Flashpoint Campaigns



Game Operations FCPMW-FM01/R5





Table of Contents

1 Intro	duction8
1.1 V	Vhat's in This Document8
1.2 N	1anuals9
1.2.1	The Field Manuals (FM)9
1.2.2	What's New9
1.2.3	FPC Hotkeys9
1.3 G	ender Pronouns and Inclusion9
2 Start	ing the Game10
2.1 S	ingle Module Game Start11
2.1.1	Welcome Commander Text11
2.1.2	Main Menu11
2.2 N	1ultiple Module Game Start
2.2.1	Welcome Commander Text13
2.2.2	Module Selection13
2.2.3	Main Menu14
2.3 C	common User Interface Buttons
2.3.1	Apply
2.3.2	Back
2.3.3	Cancel16
2.3.4	Proceed16
2.4 C	onfirmation Dialogs16
3 User	Preferences16
3.1 G	ieneral Tab16
3.1.1	Customize17

3	8.1.2	Weather Unit Preferences	17
3	8.1.3	Display Rank Information	
3.2	2 Sc	rolling and Sound Tab	
3	8.2.1	Map Scrolling Parameters	
3	8.2.2	Sound Volumes	
3.3	3 Τι	urn Resolution Tab	
3	8.3.1	Combat Resolution	
3	8.3.2	Additional Settings	
3.4	i Ga	ame Colors Tab	
4 S	start a	a New Scenario	20
4.1	l Sc	enario Selection Dialog	
4	.1.1	Selection Criteria	21
4	.1.2	Select a Scenario	21
4.2	2 PI	ay Mode Selections	21
4	.2.1	Style of Play	
4	.2.2	You will be	22
4.3	B Ba	attle Planning Options	
4.4	ł Di	ifficulty Settings	22
4	.4.1	Presets	23
4	.4.2	Game Options for the Players	23
4	.4.3	Fog of War for Map Markers	23
4	.4.4	Proceed to Scenario	24
4.5	5 Sc	enario Load and Announcements	24
5 S	start a	a New Campaign	25

5.1	Campaign Selection Dialog	25
5.2	Difficulty Settings	25
6 Sta	art a PBEM++ Game	
6.1	Log In to an Existing PBEM++ Account	26
6.2	Register New PBEM++ Account	27
6.3	The PBEM++ Game Lobby	27
6.3	.1 Games in Progress	27
6.3	.2 Challenges	28
6.3	.3 Creating a Challenge	29
7 Sta	arting a PBEM Classic Game	30
7.1	Getting Started	
7.2	Difficulty Settings	31
7.3	Set the Initial Orders	31
7.4	Play by Email Parameters	31
7.5	Upload Notice and Exit	
7.6	Recovering a Dropped PBEM++ Game	
8 Re	suming Games	33
8.1	Saved Scenario	
8.2	Saved Campaign	
8.3	PBEM++ Multiplayer	
8.4	PBEM Classic (PBM)	
9 Ga	me Launch and User Interface	35
9.1	Scenario Start-Up	
9.2	· Setting Up the UI	
9.3	Manual Sections Covering the UI	
	5	

10 An	nouncement Dialog37
10.1	In-Game Announcements
11 Ma	in Menu Bar37
11.1	Game Menu Items
11.2	Counters Menu Items
11.3	Info View Menu Items
11.4	Staff Menu Items
11.5	SOP Items 41
11.5.1	Set SOP 41
11.5.2	Adjust SOP 42
11.6	Unit Overlay Menu Items 43
11.7	Multi-Unit Overlay Menu Items 47
11.8	Terrain Overlay Menu Items55
11.9	Options Menu Items 59
11.9.1	Unit Counter Color Schemes 61
11.9.2	Map Contrast Options62
11.9.3	Map Zoom Options 64
11.9.4	Mission Graphics Transparency Options
11.10	Help Menu Items64
12 Sta	tus Bar64
12.1	Speed Buttons
12.2	Hex Information65
13 Co	re Game Panels65
13.1	Game Control Panel65
13.2	Commander Panel66
13.3	Spotlight Panel

13.3.1	OOB Tree View	67
13.3.2	Detailed Unit Information View	67
13.3.3	Combined Spotlight View	68
13.4	Mini-Map Panel	68
14 Inf	o View Panels	69
14.1	The Unit Popup Menu	69
14.1.1	General Menu Layout	69
14.2	Unit Dashboard	69
14.2.1	General Layout	70
14.2.2	Orders Tab	71
14.2.3	Subunits Tab	72
14.2.4	Staff Tab	72
14.2.5	Diary Tab	73
14.3	Sub-Unit Inspector (SUI)	73
14.3.1	General Layout	73
14.3.2	Platform Tab	74
14.3.3	Weapons Tab	75
14.3.4	Sensors Tab	75
14.3.5	Systems Tab	76
14.3.6	Further Information on Systems	76
14.4	Command Log	76
14.5	Off-Map Assets	76
15 Sta	ff Dialogs	77
15.1	Scenario Information	77
15.1.1	Scenario Description	77
15.1.2	Victory Status & Conditions	78
15.2	Operations	78

15.2.1	Mission Briefing	78
15.2.2	Map Overlay	79
15.2.3	SITREP	80
15.2.4	Engineering	
15.2.5	Air Support	
15.2.6	Emitters	82
15.2.7	Diaries (Unit Logs)	82
15.2.8	Runners	
15.3	Intelligence	83
15.3.1	Threat Assessment	
15.3.2	Enemy SITREP	
15.3.3	Reported Kills and Claims	85
15.3.4	Weather Forecast	
15.3.5	EW Report	
15.3.6	Enemy Off-Map Assets	
15.4	Personnel and Logistics	
15.4.1	Staff Alerts	
15.4.2	Detailed Unit Status	
15.4.3	Reinforcements and Withdrawals	
15.4.4	Ammunition	
15.5	Fire Support	90
15.5.1	Fire Support Assets	
15.5.2	Fire Missions	91
15.5.3	Fire Support Control Center (FSCC)	91
16 The	e Game Map	92
16.1	Moving the Map	
16.2	Zooming the Map	
163	Elvout Panel/Unit Hint	97
10.5		····· /2

93
94
94
94
94
95
96
97
97
97
98
98
98
98
99
99
99
. 101
101
101
101
102
. 104
104
104

19.3	Logistical Units104
19.4	Unmanned Aerial Vehicles (UAVs) 104
20 Ore	der of Battle (OOB) Tree105
20.1	Unit Resubordination105
20.2	Unit Reorder 105
21 Issu	uing Orders106
21.1	Unit Popup Menu 106
21.2	Primary Unit Orders 107
21.3	Indirect Fire Specific Orders 107
21.4	Engineering Specific Orders108
21.5	Helicopter Specific Orders 108
21.6	Aircraft Specific Orders108
21.7	Unit Orders Delay Factors108
21.8	Involuntary Orders Changes109
21.9	Issuing Group Orders109
22 Plo	tting Movement and Fires109
22.1	Movement110
22.1.1	Chaining Different Movement Orders
22.1.2	Altering Waypoint Timing113
22.1.3	Lost Transport Indicator113
22.2	Fires
22.3	Calling in Airstrikes 115
23 Sta	ndard Operating Procedures (SOP)
23.1	Scope 118
23.2	Stance 118

23.3	Combat	118
23.4	Movement	118
23.5	Transports	119
23.6	Recovery	119
23.7	Inspect and Apply	119
23.8	Copy SOPs via the Spotlight Panel	120
24 Spc	otting and Line of Sight (LOS)	
24.1	Spotting Units	120
24.2	Line of Sight (LOS)	121
24.3	Time of Day and Weather Impact	122
25 Coi	mbat Operations	122
25.1	Unit Postures	122
25.2	Unit Facing	122
25.3	Direct Fires	123
25.4	Indirect Fires (IDF)	123
25.4.1	Fire Support Control Center (FSCC)	124
25.4.2	Observed Versus Blind Fire	124
25.5	Air Defense (AD)	124
25.6	Air Strikes	125
25.7	Helicopter Hunting	125
25.8	NBC Warfare	125
25.9	Electronic Warfare (EW)	126
25.10	Air Superiority	126
26 Coi	mbat Soft Factors	126
26.1	Readiness	126

26.2	Morale1	27
26.3	Training1	27
27 Su	ipply and Logistics12	27
27.1	Ammo Loadouts1	27
27.2	Resupply1	28
27.3	Automatic Emergency Resupply1	28
27.4	Why No Fuel Tracking?1	28
28 Ti	me of Day12	28
28.1	Dawn1	29
28.2	Day1	29
28.3	Dusk 1	29
28.4	Night1	29
29 W	'eather1	29
29.1	Clear1	30
29.2	Cloudy1	30
29.3	Overcast1	30
29.4	Light Rain1	30
29.5	Moderate Rain1	30
29.6	Heavy Rain1	30
29.7	Snow1	30
29.8	Fog / Mist / Haze1	30
29.9	Weather and Movement1	30
30 Vi	ctory Conditions and End Game1	31
30.1	Game End and Mission Post-Mortem1	31
30.2	Final Report1	31

Butcher's Bill	132
Victory Status and Conditions	133
Sudden Death	134
mpaign Game Play Overview	135
signer Notes	138
Infantry	138
Planning	138
Mobility	138
Тетро	139
Initiative	139
Recon and Intel	
Survival	
Artillery	
Lethality	140
Ammunition	140
Dispersion	140
Line of Sight and Line of Fire	140
	Butcher's Bill Victory Status and Conditions Sudden Death mpaign Game Play Overview signer Notes Infantry Planning Mobility Planning Mobility Planning Nobility Planning Nobility Planning Planning Planning Planning Planning Planning Planning Planning Planning Planning Planning Planning Ampo Initiative Survival Artillery Lethality Dispersion Line of Sight and Line of Fire



1 Introduction

2000

Welcome to FLASHPOINT CAMPAIGNS PROFESSIONAL Edition (FCPE)

This is a grand tactical simulation of combat on the modern or nearfuture battlefield. As the force Commander, you will plan and then issue orders and Standard Operating Procedures to your battalion, brigade, or regimental forces, shaping the fight by maneuver and your intent. Your forces will engage the enemy on rendered real-world map locations. Each hex is 500m of militarily significant terrain. Each battle can last 4 to 24 hours of in-game time. Your troops will meet their foes any time of day and in any environment.

The game engine is based on asynchronous WEGO turns. This means you will issue orders and then watch a variable amount of time unfold on the battlefield. Then, issue or adjust orders to react to what has happened as you execute your battle plan.

Flashpoint Campaigns Professional Edition is a deep simulation of combat operations where your forces are arranged in maneuver units of companies, platoons, and sections of tanks, infantry fighting vehicles,

infantry squads and teams, recon forces, engineers, air-defense and anti-tank systems, helicopters and more. As the Commander, you must use available off-map assets like long-range artillery, rockets, or airstrikes.

Your efforts in this complex battlespace will be constantly challenged by modeled features like Electronic Warfare, Air Superiority, Realistic Weather, Line of Sight and Fire, Terrain and Elevation, Smoke and Mines, and Human Factors like training, morale, and readiness. All these elements must be considered if you are to be victorious on the battlefield.

The game is packed with information dialogs, map overlays, and range rings to aid you as Commander, master the situation, and understand your force's capabilities.

Flashpoint Campaigns Professional Edition is a data-rich simulation where each nation has information on National Characteristics, Command Parameters, and Orders of Battle. Data Tables are packed with era-specific equipment and troops. Weapon Systems of the time, such as guns, missiles, precision munitions, small arms, and much more, are comprehensively modeled.

As a toolkit, you can create your own scenarios and campaigns. You can also dive deeper and create or modify game data, artwork, and sound effects as you see fit. All these modding capabilities are supported by detailed documentation.

1.1 What's in This Document

We created this document to help Users understand all the different elements in the user interface (UI) and how to perform various actions to play the game.

This document is laid out to run you, as the user, though the various steps to start the game, load new or existing scenarios or campaigns, navigate the UI, explain how to order your units into action, where to find various information or overlays to help you better understand the situation on the map. Until you get comfortable with the game, it may be a good idea to open this document so you can refer to it if you have questions.

NOTE: Areas of interest or buttons on form pictures are outlined in red.

NOTE: Some images in this manual are from the commercial version of the game. While your maps and units may be different, all the information and how it is used and displayed will match the information seen in this manual.

