereh NLOS
K0▷ Pereh NLOS
K1▷ Pereh NLOS
L0▷ Hafiz NLOS
L1▷ Hafiz NLOS
M0▷ Hafiz NLOS
M1▷ Hafiz NLOS

First Page
Next Page

Please note the map will NOT scroll while you are in the NLOS targeting screen. Use the ' N(ext) ' or 'P(revious)' keys to find your available targets. Use the Escape key or ^ button if you wish to abort without firing.

New Extended Game (CD) only Features 2017

- CD / extended version holders will now get a warning message if they try to enter a building hex with a vehicle. You are now asked to confirm that you *really* want to do that. This is to stop you from inadvertently immobilising yourself as most cases involving building entry with vehicles is the result of a too long movement call through an urban built up area. The feature will also display on rough+slope combinations if you have travelled 3 or more hexes and thus are in danger of sticking. It's just a "friendly reminder."

- SAM and AAA will tend to save shots on low-probability to hit shots. Especially against Spotters (inc UAV) with less than about a 20% chance, other fliers at about 10%. AAA guns will hold fire at longer ranges (>1 KM) if to hit is under about 10% and wait for a better shot. This applies only to CD owners.

- We have introduced a new Formation sorting routine for the premium game. Over all the years these games have been developed, unit classes have expanded as required, but there was no logical order to the expansion as they were added on a need-it-now basis so the different infantry, armour and artillery unit classes that were used to build formations were spread all over the 256 unit class slots available and this meant that in some cases when buying formations you had to search though multiple pages of formations to find the ones you wanted. The new routine in place for CD holders only helps group unit types together and in a more intuitive and logical way. The caveat to that is that when sorting formations by unit class the unit class of the formation is still determined by the first unit in the formation and there is really no getting around that.

  For example. with this new routine if you go into the artillery page you will generally find that Forward observers are the first formations listed then generally if there is consistency to the first unit in the formation you will find the light mortars, then the medium mortars then the heavy mortars then the AT guns, then the Hvy AT guns through field guns into rocket formations, off map guns and finally AA guns. Again...its all determined by the first unit in the formation but in the past (and the free game will still use the original method) you may have had a one type of infantry company with unitclass #1 infantry as the first unit but the second type of infantry company may have had a unitclass # 64 Medium Infantry unit leading to in some cases a dogs breakfast of the sort order. A good example of that was the winSPMBT Russian OOB in the years that the T-55 and T-62 unitclass #13" medium" tanks were active along with the T-64 and up unitclass #59 "MBT" formations but the lower end Mediums were on page one and the higher end MBT's were on page 2. With this they are all grouped on page one and we think this will help bring a bit more order to the game

- A new button has been added to the main screen that allows access to the premium map editor from inside the game

- Seven new terrain types have been added and we have also added an exciting new way to apply terrain to the map for owners of the extended game

  Previous to this release the "Fill range" and "Fill" functions in the map editor were mainly used to flood and entire map with a base terrain that would follow the contours already on the map. If you tried to fill less area it placed whatever   terrain you chose to use as a giant Hex shape block of terrain that was virtually useless for making maps so as a general rule anyone making a map avoided that control unless they were "skinning" and entire map. We have added a new   dimension to the fill range controls that expands it's usefulness 10 fold or more

Now when pressing "Fill range" Extended game (CD) owners will see the following prompts:

First you will see **"New Fill Range: "** and you can enter any number you like. 255 will fill and entire map but you can choose any amount . After entering the number of hexes you wish to place your terrain onto the map, this new message   will appear: **"Enter 0 for Block fill, or 1-90 for a Splatter Effect "**. "0 for Block fill" will give you what this feature has always given... a solid mass of terrain but entering 1-90 for a Splatter Effect controls what percentage is covered in the   area you selected. Enter a high number and it will fill to that amount, Enter a low number and you have a much finer control over how much is placed on the map allowing you to build terrain gradually. It can almost be thought of as a spray   gun. It is very useful when building up a forested area or when starting a map off after building the hill contours if you want to blend different types of grass.