1.2 Manuals

2000

We have invested in using many living manuals to cover interface/play, learning the game, basic tactics, and Content Creation for the Professional Modern War game engine. As the engine is updated, the affected manuals and guides will be updated, and new PDFs will be included with new updates.

1.2.1 The Field Manuals (FM)

These are the core manuals related to how to play and create content for the game engine. At a minimum, we suggest that new and returning users look over this manual and the Professional Features manual to get details on new features and capabilities. These documents are found in the Documents\FMs folder.

- FM01 Game Operations THIS DOCUMENT
- FM02 Professional Features
- FM03 Scenario Creation
- FM04 Battle Planning
- FM05 Map Making
- FM06 Battle Space Management- Placeholder for New Feature
- FM07 Data File Structure Overview
- FM08 Data Modifications
- FM09 Data Logging
- FM10 Weather and Weather Data
- FM11 Game Engine Models
- FM12 Umpire Mode

- FM13 Map Rendering Toolkit
- FM14 Game Engine Modifications
- FM15 Externalized Characteristics
- FM16 Lua Scripting
- FM17 Transport Operations

1.2.2 What's New

The What's New PDFs cover a summary of any changes and fixes when updates are released.

These can be found in the Documents\WhatsNew folder.

1.2.3 FPC Hotkeys

This PDF document lists all the unique game key presses for Function keys and all hotkey definitions. Due to the large number of functions in the game, rebinding is not possible.

This document is in \Documents folder.

1.3 Gender Pronouns and Inclusion

We understand that our simulation will be played by users of all genders. We try to keep language in the game and use manual gender neutral, when possible, but sometimes, we use the pronoun "he" to refer to the user. This is merely to streamline the writing, not to exclude anyone or note a specific gender.

The On Target Simulations team supports the inclusion of all people in the field of wargaming.

2 Starting the Game

After launching the game, depending on the number of game modules installed or created, you will see one of the following:

• Single Module Game Start

2000

• Splash Screen, Welcome Commander, and Main Menu





- Multiple Module Game Start
 - Welcome Commander and Module Selection

Modern War - Professional

Welcome Commander

FLASHPOINT CAMPAIGNS is a fast paced game of modern grand tactical warfare. You are commanding a combat unit ranging in size from battalion to brigade. Air strikes and off-map artillery may be at your call.

This is a command-oriented game. Study the mission briefing, evaluate the situation, plan your goals, and issue the orders necessary to achieve them. During the turn resolution phase your subordinates will take over and do their best to make these orders happen. Inevitably difficulties, time lags, and setbacks will happen so be prepared.

Modern combat can be a complex affair but you can assume that you have an able staff officer at your elbow. Concentrate on the big picture and learn by doing. Start with some of the easier scenarios and game settings to develop a feel for the game. Finally, enjoy!

he following modules are available to play. Please select one and continue.



Small Splash with Main Menu

2000



There are Welcome Commander statements, the Module Selection and Description areas, some useful buttons to the right, and some information at the bottom that we will be covered in Section 2.2 below.

2.1 Single Module Game Start

If you are starting the game with only one game module, this is the start-up screens that you will see entering the game.

2.1.1 Welcome Commander Text

There are a few sentences providing an overview of the game engine and how to play the game.

2.1.2 Main Menu

The Main Menu has all the buttons to Start New games, Resume a game in play, or jump into one of the Edit functions to create game content.

These items are described in detail in the following sections.

2.1.2.1 Start New Group

Start New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

- Scenario Clicking on the Scenario button will launch the Scenario selection screen, where the player can choose one of the single battles included in the game. Scenarios have a few options as to how they are played. You can play scenarios versus the Artificial Intelligence (AI) and choose which side you are, Launch the game in a two-player head-to-head mode, launch the game in AI versus AI mode, or choose a side and start a Standard Play By Email (PBEM) game. See Section 4 below for more details.
- **Campaign** Clicking on the Campaign button will launch the Campaign selection screen. The player can review the provided campaigns and select one to play through. Campaigns take a core force of units and run them through several scenarios during the war. See Section 0 below for more details.
- **PBEM++ Multiplayer** Clicking on the PBEM++ Multiplayer button will start the process of playing a scenario via the Matrix Game's PBEM++ service. This allows you to set up or join a game versus someone else using the PBEM++ service across the globe. See Section 0 below for more details.

2.1.2.2 Resume Group

2000

rt New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

This group of options allows you to browse the various save files you have for the different types of games you have played and Resume them. See Section 8 below for more details on Resuming Play for these types of games.

- **Saved Scenario** Opens a dialog to review all the single battle games you have started and saved or autosaved.
- Saved Campaign This opens a dialog to see all your campaigns that are in progress.
- **PBEM++ Multiplayer** Clicking the button will take you to the PBEM++ login system and then into the current games selection tab of the PBEM++ lobby.
- **Classic PBEM** Click the PBEM Classic button to see all your ongoing games and choose one to continue.

Saved games can also be deleted in the dialog that pops up. See Section 8 below for more details.

2.1.2.3 Edit Group

Start New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

There are three buttons that start in-game editors for Scenarios, Campaigns, and Map Values Scanner. Each of these editors is covered in detail in other field manuals (FMs), as noted in Section 0 above.

2.1.2.4 User Preferences Button

User Preferences..

Clicking on the "User Preferences..." button will open a dialog box with four tabs of settings information for

various game functions, information display and looks. Once applied, these settings will be remembered from game to game. See Section 3 below

2.1.2.5 What's New Button



Clicking on the "What's New" button will bring up a PDF document that summarizes any new content, updates, bug fixes, or game engine tweaks we

have made in the latest version of the game. More detailed information will be found in the noted and revised game field manuals (FMs).

2.1.2.6 Exit Game

E<u>x</u>it Game

If, for some reason, you need to stop playing and return to your operating system, clicking the Exit Game button

will fully close out the game and return you to your main computer

screen.

2000

2.1.2.7 License Information

Premium Pro Edition **Your Name Here** Expires 2023-12-31 Licensing information will be found in the lower left of the Welcome Commander Screen. The type of license, who it is licensed to, and the expiration date (if one is required) are all noted in this area.

2.1.2.8 On Target Simulations (OTS) Logo



Our glorious team logo is on display in the bottom middle of the panel.

2.1.2.9 Game Engine Version



At the bottom of the screen, the game engine version is shown. Make sure you have the same version of the game as your opponent

when you play multiplayer.

NOTE: It is recommended to exit the game if you do work in the various editors and then restart the game to play a scenario. This helps to make sure new values are correctly initialized and avoids the possibility of odd game play issues from occurring.

2.1.2.10 Credits



Clicking on the Credits hyperlink will take you to a dialog that lists all those hard-working people who brought you this deep and detailed wargame.

2.2 Multiple Module Game Start

If you are starting the game with only one game module, this is the start-up screens that you will see entering the game.

2.2.1 Welcome Commander Text

There are a few sentences providing an overview of the game engine and how to play the game.

2.2.2 Module Selection

2.2.2.1 Module Selection Window

In this window you will see all of the modules you have installed. To select one, click on it to highlight it. In this case the Firefly Module is active and selected.

The following modules are available to play. Please select one and continu	ie.
Modern War Pro - Athena	
Modern War Pro - Firefly	
Cold War: Southern Storm	
Cold War: Central Storm	
Cold War: Fulda Storm	

2.2.2.2 Module Description Window

This window provides a look at the module meta-data for the selected module. You can review each module's information by selecting the module name in the Module Selection Window via a mouse click.

Description:

 Full Module Name: Firefly

 Module ID: Firefly

 Protagonists: NATO vs Warsaw Pact

 Scenario Dates: 1/1/1946 to 12/31/2030

 Default Scenario Date: 6/1/2020

 Map Values File Name: MapDataTypes_Firefly.xls

2.2.2.3 Proceed Button



2000

Clicking the large Proceed button will take you to the Main Menu where you can select to play the game in various ways or to perform some editing functions.

2.2.2.4 What's New Button



Clicking on the "What's New" button will bring up a PDF document that summarizes any new content, updates, bug fixes, or game engine tweaks we

have made in the latest version of the game. More detailed information will be found in the noted and revised game field manuals (FMs).

2.2.2.5 User Preferences Button



Clicking on the "User Preferences..." button will open a dialog box with four tabs of settings information for

various game functions, information display and looks. Once applied, these settings will be remembered from game to game. See Section 3 below

2.2.2.6 Exit Game



If, for some reason, you need to stop playing and return to your operating system, clicking the Exit Game button

will fully close out the game and return you to your main computer screen.

2.2.2.7 License Information



Licensing information will be found in the lower left of the Welcome Commander Screen. The type of license, who it is licensed to, and the expiration date (if one is required) are all noted in this area.

2.2.2.8 On Target Simulations (OTS) Logo



Our glorious team logo is on display in the bottom middle of the panel.

2.2.2.9 Game Engine Version

Version 2.1.1.6923 β

At the bottom of the screen, the game engine version is shown. Make sure you have the same version of the game as your opponent

when you play multiplayer.

NOTE: It is recommended to exit the game if you do work in the various editors and then restart the game to play a scenario. This helps to make sure new values are correctly initialized and avoids the possibility of odd game play issues from occurring.

2.2.2.10 Credits



Clicking on the Credits hyperlink will take you to a dialog that lists all those hard-working people who brought you this deep and detailed wargame.

2.2.3 Main Menu

The Main Menu has all the buttons to Start New games, Resume a game in play, or jump into one of the Edit functions to create game content.

These items are described in detail in the following sections.

2.2.3.1 Start New Group

2000

tart New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

- **Scenario** Clicking on the Scenario button will launch the Scenario selection screen, where the player can choose one of the single battles included in the game. Scenarios have a few options as to how they are played. You can play scenarios versus the Artificial Intelligence (AI) and choose which side you are, Launch the game in a two-player head-to-head mode, launch the game in AI versus AI mode, or choose a side and start a Standard Play By Email (PBEM) game. See Section 4 below for more details.
- **Campaign** Clicking on the Campaign button will launch the Campaign selection screen. The player can review the provided campaigns and select one to play through. Campaigns take a core force of units and run them through several scenarios during the war. See Section 0 below for more details.
- **PBEM++ Multiplayer** Clicking on the PBEM++ Multiplayer button will start the process of playing a scenario via the Matrix Game's PBEM++ service. This allows you to set up or join a game versus someone else using the PBEM++ service across the globe. See Section 0 below for more details.

2.2.3.2 Resume Group

Start New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

This group of options allows you to browse the various save files you have for the different types of games you have played and Resume them. See Section 8 below for more details on Resuming Play for these types of games.

- **Saved Scenario** Opens a dialog to review all the single battle games you have started and saved or autosaved.
- **Saved Campaign** This opens a dialog to see all your campaigns that are in progress.
- **PBEM++ Multiplayer** Clicking the button will take you to the PBEM++ login system and then into the current games selection tab of the PBEM++ lobby.
- **Classic PBEM** Click the PBEM Classic button to see all your ongoing games and choose one to continue.

Saved games can also be deleted in the dialog that pops up. See Section 8 below for more details.

2.2.3.3 Edit Group

2000

rt New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

There are three buttons that start in-game editors for Scenarios, Campaigns, and Map Values Scanner. Each of these editors is covered in detail in other field manuals (FMs), as noted in Section 0 above.

2.3 Common User Interface Buttons

Throughout the game, we have a few buttons that have the same essential functions. Those buttons are as follows.

2.3.1 Apply



If you have made any setting changes that turn on or off functions or adjust the values of settings, then this button will commit and save those

changes to the game while keeping the dialog open.

2.3.2 Back



This button will move you back to a previous dialog or menu so you can change game parameters, and settings, or select other game play options.

2.3.3 Cancel



If you have made any setting changes that turn on or off functions or adjusted values of settings and do not wish those to take effect, then this button will

revert those changes in a dialog.

2.3.4 Proceed



This button will move you forward to the following dialog or menu. If there is no Next dialog (as in User Preferences), this button will Apply, then close the

dialog.

2.4 Confirmation Dialogs



There are several times in the game when changes made will require confirmation. Selecting "Yes" will accept any changes. Selecting "No" will decline any changes. Selecting "Cancel" will place you back into the dialog so

additional changes can be made.

3 User Preferences

User Preferences...

Clicking on the "User Preferences..." button will open a dialog box with four tabs of settings information for various

game functions. Once applied, these settings will be remembered from game to game. These settings can be changed at any time via this button on the Welcome Commander screen or in-game from the Main Menu Bar.

3.1 General Tab

The General Tab allows the player to Customize basic game engine performance parameters, set Weather Unit Preferences, and set the Display Rank and Abbreviation languages.

Set User Preferences (F2)			
General Scrolling and	Sound	Turn Resolution	Game Colors
Customize:			
Default game delay f	actor: 50	🗘 (0 - 2,500 allowed,	1000 = 1 second)
Map mouse hover	delay: 500	2 (200 - 10,000 allowe	ed, 1000 = 1 second)
Hex location fla	shes: 5	C (Flash 1 to 10 times))
Default Animation S	peed: 2	(1x to 50x faster th	an normal)
😫 Show detailed unit co	mposition ins	tead of basic in game	reports
🗶 Automatically close n	nessage dialog	js on timer	
Mouse wheel rolled f	orward zooms	map out	
😫 Show Barrage Editor	after creating	artillery TRP(s)	
Weather Unit Preferences: -			
Temperature Range	aters (m)	Wind Speed	Cloud Ceiling
		o mph	• meters (m)
• °F	les (mi)	● Bft	• feet (ft)
Display Ranks and Rank Abbr	eviations: —	A N N N	
American Style		National Language	je Values
These settings will be remember	ed		
from game to game.		Proceed Ca	ancel <u>Apply</u>

3.1.1 Customize

2000

- **Default Game Delay Factor** This value controls the pacing of the game during turn resolution. If you find that the resolution is happening too quickly to follow, then use a larger number. If it is too slow, then use a smaller number.
- **Map Mouse Hover Delay** The length of time needed to trigger the map flyover panel showing the objects in the hex.
- **Hex Location Flashes** Set the number of times the hex of an active unit flashes to alert the player.
- **Default Animation Speed** Sets how fast the in-game animations are shown during combat resolution.

- Show Detailed Unit Composition If checked and when known, various in-game displays will show the actual platform names ("T-72M") in the description window instead of generic descriptions ("Tank").
- **Close 'Secure Transmission' message dialog on timer** If this option is checked, dialogs use a timer (displayed in the dialog box) to close. If not enabled, then the Secure Transmission dialogs will remain on screen until the user clears them by selecting the Proceed button.
- Mouse wheel rolled forward zooms map out If checked, scrolling the mouse wheel forward will zoom the map out to see more of it. Scrolling backward will zoom the map in. The zoom IS NOT centered on the cursor. Unchecking will flip the direction of the zooming.
- Show Barrage Editor after creating artillery TRP(s) If checked, after the player plots any Artillery Target Reference Points (TRPs), the Barrage Editor dialog will automatically open so adjustments to the fire missions can be made.

3.1.2 Weather Unit Preferences

These settings change how information is displayed throughout the game.

- **Temperature** You can set this to either Fahrenheit (degrees F) or Celsius (degrees C).
- Range Distances can be referred to in Meters (m) or Miles (mi).
- **Wind Speed** Speeds can be in Kilometers Per Hour (km/h), Miles Per Hour (mph), or Beaufort Wind Force Scale (Bft).
- **Cloud Ceiling** The cloud ceiling can be shown in Meters (m) or Feet (f).

3.1.3 Display Rank Information

You can choose to see ranks in the American (US Army) rank names or in the National language of the country.

3.2 Scrolling and Sound Tab

2000

The player can alter different values regarding Map Scrolling Parameters and Sound Volumes on this customization tab.

Set User Preferences (F2)
General Scrolling and Sound Turn Resolution Game Colors
Map Scrolling Parameters:
Change these values to define the live scrolling area just inside either the map or the program edges.
Top Bottom Left Right
₩ Map: 40 \$ 40 \$ 40 \$
● Program: 40 \$ 40 \$ 40 \$
Polling Interval (ms): 150 💲 (10 - 500 by 10's)
Initial Delay Factor (ticks): 2 🗘 (0 to 10 intervals)
Scroll Increment (pixels): 52 💲 (8 to 256 by 8's)
Sound Volumes
Linit Sound FY Background FY Intro Music
(low - med - high) (low - med - high) (low - med - high)
These settings will be remembered <u>Proceed</u> <u>Apply</u>

3.2.1 Map Scrolling Parameters

• Map Edge or Game Edge - The map is scrolled by hovering the mouse cursor in a sensitive zone of the game. This zone can either run along the inside edge of the map or the inside edge of the entire game (program) screen. Be aware that if you choose the game edge, then there may be unwanted scrolling when trying to access specific information controls. This effect may be more pronounced on multiple monitors or extremely widescreen displays.

- **Effective Border Areas** Define the top, bottom, and sides of the sensitive area independently of each other. The value is the number of screen pixels of the sensitive zone for scrolling.
- **Polling Interval** This is the length of time between checks for a map scroll measured in thousandths of a second. The polling interval defines one 'tick.'
- **Initial Delay Factor** This is the number of ticks before a scrolling action is initiated. A certain delay may be desirable to prevent unwanted scrolling when moving through these zones to other areas of the screen.
- **Scroll Increment** is the number of pixels that are scrolled for each tick. Use a lower value for faster/smoother scrolling.

3.2.2 Sound Volumes

- **Unit Sound FX** This is the volume control for unit movement and firing sounds.
- **Background FX** This controls the volume of the ambient background battle noise during turn resolution.
- **Intro Music** Controls the volume of the beginning and endgame music themes.

3.3 Turn Resolution Tab

Here you can tweak various settings which influence the way in which the turn resolution is displayed (these are not rule changes). Should you wish to speed up the progress, you can disable some settings here.



3.3.1 Combat Resolution

- Scroll Map to On-Map Firing Artillery Units during Turn Resolution – When checked, the game will scroll to the firing onmap indirect fire unit and then the target. Disable to speed up the resolution of combat.
- Show Line of Fire (LOF) from Attacked to Defender If checked, a line is drawn on the map from the attacker to the target to show the current direct fire attack being resolved. In some cases, the attacker may not be spotted, but the general area of fire may be

noticed.

- Flash Target Hex Location When checked, the hex of the target unit in combat will flash the number of times set in the General tab to help locate the action.
- Enable Combat Sound Effects When checked, a few of the current weapon shooting/launching sound effects will play. Disable to speed up combat resolution.
- Enable "Hit" Animations When checked, attacks on units that hit will cause an explosion(s) graphic on the counter. Disable to speed up combat resolution some.
- Show Combat Result Hints If this item is checked, the results of combat actions will be displayed as hints next to the affected unit. Here you can also alter the Combat Hint Font Size: The size of the combat hints displayed during the game can be increased or decreased by changing the value.

3.3.2 Additional Settings

- Autosave game after each player orders phase When checked, this will save the game immediately prior to turn resolution into the \Saved folder under the name of the scenario and with a percentage complete number. These are regular saved games and may be reopened and resumed if desired.
- Show friendly movement paths during turn resolution When checked, all friendly units with plotted movement show those moves on the map with plot lines. Disable to speed up combat resolution a bit.
- Enable Unit Movement Sound Effects When checked, the game plays various types of movement sound effects like tracks, wheels, rotors, etc. Disable to speed up combat resolution a bit.
- Scroll Map to Active Unit during Turn Resolution When checked, the map will center on the active unit during turn resolution.

3.4 Game Colors Tab

2000

A color selection dialog exists so that individual map overlays, fire lines, and other helpful color markers can be edited by the player and established as new game defaults.

Set User Preferences			
General	Scrolling and Sound	Turn Resolutio	n Game Colors
Use this dialog lines that are (ι to set the exact colors you v drawn on the map. Το chang	vant for the various o je a color, click on the	verlays, range rings, and e associated color swatch.
	Color: T	% ransparency:	
Line of sig	ht (LOS) overlay:		
Command	range ring:		
• Weapons i	range ring:		
🔿 'Spottable	at' range ring: 🛛 🚺 -		Cooke Barracke
 Twilight ov 	verlay:		COURCE BARRIERS
Nighttime	overlay:	Line Thickness	
 Unit mover 	ment path:		Goulhun
Player 1 lir	ne of fire (LOF):		a a a a a a a a a a a a a a a a a a a
Player 2 lir	ne of fire (LOF):		
Map Curso	or: 🚺 -		L1219
🔿 Player 1 se	etup zones: 📃 -		
🔿 Player 2 se	etup zones:		
These settings from game to	s will be remembered game.	Proceed	<u>Cancel</u> Apply

The level of color transparency can also be changed. This will allow the player, for example, to create a distinctly different hue for each kind of overlay so that he can easily tell which is in effect at any given time. The effect of these changes can be seen in the terrain sample to the right of the selections.

NOTE: It is possible to create unsightly or even invisible colors. If you

want to experiment with this, you might want to consider backing up the original "overlays.ini" file.

4 Start a New Scenario

To start a new Scenario, click on the Scenario button in the Main Menu.

art New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
PBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

4.1 Scenario Selection Dialog

This will launch the Scenario Selection dialog, as seen below. In the list, you can review all the scenarios that are available in the module. Selecting a scenario by clicking on it will also show a description of the scenario's meta-data details. The details state the map and forces used (nation and the number of units) in the selected scenario. Lastly, you can read the Scenario Summary to get an idea of the mission and historical context of the battle.

odern War Pro - Firefly						
Select Scenario to Play:			. L			
File Name 🔺	Starting At		Selection Criteria			
Airspace Deconfiction Test 1			Search			
Base_1 UK	0800 hrs, Jan 11 1993					
Base_1 UK with Off Map Arty	0800 hrs, Jan 11 1993				0	
demo_2km_discr_range	0800 hrs, Jun 1 2020		American	British		
demo_man_in_the_loop_spotting	1200 hrs, Jun 1 2020					
demo_pgm_gps	0800 hrs, Jun 1 2020		*			
demo_sfm	0800 hrs, Jun 1 2020		ML-Red		Soviet OMG	
demo_wlr_offmap_offmap	0800 hrs, Jun 1 2020					
demo_wlr_offmap_onmap	0800 hrs, Jun 1 2020					
demo_wlr_onmap_emissions	0800 hrs, Jun 1 2020					
demo wlr onmap offmap	0800 hrs, Jun 1 2020		🙁 XS 😫 S 🗧) M 🙁 L	🗶 XL 😫	
est Scenario for Airspace Deconfliction base ensors. British side has 3 different AD units arious air threats that should only be seen b	d on target type (Air/Held each with a specific sens y the correct sensor platf	o/Dronej or for ea orm.), Size, and Altitude sch type. The Sovie	Band for Ti t side (Red :	arget Acquisi side) will hav	tion re
	Proceed	<u>B</u> ack				

4.1.1 Selection Criteria

To the right of the Scenario Selection List is a Selection Criteria panel where you can search for a scenario by entering names or other scenario details in the text box.

Below the Text box for Criteria Search are flags of all the nations in the current module. Clicking on one will filter the scenario list to include only that nation.

There is also the option to filter the scenario selection list by the size of the scenario based on total units. You can check any or all boxes to set the list (filtered or otherwise) to show only scenarios of the given size(s).

4.1.2 Select a Scenario

Click on a scenario name to show the information and select it to play.

Hit Proceed to start the scenario selected and move on to the Play Mode and Battle Plan Options.

4.2 Play Mode Selections

When you start a new scenario, the next thing to do is to decide how the game will be played and what side, if any, you will play as the player.

Play "demo_wlr_onmap_en	nissions"
Style of Play:	
 Computer Opponent 	
 Head to Head Play (Hot Seat) 	
 Start a Play by Email Game (Classic PBEM)
Computer Plays Both Sides	
∠ You will be:	
Player 1: NATO Commander	
Player 2: Warsaw Pact Comr	
Battle Planning Options: If desired, the side played by the c computer to use a random battlen	computer may use a battle plan. Chose 'Random Selection' for the Jan. or pick a specific battlenian for the computer to use.
Battle Planning Options: If desired, the side played by the or computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all.
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the Jan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire
Battle Planning Options: If desired, the side played by the o computer to use a random battlep Alternatively, uncheck the selection	computer may use a battle plan. Chose 'Random Selection' for the plan, or pick a specific battleplan for the computer to use. n box to use no battle plan at all. Warsaw Pact OPFOR indirect fire

4.2.1 Style of Play

2000

Currently, the game system offers four styles of play for you to choose from.