AS WELL we have changed the old SSI function of "right clicking" the mouse to add 7 hex clusters of terrain to the map at a time. <u>Left clicking the mouse button will still give you single hex fine control</u> but now right clicking the mouse   utilizes the same function as fill range so whatever range and density you have set you can now add by clicking the right mouse button. If you want to use it the "traditional" way simply set the range to 2 and 0 for Block fill and it will behave   as it always has but now you can set whatever range you want to control the size of the fill but you can also adjust the splatter effect which GREATLY enhances the usefullness of the tool so adding terrain becomes quick and easy reducing   the time it use to take to hand build a map by many hours.

This new tool has many uses but one thing you really want to avoid is mixing contrasting terrains together too much. A little is OK but it really depends on what you are mixing as too much is very distracting and can totally camouflage any   contours on the map. What it's ideal for is blending similar colour densities together or placing forest. you can also use it to place hills but even a fast computer will take a few seconds to compute everything and place it on on a full sized   map so be patient at first as slower computers may take a little longer to complete the command. We are after all, asking a 20 year old game to do a lot more than it used to but it will with sometimes spectacular results. I help design the   feature and I'm still finding new ways to use it. We look forward to seeing the maps players design with this new feature.

New Extended Game (CD) only Features 2018

CD owners Only. In the main game screen and deployment screens, pressing **the middle mouse button** will centre the map on the currently selected unit and also simultaneously highlight all of the visible hexes from it.

For CD owners only .The following menus now include a **GOTO** feature added .

- Save games List
- PBEM games List
- Tournament games List
- Scenarios List
- Campaign List
- Load and Save Custom Map List in the Main Game and the Custom Editor

For CD owners only. The extended map editor now allows you to strip all terrain from the map , leaving only the contours with one press of a button. This does a bit more than flood filling the map with base terrain that followed contours did.
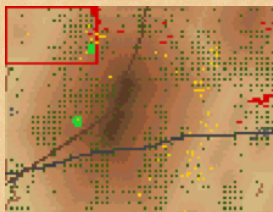
For CD owners only. The functionality of the mini maps has been greatly expanded. The original purpose of the mini maps was to show a general overview of unit positions and allow players to quickly move the focus of the area they were playing by simply clicking on a new area on the mini map. This had more of a purpose in the original game where map sizes and screen resolution were fixed. As we expanded the size of maps and number of screen resolutions available and eventually set up the game to play at desktop resolution the mini map became less and less used as it's size shrank with the increase in resolution but now we have added code to help make it worthwhile once again.
The mini map can now be expanded to show the entire map by right clicking on it with the mouse *if the map is larger than 100 hexes wide and 80 hexes high* so it can now be expanded to show an entire large map up to 160 hexes wide and 200 hexes high.
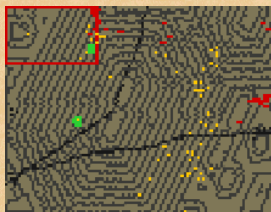
As well a second, simplified view of the map can be generated by pressing **the middle mouse button** of your mouse on the mini map. This **"RadarMini"** view shows the main map , roads, contour lines and streams/ water rather than the coloured graduated terrain of the old style MiniMap. It's background colour is darker than the standard MiniMap to allow players a higher contrast between the friendly and enemy units, and the Victory Hex locations and is there to give players an alternative overview. The old mini gives a better quick glance overview of terrain height whereas the **"RadarMini"** gives a clearer overview of friendly and known enemy unit positions. Both types of maps can be viewed small or large if the map is large enough and all four types allow players to left click anywhere on the mini and that will change the position of the main map allowing players to view unit positons and move to new areas of the map with one left click on the mouse.