- **Computer Opponent** Play against our AI using either a random or set Battle Plan (See Section 4.3 below).
- **Head-to-Head Play (Hot Seat)** Play against another human on the same computer in hot seat mode, taking turns issuing orders and then watching the resolution phase together.
- Start a Play by Email Game (Classic PBEM) Load up a scenario to play against another human using the classic Play by Email (PBEM) system, where you send the game file to your opponent via email or, these days, a cloud service. See Section 7 below for more details.
- **Computer Plays Both Sides** The computer AI plays both sides and uses a Battle Plan, if set, to fight out the scenario.

4.2.2 You will be

This selection will determine which side you will command in a humanplayed game mode.

- **Player 1: NATO Commander** You will play, for example, as an American, Canadian, French, or West-German commander.
- **Player 2: Warsaw Pact Commander** You will play, for example, as a Czechoslovakian, East-German, or Soviet commander.

4.3 Battle Planning Options

At the bottom of the Start a Scenario Screen are the options to set the AI Battle Plan or have it randomly determined to add to the unknown nature of the enemy's locations and routes of travel at the start of the scenario. Some scenarios may not have a Battle Plan, and the selection box will be greyed out.

Additional Battleplans can be added to scenarios to increase the replayability of a given scenario further.

Hit the Proceed button to move on to the Difficulty Settings dialog.

Dlav	"demo wir onman emissions"
r ia y	Style of Play:
	Computer Opponent
	Head to Head Play (Hot Seat)
	Start a Play by Email Game (Classic PBEM)
	Computer Plays Both Sides
	You will be:
	• Player 1: NATO Commander
	Player 2: Warsaw Pact Commander
Batt	e Planning Options: If desired, the side played by the computer may use a battle plan. Chose 'Random Selection' for the computer to use a random battleplan, or pick a specific battleplan for the computer to use.
Batt	e Planning Options: If desired, the side played by the computer may use a battle plan. Chose 'Random Selection' for the computer to use a random battleplan, or pick a specific battleplan for the computer to use. Alternatively, uncheck the selection box to use no battle plan at all. Warsaw Pact OPFOR indirect fire

4.4 Difficulty Settings

While most games have difficulty settings that make the game easier to win by raising and lowering various values, our game does not do that. There are a few adjustments you can make to make things easier to learn the game, and in that way, the game is "easier" to play, but not necessarily easier to win. No game play values are modified, so if tank A shoots and can kill tank B, which will always be the case regardless of these settings.

Modern War Pro - Firefly

2000

Difficulty Settings fo	or "demo_wlr_onmap_emissions"
Presets: Recruit Veteran Grognard Custom	Game Options for the NATO and Warsaw Pact Players: NATO Warsaw Pact Energy units are always visible Emergency resupply is automatic Allow gathering of full information of visible energy units
	Pog of War for Map Markers: See "unspotted" Victory Point objectives accurately See "unspotted" terrain markers (craters, bridge state, etc.) accurately Unchecking any of these options will increase the challenge of of the game.
	Proceed Bock

4.4.1 Presets

There are three presets to set the various difficulty options. The Custom option will be set if you make your own settings. These are saved and active on reloading.

- **Recruit** Set this if you are new to the game system to turn on all the options to make learning the game easier.
- **Veteran** Set this if you are familiar with our game system and want more of a challenge.
- **Grognard** The ultimate in realism. No options are set. Good hunting!
- **Custom** You can set your own options to play the game the way you want.

4.4.2 Game Options for the Players

There are three settings that you can adjust for each side of the game. These will change how you see various information in the game. Checked options will make game play easier for the player.

- Enemy Units are Always Visible When checked, this is the most potent option, as you will always see all the enemies on the map. Combat still requires the units to "see" the enemy, but you do not need to locate hidden enemies by recon or fire. When unchecked, units will have to use their own sensors to spot enemy units and take time to identify them before they will be displayed on the game map. NOTE: If checked, units that are spotted will have a white spotting dot on the lower right of the counter. These dots will not be shown if unchecked.
- **Emergency Resupply is Automatic** When checked, this setting allows units with low ammo to resupply an amount of ammo to keep fighting automatically. When unchecked, you, as the commander, must order units to resupply or set resupply parameters.
- Allow Gathering of Full Information of Visible Enemy Units When checked, the player can get more detailed information on a unit by double-clicking and seeing a Read-Only version of the enemy unit's Dashboard. It is also possible to right-click and see a number of the overlays from the Show menu item. NOTE: Experienced players should unselect this option for the enemy as it gives away too much information on the enemy and its units.

4.4.3 Fog of War for Map Markers

- See "Unspotted" Victory Point (VP) Objectives Accurately When checked, this setting provides perfect information on the markers. So, if a hostile unit seizes a VP, that information appears immediately on the map. When unchecked, the map won't reveal hostile triggered VP ownership changes until your units have line-ofsight to them. Friendly triggered changes are visible.
- See "Unspotted" Terrain Markers Accurately When checked, this setting provides perfect information on the markers. So, if a hostile unit builds a bridge, that information appears immediately on

the map. When unchecked, the map won't reveal hostile triggered marker changes (like bridges or obstacles) until your units have lineof-sight to them. Friendly triggered changes are visible.

4.4.4 Proceed to Scenario

2000

Hit Proceed to load the selected scenario.

4.5 Scenario Load and Announcements



At this point, the selected scenario will load, and you will get the Announcement Screen (click on it to disable the timer countdown) that gives you the mission overview. Head to Section 9 below to see information on what all the User Interface (UI) elements are on the screen in detail.

lodern War Pro - Firefly				
Load CAMPAIGN Start File:				
D:\OTS_Athena Release Branch\Modules\Firefly\Campaigns\				
File Name	File Date			
"Campaign Games" are a series of individual scenarios through which you move you	r core forces. You may also			
play the side set by the campaign designer.	game is selected then you will			
Proceed				
Tionen Tron				

5 Start a New Campaign

2000

A campaign is a sequence of scenarios from one nation's perspective where the result of one scenario may influence the subsequent scenario. The player will be able to carry over core forces from scenario to scenario. This means that campaign scenarios might play out very differently from single scenarios because it is of vital importance to preserve your force as you try to win your part of the war.

To start a new Campaign, click on the Campaign button in the Main Menu.



NOTE: In most cases, a Professional user will not use the Campaign part of the game engine. If there are any campaigns made to be used. They will show up in the Campaign Selection Dialog.

5.1 Campaign Selection Dialog

This will launch the Campaign Selection dialog, as seen below. In the list, you can review all the campaigns that are available in the module. Selecting a campaign by clicking on it will also show an overview of the campaign in the bottom text box so you can get an idea of the overall mission and historical context of the campaign.

5.2 Difficulty Settings

After selecting the campaign, you are sent to the Difficulty Setting dialog. The settings here are covered above in Section 4.4.

After hitting Proceed, you can then select the enemy Battle Plan that will be used in the first scenario of the Campaign.

Selecting Proceed will then finish the loading of the selected campaign, and you will get the Announcement Screen for the first scenario (click on it to disable the timer countdown) that gives you the mission overview. Head to Section 9 below to see information on what all the User Interface (UI) elements are on the screen in detail.

For more details on Playing a Campaign, see Section 31 below.

Battleplan Selection Battle Planning Options: If desired, the side played by the computer may use a battle plan. Chose 'Random Selection' for the computer to use a random battleplan, or pick a specific battleplan for the computer to use. Alternatively, uncheck the selection box to use no battle plan at all. Computer Player Plan Selection: Random Selection One Two Punch Proceed

6 Start a PBEM++ Game

2000

PBEM++ is a more advanced and user-friendly way to play the standard PBEM game. In this case, the games are sent back and forth via servers at Slitherine Games automatically as you finish turns and send them. The game file resides on the Slitherine server, so you can technically log in to your account from any computer and pick up and play your games with your friends.

t New:	Resume:	Edit:
Scenario	Saved Scenario	Scenario
Campaign	Saved Campaign	Campaign
FBEM++ Multiplayer	PBEM++ Multiplayer	Map Values
	PBEM Classic (PBM)	

6.1 Log In to an Existing PBEM++ Account

Modern War Pro - Firefly	
PBEM++ Multiplayer:	Not currently logged in
Log In	
Join PBEM++ Webserver:	
Log In to Existing Account Register New Account	ıt
UserID: CapnDarwin	
Password:	Show
Remember Password:	
Share anonymized game data for research purposes	PBEM3++ Beta
Back	

On the Log In tab, if you have an established Matrix/Slitherine account, you can log in using your UserID and Password.

Clicking the Show button will reveal your password so you can verify it if you need to.

You can check the box to Remember Password so it will auto-populate on the next log in.

If you wish to help with game data analytics, you can click the Share anonymized game data for research purposes.

Clicking the Log In button will display the message below as the game contacts the servers.



6.2 Register New PBEM++ Account

If you would like to create a new Matrix/Slitherine PBEM++ account, you can select the Register New Account option and then fill in your User ID (alphanumeric with no spaces), a Password (something you will remember), and a valid email address.

If you want the game to remember your PBEM++ password the next time you load the game, check the box next to Remember Password.

When all that is complete, you can click on the Register button. It may take a few moments to send the information to the servers. If everything works out, you will be presented with the PBEM++ Game Lobby. If there is an error, a dialog box will pop up with information that you can use to contact Matrix support to see if they can resolve the problem.

Modern War Pro - Firefly	
PBEM++ Multiplayer:	Not currently logged in
Log In	
Join PBEM++ Webserver:	
Log In to Existing Account Regist	er New Account
UserID: PlayerName	
Password: •••••••	Show
Email for Registration: player@playeremail.xyz	
Remember Password:	_
Register	
Chara manumized arms data for recovery surgering	
Share anonymized game data for research purposes	PBEM3++ Beta
Back	
<u><u><u>n</u>uck</u></u>	

NOTE: If you already have a Matrix/Slitherine account, please use that as your login.

NOTE: If you want a new account for PBEM, you must have an unregistered email to make a new account.

6.3 The PBEM++ Game Lobby

Once you have signed into the PBEM++ system and the server has validated your credentials, you are placed into the Flashpoint Campaigns Game Lobby. Here there are a couple of options to either continue a game or pick a new challenge, or start a challenge of your own.

6.3.1 Games in Progress

This tab shows you all the games ready for you to continue, view game details, resign from a game, or upload a game turn ready for your

opponent to play.

2000

The top window shows all the games you are currently playing with others. This information includes the Scenario being played, Turn Number, Status, Opponent being played, and the date of the Last Update for the game.

The bottom window will show any messages for the currently selected PBEM++ game in the top window.

Modern War Pro - Firefly					
PBEM++ Multiplayer:				Logged in as OTSTestPla	iyer
Games in Progress Cha			Show Completed Games	Show Resigned Games	1
Scenario 🔻	Number	Status	Opponent	Last Update	
A Brief Moment In Time Message From CapnDarwin:		My Ium	CapnUarwin	//5/2022 1:1 <i>/:2/</i> PM	
Who is up for a battle?					
Refresh	(Play (Resign Upload		┚┃
		(E	xit PBEM++		

You can also see completed games by checking the Show Completed Games box.

You can check the Show Resigned Games box to see all the games you have resigned from.

The Refresh button will update all games from the server if needed.

6.3.2 Challenges

This tab shows you all games ready to be played with another player.

Modern War Pro - Firefly						
PBEM++ Multiplayer:				Logged in as OTSTestPlayer		
Games in Progress Cha						
Scenario 🔻	Your Side	Туре	Challenger	Date		
A Brief Moment In Time	NATO	Public	CapnDarwin	6/27/2022 1:33:48 PM		
				o Challenger:		
Who is up for a battle?		×		×		
Refresh	New		pt Remove			
		Exit PBE	EM++			

The top window will show all available challenges. The information displayed includes the Scenario name, the Side you will play in the game, the Type of game, which the Challenger is, and the date the challenge was issued.

The type can be one of two choices. The first is Public. Anyone can accept a Public challenge and play the game. The second type is Private. Private challenges are those created by a player with a password. To accept the challenge, you need to know the password. These types of challenges are usually between friends and are set up so the other player knows the password.

Once you select a challenge and click on the Accept button, you are

given a chance to send a message to your opponent before the action starts.

Modern War Pro - Firefly						
PBEM++ Multiplayer:				Logged in as OTSTestPlayer		
Available Challenges:						
Scenario 🔻	Your Side	Туре	Challenger	Date		
Brothers in Arms A Brief Moment In Time	Warsaw Pact NATO	Public Public	OTSTestPlayer CapnDarwin	7/5/2022 1:14:49 PM 6/27/2022 1:33:48 PM		
	Confirm Use Would you I	ike to send <u>Y</u> es	a message to the Challenger?			
Message From CapnDarwin:			Your acceptance message t	to Challenger:		
Who is up for a battle?		×		×		
Refresh	New	Acce	ept Remove			
		Exit PBI	EM++			

After sending a message or not, you will get the following message stating you have accepted the challenge.

Hit Play to start the game and setup for the first turn.

Modern War Pro - Firefly					
PBEM++ Multiplayer:	llenges			Logged in as OTSTestPlayer	
Games in Progress:			Show Completed Games	Show Resigned Games	
Scenario 🔻	Number	Status	Opponent	Last Update	
A Brief Moment In Time	0	My Turn	CapnDarwin	7/5/2022 1:17:27 PM	
Information Vou ha Message From CapnDarwin:	ve accepted t	he Challenge from	CapnDarwin to play "A Brief M	X	
Who is up for a battle?		Play Res	ign Upload	*	
		Exit PE	EM++		

6.3.3 Creating a Challenge

To start a new challenge for someone to play against you, you need to select the New button at the bottom of the Challenges tab. You will see the following screen. Perform the following actions to issue a new challenge.

- Click the Scenario button to open the Scenario Selection dialog.
- Choose a scenario to play and click Proceed.
- Select if your challenger will play as NATO or the Warsaw Pact commander.
- If you wish for your challenge to be with a friend instead of open to

anyone, then place a password in the Optional Password field. You will need to give this password to your friend for them to accept the challenge and start playing. This will show up as a Private challenge in the Challenges lobby. Do not place the password in the Comment box, as that is seen by everyone.

- In the Your Comments text box, you can place any message (don't do a private challenge password). This can be info on the scenario, a friendly greeting, or any other relevant information.
- Checking the Share email address box will share your PBEM++ email address with the opponent who accepts your challenge.
- Next, set the Game Options to be used in the scenario challenge. Refer to Section 4.4 above for details on these settings.
- Finally, click Upload the Challenge button to pass the information on to the PBEM++ server, where it will show up in the Challenges tab.

Modern War Pro - Firefly
PBEM++ Multiplayer: Logged in as CapnDarwin
Scenario A Brief Moment In Time
Challenger: NATO Warsaw Pact
Optional Password: The use of a password makes this a private challenge.
Your comments: Who is up for a battle?
Share email address with opponent after challenge accepted.
Game Options: NATO Warsaw Pact Enemy units are always visible Emergency resupply is automatic Allow browsing of spotted enemy units See "unspotted" Victory Point objectives accurately
See "unspotted" terrain markers (craters, bridge state, etc.) accurately Upload the Challenge Cancel
Exit PBEM++

7 Starting a PBEM Classic Game

This is the classic play-by-email mode. Players will play through a scenario by playing turns and submitting them via email or a file-sharing service like DropBox to each other.

7.1 Getting Started

At the Main Menu, select Start New: Scenario. Then select a scenario that you wish to play with your opponent and click Proceed. In the following dialog (below), select the Start a Play by Email Game (Classic PBEM). Next, choose which side you will command in the scenario and click the Proceed button.

Modern War Pro - Firefly	
Play "A Brief Moment In Time" Style of Play: Computer Opponent Head to Head Play (Hot Seat) Start a Play by Email Game (Classic PBEM) Computer Plays Both Sides	
You will be: Player 1: NATO Commander Player 2: Warsaw Pact Commander	
Proceed Back	

7.2 Difficulty Settings

In the next screen, select the Difficulty Settings (refer to Section 4.4 above) to be used for the scenario and click the Proceed button.

7.3 Set the Initial Orders

The scenario will load, and you will see the game interface (Refer to Section 8 below for details on the interface). Next, issue initial orders for your forces and click the Start button. You will get the following dialog alerting you that your opponent needs to do initial orders.

Start Game Resolutio	on Phase	
	BG. Morrison, Your setup is done and it is time for your opponent's setup.	
	Proceed Cancel	

Click Proceed, and you will get the following dialog to enter information for the Classic PBEM file.

7.4 Play by Email Parameters

The following items are displayed, and some require inputs:

- **Game Name**: This is the scenario name. You can edit this name, and it will automatically change the File Name.
- **Password**: You can add a password to the file for extra security. Please make sure your opponent knows it to open the supplied game file.
- **Increment File**: Check this box to add a "00X" number to the filename to keep a better track of game turns.
- **File Name**: This is automatically generated from the Game Name and increment (if selected).
- **PBEM File Destination Directory**: This is the folder on your computer where the generated Play By Email (*.PBM) files will be placed. You can change the folder location by clicking on the Folder icon on the right of the panel.
- **Game Text Message**: You can write a short message for your opponent in the bottom window that will be displayed to them at the start of their game turn.

Outbound PBEM Dispatch			
Play By Email Parameters:			
Game Name: A Brief Moment In Time (48 max) Password: (optional, 12 max) Increment File: File Name: A Brief Moment In Time 001 phm			
PBEM File Destination Directory: C:\Users\Jim\Dropbox\Public Any text entered below will be displayed to your opponent when the game is loaded:			
Ready to start this battle. Good Luck!			
<u>Send</u> <u>Cancel</u>			

Click the send button to save the game file.

7.5 Upload Notice and Exit

Next, you will see the following notice. Click Proceed when you are done reading it.



Next, you will see the following message, and you can Exit the game or go back to the Main Menu and start another game from the game's Main Menu. Clicking Proceed will close the dialog.

This game is now inactive until the other side responds play another scenario until then.	. You may exit the game or
Proceed	
	1

7.6 Recovering a Dropped PBEM++ Game

If there is a dropped connection to the PBEM++ servers, the game engine will create a save file that allows you to retry a load back to the server at a later time when the servers are online.

The following dialog will show if the connection drops when trying to upload your game turn. It notes the name of the file created and where it is located.

cure Transmission

2000



SORRY, THERE HAS BEEN A FAILURE TO COMMUNICATE.

There is currently a problem uploading the game file to the Matrix server. It's not you, it's the Internet. Web services are like that sometimes.

In the meantime, your game has been saved so that you can come back and upload it later. A recovery file called "Beening the Beamers_Recovery_7380_20230129_1105.ini" has been placed in the \Saved folder that holds the other Flashpoint Campaigns saves.

When you are ready, do the following:

- Go to the main menu and select "Resume: PBEM++ Multiplayer".
- Log in and go to the "Games In Progress" tab.
- Select the "Upload Game" button near the bottom right corner. This button will be enabled only if a recovery file is detected.
- Use the "Upload a PBEM++ Game File" dialog to select the recovery file and upload the game. The save file will not be erased until after you successfully upload it to the Matrix server.

This will still work if you exit Flashpoint Campaigns completely and try again later.

If problems continue, and if the PBEM++ "Logging" tab is visible, then save and send the debug log attached to an email to robertc@matrixgames.com. This text file could be pure gold.

The OTS Development Team

If there was a loss of connection to the server, once you Resume a PBEM++ game, the following dialog will be shown offering you the chance to recover a failed upload.

Select the file you want to resend to the server and click Upload.

Upload a PBEM++ Game File Use this dialog to select and reupload a PBEM++ file to the Matrix game servers. These files will not be erased until an upload is successful. Eligible game instances are: Cross Checking_Recovery_7381_20230129_1147.ini Defence of Kinding_Recovery_7382_20230129_1243.ini te Upload Cancel

8 <u>Resuming Games</u>

On the Main Menu, there are four options for resuming gameplay. The following sections will detail how you resume one of your games.



8.1 Saved Scenario

Selecting and clicking the Saved Scenario button will bring you to the dialog shown below.

:\OTS_ECCW_BETA\Modules\ECSS\Saved\		-
ile Name	File Date 🔻	Ā
Brief Moment In Time 220617 1638 @ 00 nc 0600	brs 2022/06/17 16:39:06	
rothers in Arms-IRS 220617_1635 @ 00_pc_0000	rs 2022/06/17 16:35:00	
Brief Moment In Time 220617 1630 @ 00 nc 0600	hrs 2022/06/17 16:31:02	
Brief Moment In Time 220617 1625 @ 00_pc_0000	hrs 2022/06/17 16:26:08	
Brief Moment In Time 220507 0908 @ 00 pc 0600	hrs 2022/05/07 09:19:54	
oujours Pret-2e 220426_1918 @ 00_pc_0800 hrs		
oujours Pret-2e 220426 1518 @ 12 pc 0831 hrs	2022/04/26 15:21:30	
oujours Pret-2e 220426_1518 @ 12_pc_0830_hrs	2022/04/26 15:21:24	
oujours Pret-2e 220426_1518 @ 11_pc_0827_hrs	2022/04/26 15:21:00	
oujours Pret-2e 220426_1518 @ 06_pc_0815_hrs	2022/04/26 15:19:04	
oujours Pret-2e 220426_1518 @ 00_pc_0800_hrs		
oujours Pret-2e 220426_1512 @ 00_pc_0800_hrs		
autoure Prot-70 770476 1504 @ 06 pc 0015 bre	2022/04/26 15-00-27	
Cold War: Southern Storm		
Scenario. A biter Moment In Time		
Player 1: Human, Player 2: Computer		
Save Date: 6/17/2022		
There are 78 Saved Games.	Delete Selections Allow multiple selections	

The top text box shows you the folder in which the saved scenarios are located. If you need to change this folder, you can click on the folders icon at the right of the text box and switch locations.

Next is an extensive list box showing all the saved scenario games in the selected folder. Clicking on one to highlight it will bring up details in the panel below the list box.

Below the Detail panel is a panel that tells you the number of saved scenario games and a button to delete the highlighted save. Clicking the Delete Selections button will remove the highlighted save or saves if you check the box for Allow multiple selections.

Click the Proceed button to start the saved scenario.

8.2 Saved Campaign

Selecting and clicking the Saved Campaign button will bring you to the dialog shown below.

lodern War Pro - Firefly				
Resume a Previously Saved Campaign:				
File Name	File Date V			
Finding the way home				
Cold War: Southern Storm Scenario: Yellow Brick Road				
% Game Complete: 0 Player 1: Computer, Player 2: Human Save Date: 7/12/2022				
	Delete Selections Allow multiple selections			
Proceed Back				

The top text box shows you the folder in which the saved campaigns are located. If you need to change this folder, you can click on the folders icon at the right of the text box and switch locations.

Next is a large list box showing all the saved campaign games in the selected folder. Clicking on one to highlight it will bring up details in the panel below the list box.

Below the Game Details panel is a panel that tells you the number of saved campaign games and a button to delete the highlighted save. Clicking the Delete Selections button will remove the highlighted save or saves if you check the box for Allow multiple selections.

Click the Proceed button to start the saved Campaign game.

8.3 PBEM++ Multiplayer

To continue a PBEM++ challenge, click the PBEM++ Multiplayer button, and that will launch the PBEM++ login screen. Refer to Section 0 above

on how to log in and then continue a challenge.

8.4 PBEM Classic (PBM)

2000

Clicking on the PBEM Classic (PBM) button will take you to the following dialog.

The top text box shows you the folder that the saved Play by Email Classic saves is located in. If you need to change this folder, you can click on the folders icon at the right of the text box and switch locations. Refer to Section 7 above on the setup of a Classic PBEM game.

Next is a large list box showing all the saved Classic PBEM games in the selected folder. Clicking on one to highlight it will bring up details in the panel below the list box.

Below the Detail panel is a panel that tells you the number of saved Classic PBEM games and a button to delete the highlighted save. Clicking the Delete Selections button will remove the highlighted save or saves if you check the box for Allow multiple selections.

Click the Proceed button to start the saved Classic PBEM game turn.

Modern War Pro - Firefly				
Desume an Existing DDEM Games				
C:\Users\lim\Dronbox\Public	-			
	Ste Data			
Hie Name	File Date ▼			
A brief Moment II Time 001	2022/07/11 10.20.47			
Cold War: Southern Storm				
Scenario: A Brief Moment In Time				
% Game Complete: 0				
Player 1: Human, Player 2: Remote Human				
Save Date: 7/11/2022				
There is 1 Saved PBM Game. Refresh	Allow multiple selections			
Proceed Back				

9 Game Launch and User Interface

This section will cover the basics of launching a scenario and the basics of the new User Interface (UI) in the game.

9.1 Scenario Start-Up

Once you have selected a scenario to play by one of the means noted earlier, you will get a screen where you will wait for a few seconds (or more on slower computers or larger scenarios) for the game to load the map and data.