2x normal size for ease of comparison
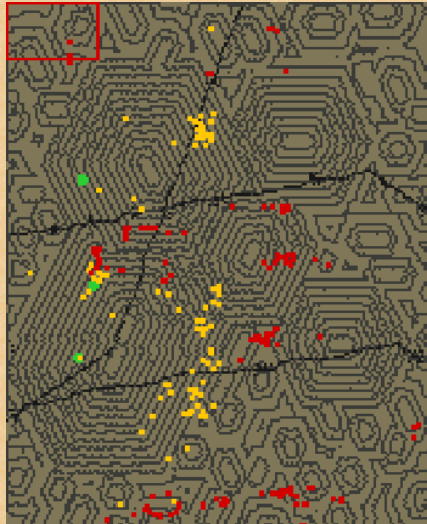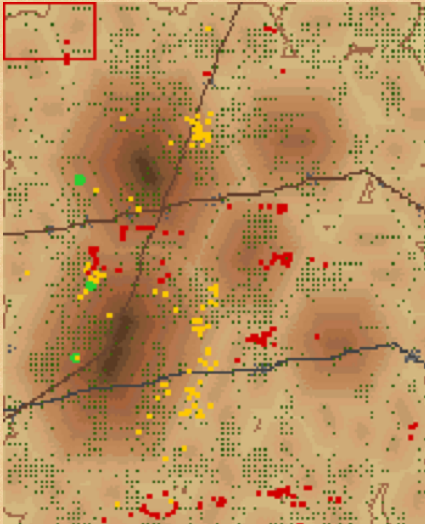
Standard MiniMap   NEW! **RadarMini**

NEW! **BigMini**   NEW! **BigRadarMini**

For CD owners only.Ongoing regular battles and scenarios (but NOT PBEM or Campaign games) can now be saved " As Scenarios" in the scenario folder from the battle window by pressing the "Scenario Save" button that has been added. This allows players and scenario designers an easy-to-use way to save a regular game as a scenario without having to manually rename and transfer them from the save game folder to the scenario folder. This will allow "battle in progress" scenarios to be made much easier as a designer could play out a turn or two saving the game as a scenario until just the right one is found.

New Extended Game (CD) only Features 2019

- **CD owners Only-** There are now **8** game display levels. Three more than previous each of those allow you to zoom in on units on the map. The base zoom level, the one you see when you first start up the game is Z4 and previous versions of the game also allowed you to zoom in 1.5X closer than Z4 using Z5 but the new zoom ins allow 2X closer than Z4 using Z6 and 3X closer than Z4 using Z7 and 4x closer than Z4 using Z8. How this will look to each gamer depends on what size your monitor screen is and what resolution it uses so in some cases with older , smaller monitors the greater zoom ins may not be as useful to you as they would someone with a large monitor that displays at very High resolutions.

- **CD owners Only-** There is a Delete button for the scenarios page like the one for saved games.

- **CD owners Only-** There is now a GoTo button in the Campaign Editor.

- **CD owners Only-** Pressing <**SHIFT+3**> (the **#** HotKey) during your turn will turn your bombardment markers on and off so you can see where they are and if you are advancing into your own barrage. It will also show which guns are targetging the hex .

- **CD owners Only-** Pressing **[** HotKey on your keyboard will show the victory hex values under the V hexes.

- **CD owners Only**- Pressing **]** HotKey on you keyboard will force V hexes to the top of all building rubble so they cannot be hidden by said rubble.

- **CD owners Only-** Scenhacks "Nation" button will no longer switch the entire OOB from one nation to another...... just the ID tags now.

- **CD owners Only-** Scenhack now shows the Scenario number and they are no longer being added to the CMT file.