Please wait while the game loads and initializes...

Once that is complete, you will get the main game screen seen below.



9.2 Setting Up the UI

Before we dive into the details of all the various User Interface (UI) elements, there are a few new capabilities for how you can set up the UI to suit your taste.

• All the dialogs and panels that are shown, except for the Main Menu Bar at the top of the screen and the Status Bar at the bottom of the screen can be moved around on the screen or on to other screens.



2000

• Dialogs and Panels with this symbol in the lower right can be resized. Most have a minimum and maximum size.



- Dialogs and Panels with this symbol in the upper right can be collapsed to the title bar or expanded to full size. Useful if you want to see more of the screen.
- A few of the Staff Dialogs have active maps that will update with

information as the game is played.

- Most of the dialogs and panels will remember the last location they were placed on the screen and will be in those positions the next time you play a scenario.
- The Dashboard can be locked to display information on one unit, and more dashboards can be opened. The dashboard can also collapse to a smaller size if you need it, and they also will dock against each other.
- The UI should work well with ultra-wide screens and scale well with 4K monitors.

NOTE: If you have multiple monitors with different font scaling levels and drag dialogs to another screen with a different scale, the dialogs and other menu panels may not display correctly. This is something we are looking into and hope to correct in the future.

9.3 Manual Sections Covering the UI

The following sections cover all the various parts of the game interface and what they do.

- See Section 10 below for information on the Announcement Dialog.
- See Section 11 below for information on the Main Menu Bar.
- See Section 12 below for information on the Status Bar.
- See section 13 below for information on the Core Game Panels.
- See Section 14 below for information on the Info View Panels.
- See Section 15 below for information on the Staff Dialogs.
- See Section 16 below for information on the Game Map.
- See Section 17 below for information on Unit Counters.

NOTE: If you know the interface or want to jump to the how-to-do things portion of the manual, then head for Section 20 below on Issuing Orders.
10 Announcement Dialog

When a scenario first starts, there is a dialog that pops up in the center of the screen with basic information about the scenario. It gives you the Commander's name, the side played, and then a few links to Staff Reports that you can bring up and review (see Section 15 below for details on those reports).

The dialog also tells you that you can set up your forces on the map and tells you a general breakdown of those forces. As noted in the dialog, the best of luck with the upcoming battle.



2000

Welcome to the "Brothers in Arms-JRS" scenario. You are commanding NATO

forces, and have 6 hours to accomplish the mission described in your Scenario Briefing. Your forces are composed of 4 group(s) of units, extensive descriptions of

which are found in the Operations, P&L, and Fire Support staff reports Information about the opposing forces are available from the Intel staff report.

(subject to the usual stacking limits).

You are responsible for a total of: 12 Recce, 9 Tank, 35 APC, 36 Inf, 8 HQ, 2 assets are all but irreplacable.



Obs. Kaus



In-Game Announcements 10.1

In-Game Announcements bring you the information in the form of small dialogues that pop up when specific events happen. Information that may be received includes:

- Weather Updates and changes in visibility
- Changes in time of day and lighting conditions •
- Reinforcements and withdrawals of specific units •
- Leader killed •
- HQ intercepts •
- Electronic Warfare level changes •
- Off-map Events like strike aircraft intercepts ٠
- Detection of on and off-map enemy artillery assets ٠
- Losses of friendly off-map artillery assets •
- Scenario or Campaign Game has ended

Other messages may also be displayed. You can dismiss them by clicking the Proceed button.

Main Menu Bar

At the top of the screen is the Main Menu Bar for the game. The following sections will go over each menu and function in detail. Hotkeys are shown in brackets ([hotkey]) for each item that can be used.

11.1 Game Menu Items

The Game Menu covers those functions that relate to the overall playing of the scenario.



- **Start/Pause/Resume Turn Resolution** [*F9*] This menu item will start turn resolution after you issue orders or pause the turn resolution if it is running and then resume resolution when you are done looking at information.
- Replay Previous Turn Resolution [Shift-F9] This menu item will replay reset the turn that was just resolved and start it over with a VCR dialog for control (See Section for details on the VCR dialog functions). You can only replay the last turn resolved.
- **Full-Screen Map Capture** [*Ctrl+Z*] Captures the entire game map and all counters and markers on it with no UI shown in the specified folder.
- **Save Game** This opens the Save Game dialog, and you can save the current turn and return to the game. The Cancel button will exit the save dialog back into the game.
- End Game Now Depending on the confirmation dialog, Yes will stop the current scenario, score the outcome, and display the end of the scenario post-mortem. Once invoked, you cannot restart the game and would need to reload a previous save. If you wish to continue the game, select No from the Confirmation dialog.
- **Go to Main Menu** When this action is selected, a confirmation dialog to save the scenario will appear. Selecting Yes will save the game via dialog and then return to the Main Menu. Selecting No will end the game and return to the Main Menu. Finally, selecting Cancel

will abort the action and return to the game.

- Show Game Difficulty Settings [F3] Selecting this action will open a read-only display of the Difficulty Settings of the scenario for you to review.
- **Exit** Exits the game back to the desktop without saving the game.

11.2 Counters Menu Items

The menu items in this tab relate to actions to better see specific units or to show/hide counters and markers on the map.

Counters 👻	Info View 🔻	Staff 👻	Unit
Bring All HQs to the Top			Ctrl+H
Enemies Sighted by this Unit			Ctrl+Y
Spotted Enemies That Can See This Unit			
Hide Unit Counters			Ctrl+U
Hide Victory Point Markers			Ctrl+V
Hide All Map Markers (not kills / craters)			Ctrl+G

- **Bring All HQs to the Top** [*Ctrl+H*] For all your units in the stack, this action will move all Headquarters (HQs) to the top of the stacks to be visible.
- Enemies Sighted by this Unit [*Ctrl+Y*] For the selected unit on the map, this action will remove all the enemies from the map that are not spotted by the unit, only showing those enemies this unit can see. It can be toggled on and off.
- Spotted Enemies That Can See This Unit For the selected unit on the map, this action will only show those known enemies that can see the selected unit. It can be toggled on and off.
- **Hide Unit Counters** [*Ctrl+U*] Selecting this action will hide all the counters on the map, both friendly and the enemy, so the map and markers are visible. It can be toggled on and off.
- Hide Victory Point Markers [Ctrl+V] Selecting this action will hide all the Victory Point (VPs) markers on the map. It can be toggled on and off.

Hide All Map Markers (not kills/craters) [*Ctrl+G*] – Selecting this action will hide all map markers except the kills and craters so the map and unit counters can be seen more easily. It can be toggled on and off.

11.3 Info View Menu Items

The menu items in this tab open or close several helpful dialogs, toggle the Spotlight Panel look or change the look of the Core Panels.



- **Unit Dashboard** [*F4*] Selecting this action brings up the Unit Dashboard for the currently selected unit on the map. See Section 0 below for the details of this dialog. You can have more than one of these open at a time on different units.
- **Core Floating Panels** [*F5*] These are the four primary panels you see on the left side of the screen (default locations). These are Game Control, Commander, Spotlight, and Mini-Map panels. This is on by default. These are covered in detail in Section 13 below.
- **Subunit Inspector (SUI)** [*F6*] Selecting this action brings up the SubUnit Inspector for the currently selected unit on the map. See Section 14.3 below for the details of this dialog.
- Command Log Display [F7] This panel displays the diary log messages for the entire force in the scenario. It is on by default. It

can be toggled on and off. In head-to-head or AI versus AI games, there are tabs for both forces on the display.

- **Off-Map Unit Holding Box** [*F8*] Selecting this action will open the Off-Map holding Box to show you any off-map units that you can use during the scenario. See Section 14.5 below. It can be toggled on and off.
- **Toggle Spotlight View Format** [*F10*] Selecting this action will toggle the Spotlight Panel between the Order of Battle (OOB) display and the Detailed Unit information display.
- **Toggle Spotlight View Format** [*Shift+F10*] Selecting this action will split the panel and show both the OOB and the Detailed Unit information on the single panel with a splitter bar that you can adjust up and down to show the information. This is recommended only if the panel has more room or is floating away from other panels.
- Show and Use Core Info Panel Area Selecting this action to be active (check mark showing in the menu) will place the Core Info Panels to the right of the map, so the right edge of the map is visible on the screen. If this is turned off, the map edge will go to the screen edge and be hidden under the Core Panels.
- Reset All Form Screen Positions on Game Exit Selecting this action will set all the various game panels and dialogs back to their default location for the next game played.

11.4 Staff Menu Items

This is a critical menu for all Commanders to utilize during the game. The dialogs here provide you with information from your various staff officers (Operations, Intelligence, Logistics, and Fire Support) as well as an overview of the scenario.

Other essential functions found in this menu are the items relating to overlay graphics. These are graphics that are placed over the map and are created by an external art program.



- Scenario Information Selecting this action brings up the Scenario Information dialog. This covers the Scenario Description, Victory Conditions, and VP Distribution Details. See Section 15.1 below for the details of this dialog.
- **Operations** Selecting this action brings up the Operations dialog. This covers the Mission Briefing, Map overlay, SITREP (Situation Report), Engineering, Air Support, Emitters, Diaries, and Runner information. See Section 15.2 below for the details of this dialog.
- **Intelligence** Selecting this action brings up the Intelligence dialog. This covers the Threat Assessment, Enemy SITREP, Reported Kills and Claims, Weather Forecast, EW Report (Electronic Warfare), and Enemy Off-Map Assets. See Section 15.3 below for the details of this dialog.
- **Personnel & Logistics** Selecting this action brings up the Personnel and Logistics dialog. This covers Staff Alerts, Detailed Unit Status, Reinforcements and Withdraws, and Ammunition. See Section 15.4 below for the details of this dialog.
- Fire Support Selecting this action brings up the Fire Support

dialog. This covers the Fire Support Assets, Fire Missions, and Fire Support Control Center. See Section 15.5 below for the details of this dialog.

- Victory Conditions and Status Selecting this action will open the Victory Conditions and Status dialog, and you can review the current state of the scenario.
- Show User Mission Graphics Selecting this action will toggle the latest Mission Graphics to be drawn on the map. The graphics can be from the Briefing, Clipboard, or User.
- Copy Map to Clipboard for Mission Graphics Selecting this action will copy the map with unit counters and markers to the clipboard so it can be imported into a paint program for editing. We suggest using Paint.NET in Windows to edit the mission graphics with information. Other programs may not support the format for import.
- **Import Mission Graphics from Clipboard** Selecting this action will load any mission graphics you have currently copied to the clipboard from your paint program, provided the image dimensions are identical to the map dimensions (as imported from the clipboard). The game will blend the image to show your color graphics on the map while turning grey scale-colored pixels (including white and black) transparent. The game is compatible with the 'in-memory' clipboard format from Paint.NET, not with those from MS Paint and Paint3D. **NOTE:** The color Black will not show in the mission graphics.
- **Import Mission Graphics from Briefing** Selecting this action will load the pre-made mission graphic that supports the given side's briefing for the scenario.
- **Import Mission Graphics from Threat Assessment** Selecting this action will load the pre-made mission graphic that supports the threat assessment for the scenario.
- Load Mission Graphics from File Selecting this action will load the pre-made mission graphic from the Custom folder in a scenario folder. For the NATO side, the graphic must be named Overlay0.png, and for the Warsaw Pact side, it must be named Overlay1.png.

Save Mission Graphics to File – Selecting this action will save the currently shown mission graphics to the Custom folder of the scenario folder with the name Overlay0.png for NATO and Overlay1.png for Warsaw Pact. It will only save a single image currently.

11.5 SOP Items

2000

SOPs (Standard Operating Procedures) are unit instructions on how to behave in certain situations on the battlefield. This menu item provides a means to adjust SOP characteristics for selected units or to set SOPs based on the type of unit and the selected SOP package for the selected units.



- Set SOP Selecting this option will display the Set SOP options submenu. See Section 11.5.1 below for details on the various color options.
- Adjust SOP Selecting this option will display the Adjust SOP options sub-menu. See Section 11.5.2 below for details on the various color options.
- SOP Manager Selecting this action will open the SOP Manager Dialog for the selected unit. See Section 23 below for details on the setting of this dialog.

11.5.1 Set SOP

The Set SOP menu item brings up an additional menu dialog with a list of unit types and arrows to open an additional menu with pre-set SOP options for those unit types. The pre-sets are based on the unit type and the roles it typically performs and the values have been set by our team.

The Set SOP submenu is seen below.



The Custom Unit Type selections are seen in the additional flyout submenu below.



Once a Set SOP is selected, the following confirmation dialog is shown that explains the SOP settings used for the Set SOP selection. Under each counter is a checkbox that allows you to select which of a group of units the Set SOP applies to. At the bottom, there are options to apply the new Set SOP preset to the current default order, all movement orders, and all non-movement orders. The recycle button allows you to quickly invert the selected unit check boxes in the dialog. When you are ready to apply hit the Done button. If you change your mind and do not want to do a Set SOP setup, click the cancel button.



For more information on SOPs, see Section 23 below.

11.5.2 Adjust SOP

This sub-menu has the following SOP items set out as individual items. These are the same items as found in the SOP Manager dialog. For any selected unit or units (Alt, Ctrl, or Shift selected), the setting will be applied to those units shown as checked in the setting dialog that pops up after choosing a setting.



- Acceptable Losses... This is the unit(s) willingness to take losses before seeking a change in orders. This works with the Tactical Initiative above to set how a unit reacts. The settings for this item are Do or Die, Substantial, Moderate, or Minimal.
- **Preferred Standoff Range...** The number of 500m hexes you wish the unit(s) to be distant from any detected enemy units.
- Fire Discipline... This sets the range or ability to shoot at enemy units in direct fire. The available settings are Refuse fire, Hold until fired on, Point blank (0 to 1 hex), Short Range (1/3 Max Range), Medium Range (2/3 Max Range), and Maximum Range. **NOTE:** This applies to all of the unit's weapons.
- Minefield Contact... This is the unit(s) response to entering a minefield. The options here are Ignore and Run (do not delay and accept the potential for more subunit losses crossing the field), In Stride Breach (units slow down to follow a leader through the field, hoping to avoid mines by traveling in the same tracks), or Stop and Reduce (units halt and either wait for engineers to remove enough mines to open a path through or do the work themselves at a slower rate).
- Relocate When... This determines under what condition a unit will seek to scoot to a new location for better protection or to avoid enemy fire. The possible selections are After each fire mission, After

all fire missions, While enemy spotted, After receiving any fire, After receiving direct fire, After taking any losses, After taking direct fire losses, or Never. Some of these settings work better for certain types of units. The after-fire mission settings work better for artillery, for instance.

- Movement Preferences... When a unit moves from waypoint to waypoint, there are a few options for how that travel can be done. Hasty move will prefer roads, and Deliberate or Assaulting move orders will mix roads with cross-country movement. You can set stricter movement preferences by checking the boxes for Concealment (more off-road and seeking better-covered terrain to move through, Roads (favor taking roads instead of cross country), and Avoid NBC (which will path units around NBC-contaminated locations on the map).
- **Passengers Disembark...** Selecting this option will display the Adjust SOP options sub-menu. See Section 11.5.1 above for details on the various color options.
- Carriers, when Empty... Selecting this option will display the Set SOP options sub-menu. See Section 11.5.1 above for details on the various color options.
- **Direct Support Priority to...** Selecting this action will open the SOP Manager Dialog for the selected unit. See Section 23 below for details on the setting of this dialog.

Once an SOP Adjustment is selected, the following confirmation dialog is shown that states the SOP settings adjusted for the selected units. Under each counter is a checkbox that allows you to select which of a group of units the SOP Adjustments apply to. At the bottom, there are options to apply the new SOP Adjustment to the current default order, all movement orders, and all non-movement orders. The recycle button allows you to quickly invert the selected unit check boxes in the dialog. When you are ready to apply hit the Done button. If you change your mind and do not want to do any SOP Adjustment, click the cancel button.



For more information on SOPs, see Section 23 below.

11.6 Unit Overlay Menu Items

Overlays are helpful on-map graphics that show various information for the selected unit to help show lines of sight, the range for weapons and spotting, Electronic Emissions if any, and a range ruler. Some of these can be used in combination on the map.

Unit Overlay 🔫	Multi-Unit	
Line-Of-Sight	Ctrl+L	
Range Rings	Ctrl+D	
SOP Ranges	Ctrl+P	
Spottable From	. Ctrl+O	
Emissions		
Ruler	Ctrl+F	

 Line of Sight [Ctrl+L] – Selecting this action brings up the Line of Sight (LOS) overlay and the basic Detection, Classification, and Identification rings for the selected unit. Hexes are in various shades of green based on how good the visibility is to that hex. The brighter the green, the better the visibility to the hex. Also included are the

visual capability values for each hex. Higher numbers mean a better chance to spot enemy units in those hexes. Hexes inside the hard outline are in weapons range. See Section 23 below for more details on LOS and the Spotting of units.



The range ring for Detection notes the maximum range under perfect conditions that an enemy unit of some type can be detected. Once inside the Classification range, the Detected target's type can be determined (is it a tank or infantry unit). Once inside the Identification range, the exact type of enemy units can be determined (the tank is a T-80BV, for example).

NOTE: You can see the line of sight from any hex by doing a Shift + left mouse clicks on the hex you want to check.



Range Rings [*Ctrl+D*] – Selecting this action brings up the range rings overlay on the map for the selected unit. Rings include weapons ranges (in your combat preferences color), visible spottable range (Thermal and radar distances will be more prominent in most cases), and the max spotting range based on the environmental conditions.



• **SOP Ranges** [*Ctrl+P*] – Selecting this action brings up the SOPrelated range rings for the selected unit. This includes the unit's standoff range and selected weapon engagement range. The filled hexes show the line of sight, with green being out to the maximum spotting range. Yellow hexes are the line of sight within the standoff range, and ones with red numbers are in the selected weapon's range.



Spottable From [*Ctrl+O*] – Selecting this action brings up the Spottable From overlay for the selected unit. This shows the various ranges and types of systems (Visual, Thermal, and Radar) that the unit is possibly visible to and the hexes where line of sight exists. The size, movement, firing, and other factors impact the ranges.

NOTE: You can check the selected unit's Spottable From in any hex by doing a Shift + left mouse click on the hex you want to review. The information will change based on the type of terrain in that hex.



• **Emissions** – Selecting this action brings up the Emissions overlay. This shows the electronic line of sight of an emitting unit. These would be units with some form of radar (air search or ground search) and that system turned on (See Orders, Section 20 below).



 Ruler – Selecting this action brings up the Ruler overlay. This shows range rings in 1000-meter circles with lighter rings for 500 meters up to 5000 meters.



NOTE: You can check the from any hex by doing a Shift + left mouse click on the hex you want to review.

11.7 Multi-Unit Overlay Menu Items

Multi-Unit Overlays are helpful on-map graphics that show various information for all units to help show lines of sight, ranges for weapons and spotting, Electronic Emissions if any, and Starting Deployment Areas. There are also functions to show Chain of Command, Air Defense coverages, Fire Support coverage, and Direct Support assets. Some of these can be used in combination on the map.

NOTE: Many of the following functions will also show the currently selected units overlay as it would appear in other hexes by Shift + Left Mouse Click in the hex of interest. This can be very useful when planning locations for things like air defense or looking at variations in line of sight at different map locations.



• All Paths [*Ctrl+A*] – Selecting this action brings up all the active paths for all your units. The currently selected unit will have a darker path line.



• **All LOS** – Selecting this action brings up the Line of Sight (LOS) overlay for all your on-map units. As you select units, you will see the LOS of that unit shown with the thick hex outline on the map.



• **All Spottable From** – Selecting this action brings up the Spottable From overlay on the map for all your units on the map. The selected unit's spottable hexes will be shown with a thick hex outline.



• All Emissions – Selecting this action brings up the All-Emissions map overlay. This shows the coverage for all emitting units on the map. The selected unit will have its hexes outlined, and the unit will have a wavey circle around it.





In cases where a unit has an emitter(s), but they are turned off, the unit will have a gray wavey circle drawn around it as it shows to the left. See Section 20 below on how to issue orders to turn emitters on and off.

Deployment Areas – This menu action toggles the setup zones for each side off and on. These are the colored hex areas that show up for your units at the start of the scenario. The selected unit can be dragged and dropped into any colored hex. The colors for each side and the level of transparency are set in the game options (see Section 3.4 above).





• Chain of Command [*Ctrl+X*] – Selecting this action brings up the Chain of Command overlay. This shows the chain of command for units. The chain of command is how orders are given and received by units and headquarters. As shown below, the highest headquarters, when selected, will show lines of command to the next lower-level headquarters. Solid lines are in-range. Dashed lines indicate a subordinate HQ or unit that is out of command range. The HQ's command range is drawn as a large circle. Units outside of the command range face additional delays in orders and reduced resupply. Some units, like Recon units, can operate at full capacity at any range.



As seen above, dark-colored lines extend from the selected HQ to its next-level subordinate units. In this case, the subordinates are lower-level HQs.



In the picture above, one of the subordinate HQs has been selected. Dark lines extend to that HQs subordinate units, and a dark circle shows the extent of the HQ's command radius. A light-colored line goes from the selected HQ up to the next higher HQ if it exists, and the command range of the next higher HQ is drawn on the map.



In the picture above, one of the subordinate units has been selected. Light lines extend to that subordinate unit's HQ, and a light circle shows the extent of the HQ's command radius for that subordinate. Selecting other subordinate units will show the relationship to their local HQ.

Air-Defense against Helicopters – Selecting this action brings up the Air-Defense overlay for on-map Helicopters or Drones (assumed to be flying very low and defensively) for all air-defense capable units in your force. Depending on the type of unit, there are three types of overlay effects shown on the map. When you select a unit with an Air-Defense Surface to Air Missile system (SAM), the hexes are shown as filled, and the range of the selected unit is seen in the solid hex side outline, as seen in the image below.



When you select a unit with an Air-Defense Gun system (Flak), the hexes are shown as horizontal hatched lines, and the range of the selected unit is seen in the solid hex side outline as seen in the image below on the left.



When you select a unit with a Limited Air-Defense system (like an anti-air machine gun or autocannon), the hexes are shown as vertical hatched lines, and the range of the selected unit is seen in the solid hex side outline as seen in the image above on the right. These are limited capability systems. These weapons will engage at a reduced range and only engage air threats approaching them (within a 30degree arc).

Air-Defense against Planes – Selecting this action brings up the Air-Defense overlay for off-map Aircraft (assumed to be flying low) for all air defense capable units in your force. Depending on the type of unit, there are two types of overlay effects shown on the map. When you select a unit with an Air-Defense Surface to Air Missile system (SAM), the hexes are shown as filled, and the range of the selected unit is seen in the solid hex side outline, as seen in the image below.



When you select a unit with an Air-Defense Gun system (Flak), the hexes are shown as horizontal hatched lines, and the range of the selected unit is seen in the solid hex side outline, as seen in the image below.



Fire-Support Coverage – Selecting this action brings up the Fire-Support Coverage overlay. This shows the firing range for all on-map and off-map indirect fire artillery units (mortars, field guns, rockets). Selecting a unit will show darkened range rings and map coverage hexes.





Fire-Support Missions – Selecting this action brings up the Fire-Support Missions overlay. This shows All of the currently plotted fire missions. A line is drawn from each firing unit to the target hex(es). The target hex(es) will state the type of mission (HE = High Explosive, Smoke, ICM = Improved Conventional Munitions, or Chemical, for example), the number of rounds to be fired, and the time the mission starts. Lines will be drawn for off-map assets based on their off-map locations and target hexes.



Direct Support – Selecting this action brings up the Direct Support overlay. The direct support overlay indicates, given the selected unit, which assets are in direct support and which units are directly supported. DS assets either have a line to the selected unit supporting that unit), or six short lines in all directions when they are set to support all units. The ranges of DS assets are also shown on the map. If a DS asset is selected, the hexes in the line of sight of all supported units are indicated as hexes with a hard outline.



11.8 Terrain Overlay Menu Items

The Terrain Overlay Menu has several useful overlays covering various factors of the map and the terrain. The most important from a planning aspect is the MCOO [Pronounced Ma Coo] or the Modified Combined Obstacle Overlay. The others have been used, and most are found in the Status Bar (See Section 12.2 below) for the hex the mouse is in.



 Modified Combined Obstacle Overlay (MCOO) – Selecting this action will bring up the MCOO. The map will be overlayed with various colors, hatching, and edges that represent various levels of useful terrain information. A Legend also pops up to explain all the impact of the various information shown. Use this information to quickly note poor mobility areas, clear lanes of fire, impassible terrain, and good locations to hide recon units. See Section 16.12 below for details on what the various markings mean.