- **CD owners Only**. There is a new "find text" function in the **Scenhack** utility that allows players to search through all scenario description text files to find specific text references. Once the search is run this new feature will provide a list of the scenarios in order, that match the search inquiry. **For example**, perhaps Israel or Warsaw pact or WW3 is entered and all the scenarios with that word or phrase used in the scenario desciction file will be listed, You can then click on the one that interests you and you will be taken to the "**Scenario Fixer**" tab and read the scenario description by clicking on the **Scenario** button. It can also be **ver**y handy for finding scenarios created by a specific designer. Simply enter the name and it will provide a list of any scenario that has that designers name on it. As well, scenhack now allows **SQL**'s database querys to be saved and loaded from a new folder placed in the game named 'SQL". The **2019** additions are further explained **HERE**

- **CD owners Only-** Setting visibility can now be done in 10's or ones . Low visibility games 7 and under show a red number, 8- 20 will show yellow numbers and anything greater than 20 shows in green. You will see two row of up/down arrows. The inner set changes by one and the outer set changed by 10's

- **CD owners Only**. There is a new **Units In Hex** feature for the Full CD game that allows you to select the unit you want easily

If for example you have four units in a hex and you own the CD version you will see this to the right of the screen
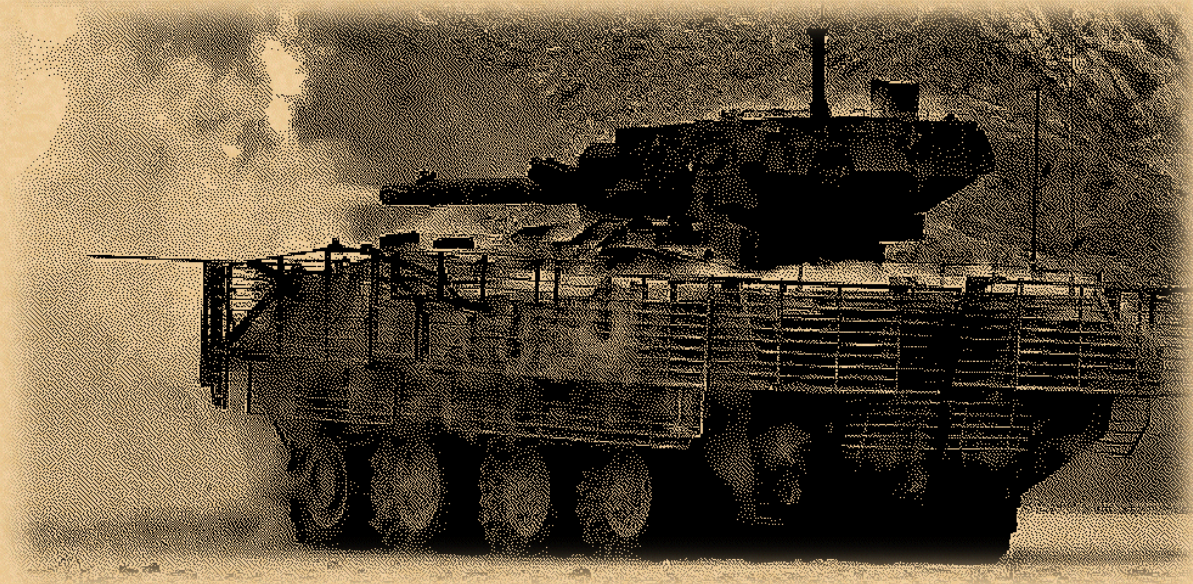
The top unit shown is the one you clicked on and is the "active" unit that you can move or fire or whatever you want to do but lets assume you want to use the observer team to call artillery, Click on that unit and the list will re-order and change.

Now the Observer team is the unit you have direct control over in that hex and if you wanted to select one of the rifle sections just pick the one you want and it will appear at the top of the list and that is the one you have control of

- **CD owners Only.** You can now flood fill areas of zero elevation with deep water using the " key. This was primarily added to be used with the Venhola map generator but it can be used for hand made maps as well. For shoreline maps it saves a great deal of time but be aware that sometimes beach areas are recorded by Venhola as the same level as the water so those areas and any areas of shallow water you may want troops to wade through need to be added manually

CAMO WORKSHOP

Manual Start