Elevation Values – Selecting this option will show the elevation value for every hex on the map. Elevations run from 1 to 10 and denote changes of 25 to 50 meters of the ground level. Elevation changes impact the line of sight, and changes in elevation also impact the speed of unit travel.



• **% Cover** – Selecting this option will show the Cover Percentage for every hex on the map. Cover runs from 1 to 99 and denotes the ability of the terrain to provide cover from direct/indirect fire, with 1 being no protection and 99 being a maximum.



% Concealment – Selecting this option shows the Concealment rating for each hex on the map. Concealment impacts the spotting and line of sight abilities of units. One being no impact to line of sight/spotting and 99 being extreme degrading of the line of sight and spotting.



• **%Mobility** – Selecting this option shows the Mobility rating for each hex on the map. The Mobility rating shown reflects off-road movement for units. The higher the number, the faster units can travel off-road. Units using Hasty (road) movement will move faster where there are roads and ignore the mobility rating in favor of the type of road.



Altitude Values – Selecting this option will display the Altitude value for every hex on the map. The Altitude value is the height above sea level in meters for the area represented on the map. The information is for display only and does not factor into gameplay.



• **Feature Height** – Selecting this option will display the Feature Height for each hex on the map. Feature height is a primary measure of how tall the objects are in the terrain. This value impacts spotting and line of sight during the game.



Defense Rating – Selecting this option will display the Defense Rating for every hex on the map. This is a relative rating for how defendable a location is based on the terrain type. One would be very poor defensible terrain, and 99 would be outstanding terrain to defend in.



11.9 Options Menu Items

The Options Menu is used to access the User Preference dialog, change up the counter art style and colors, and vary the map contrast to suit your taste to see the counters and markers.

- **User Preferences** Selecting this option will open the User Preferences dialog that has many of the game settings. See Section 3 above for details on what settings are there and what they do.
- Show NATO Unit Counters Selecting this option will display NATO markers in place of the vehicle silhouettes on all counters. Default silhouette counters left, and NATO counters right. For a rundown of NATO symbols and their meaning, refer to the Battlefield Primer FM FCCW-02.



Show Large Simple Unit Counters – Selecting this option will display Large NATO Symbols on all the counters to make the unit type more visible at extreme map zoom-out levels. Default silhouette counters left and Large Simple counters right.



• Show Unit Counter Halo – Selecting this option will display a color halo around the silhouette on all the. Default silhouette counters left and Large Simple counters right.



- Unit Counter Color Schemes Selecting this option will display the Unit Counter Color Scheme options. See Section 11.9.1 below for details on the various color options.
- Map Contrast Options Selecting this option will display the Map Contrast Options. See Section 11.9.2 below for details on the various map contrast options in the game.
- **Map Zoom Options** Selecting this option will display the Map Zoom Options. See Section 11.9.3 below for details on the various

map zoom levels in the game.

• **Map Show Hex Grid** – Selecting this option will draw a lightcolored hex grid over the current map to better show the map hexes. This can be toggled on and off via the menu item.



• **Mission Graphics Transparency Options** - Selecting this option will display the Mission Graphics Transparency Options. See Section 11.9.4 below for details on the various transparency options in the game.

11.9.1 Unit Counter Color Schemes

Along with being able to change the basic look of the counter art between Silhouettes and NATO standard markings, these additional counter options allow you to change the colors for better identification or contrast depending on your style or need. These settings can be changed at any time the menu is active in the game.

Black on White (Default)

White on Black

2000

- Automatic Dark Color Fill (best for silhouettes)
 Automatic Light Color Fill (best for NATO)
 Automatic Light Color Fill with Black Accent (best for NATO)
- **Black on White (Default)** Simple black art or black NATO symbol on a white field.



• White on Black – Simple white art or white NATO symbol on a black field.



• Automatic Dark Color Fill (best for silhouettes) – Based on formations, each unit will get a contrasting dark color fill for the silhouettes and halo or the NATO backgrounds. This makes it easier to see what units belong to what formations and HQs.



Automatic Light Color Fill (best for NATO) – Based on formations, each unit will get a contrasting light color fill for the silhouettes or the NATO backgrounds and contrasting color lines for the NATO symbols. This makes it easier to see what units belong to what formations and HQs.



 Automatic Light Color Fill with Black Accents (best for NATO) – Each unit, based on its formation, will get a contrasting light color fill for the silhouettes or the NATO backgrounds with black line art for the NATO symbols. This makes it easier to see what units belong to what formations and HQs.



11.9.2 Map Contrast Options

These options allow the user to change the level of contrast/saturation (color vibrancy) of the map to make the counters and map markers more visible in some cases. The option goes from full color all the way down to a basic grey scale look. This setting can be changed at any time when the menu is active.



• **Full-Color Map Terrain** – This selection shows the map in its default color as made.



• Lightly Muted Map Terrain – This selection shows the map with a slight change to contrast and saturation.



 Moderately Muted Map Terrain – This selection shows the map with a moderate change to contrast and saturation.



• **Strongly Muted Map Terrain** – This selection shows the map with a strong change to contrast and saturation.



 Fully Muted Map Terrain – This selection shows the map with an entirely muted contrast and saturation. Basically, turning the map to grey-scale.



11.9.3 Map Zoom Options

2000

The Zoom Options menu item provides the user with the ability to zoom the map from 30% all the way up to 200%. This wide range allows layers on very high-resolution screens to zoom in and still see and read counters and the map. The Fit option automatically scales the entire map to fit on the screen. There are hotkeys for the basic ranges between 50% and 130%.

	Zoom 30%		
	Zoom 40%		l
	Zoom 50%	Ctrl+5	ł
	Zoom 60%	Ctrl+6	
	Zoom 70%	Ctrl+7	I
	Zoom 80%	Ctrl+8	I
	Zoom 90%	Ctrl+9	
~	Zoom 100%	Ctrl+0	
	Zoom 110%	Ctrl+1	
	Zoom 120%	Ctrl+2	I
	Zoom 130%	Ctrl+3	l
	Zoom 140%		ł
	Zoom 150%		l
	Zoom 160%		
	Zoom 170%		I
	Zoom 180%		
	Zoom 190%		
	Zoom 200%		
	Zoom (Fit)	Ctrl+4	

11.9.4 Mission Graphics Transparency Options

The in-game Mission Graphics Transparency is 50% and can be set to a less transparent level on the map by selecting 25% or 10% Transparency via this option. The lower the value the brighter the mission graphics will appear over the map.



11.10 Help Menu Items

The Help Menu contains several items to allow you to access various game documentation folders to access the PDFs for the What's New, Field Manuals and Operational Area Guides, the in-game Hotkeys listing, About the game info, and the all-important Credits (check it out at least once to see all those responsible for this great game).

Help 👻		
Open Wha	it's New Folder	
Open Field	l Manuals Folder	
Open Operational Area Guides Folder		
Hotkey Su	mmary	
About the	Game	
Credits		

12 Status Bar

At the bottom of the game screen is the Status Bar. This bar has two areas with different functions and information.

In the blank area between the two status zones, information about the selected unit and overlay(s) in use is displayed.

12.1 Speed Buttons

The left side of the Status Bar has several Speed Buttons that perform various game functions.

1117: A 02 0 63% Q 90% 56

Map + 49% (Map - LOS (Paths) (Ranges) SOP (Special) (Mission)

- **Map + and Map -** These speed buttons are used to zoom the map in or out, and the percentage of zoom is shown between these speed buttons.
- **LOS** This speed button turns on the Line of Sight (LOS) overlay for the selected unit, or a shift selected hex.
- **Paths** This speed button toggles on or off all the movement paths for your units if set.
- **Ranges** This speed button draws in the range rings for Spottable, Weapon Ranges, and Spotting range for the selected unit. If the unit is an HQ, then the command range will be shown as well.
- **SOP** This speed button draws the selected unit's SOP-related range rings showing Stand-Off range and Weapon Firing range settings.
- Special This speed button will toggle off or back on the last overlay not covered by any of the other speed buttons on the status bar.
- **Mission** This speed button toggles on and off any custom or loaded Mission Graphic for the scenario.

12.2 Hex Information

The right side of the Status Bar has five symbols and numeric information for the hex the mouse cursor is in.



- Hex Icon this is the ID number of the selected hex.
- **Mountain Icon** This is the elevation of the selected hex, with 00 being water/ground level and going up from there.
- **Shield Icon** This is the percentage of cover the hex provides units in it. Higher is more cover.

- **No Eye Icon** This is the concealment capability of the hex selected. Higher numbers make it harder to be spotted.
- **Truck Icon** This is the mobility rating for the selected hex. The higher the number, the quicker units can move through the hex.

13 Core Game Panels

On the right side of the screen, next to the map, are the Core Game Panels. This is the default position of these panels. They can be moved around on the screen or moved to another screen. See the sections below for details on each of these Core Panels.

13.1 Game Control Panel

The Game Control Panel contains information critical to the overall play of the scenario.



- 1. The top bar states the commanding force name. During turn resolution, the title changes to "Turn Resolution."
- 2. This area shows the time of day and date and the elapsed time of the scenario, and the total time limit of the scenario.

- 3. This is the Start/Pause button that starts turn execution after an orders phase or pauses the resolution if the game is running.
- 4. This graph shows the command cycles for both sides. The player side is an exact measure of the command delay time, and the enemy is an estimated value.
- 5. This area is the weather panel. At the top, the current weather and visibility conditions are shown. Below is a weather icon and the temperature. To the right of that, there is an icon for wind direction and wind speed. Next is the percentage of illumination (which is vital at night based on the phase of the moon). In the upper right, the cloud ceiling in meters is shown (if one exists). Finally, in the lower right, the next phase in the time-of-day cycle (dusk in this case).
- 6. At the bottom of the panel, the state of Air Superiority Control is noted. This will be noted as who is in control and how strong that effort is.

13.2 Commander Panel

2000

The Commander Panel contains information about your command and shortcuts to the Staff information dialogs.



1. The top bar shows the name of the commanding force.

- 2. This is the commander's name and rank. This is you as the player.
- 3. This is the force's badge or flag.
- 4. This is the national flag of the commanding force.
- 5. The HQ button calls up the Dashboard for the highest HQ unit on the map and highlights the HQ on the map.
- 6. This area tells you the time to your next Orders input cycle in minutes of game time.
- 7. These buttons can be used to bring up any of the Staff dialogs and the Off Map Assets (OMA) dialog. See Section 15 below for more details.
- 8. This area has information related to the overall condition of your force. This includes current Force percentage, Electronic Warfare Interference level, Recovery of Readiness capability per hour, and the overall Average Readiness of your force. These are the primary determinants of the command cycle length.

13.3 Spotlight Panel

The Spotlight Panel can be set to one of three modes to display 1) The Order of Battle (OOB Tree) or 2) Detailed Unit Information on the selected unit, or 3) in cases where there is enough screen space, both can be shown at the same time. You can toggle between modes 1 and 2 or show/hide the panel by pressing the F10 key or switch to mode 3, showing both by pressing Shift + F10.

13.3.1 OOB Tree View

2000



- 1. The top bar shows the name of the commanding force being spotlighted.
- 2. This panel displays your force's Order of Battle (OOB). You can open and close the OOB by clicking on the chevron icons to the left of the list. Clicking on a unit name will highlight that unit on the map. Right-clicking on a unit name will open the Unit Popup Menu (see Section 21.1 below).
- 3. This area allows you to select a unit and then resubordinate to another HQ or to change its order within a formation by clicking on the unit and dragging and dropping to a new position in the list. For more details on both actions, see Sections 20.1 and 20.2 below.

13.3.2 Detailed Unit Information View



- 1. The top bar shows the name of the commanding force being spotlighted.
- 2. The currently selected unit counter is shown in the window.
- 3. The text area states the selected unit's complete ID, Training Level, Type of unit, Size of the unit, Hex Location of the unit, Unit's Composition (by platform name and type), and then the percentages of the unit's Readiness, Morale, and Ammo (average for weapons).
- 4. Clicking on the <u>Menu</u> text item will bring up the Unit Popup Menu, which allows for orders and other unit-related functions and information (see Section 21.1 below).

13.3.3 Combined Spotlight View

2000



This view, as noted above, combines both windows into a single dialog view with all the information noted above. You can adjust the size of both windows within the dialog by dragging the splitter bar (1) up or down.

13.4 Mini-Map Panel

The Mini-Map panel, or Jump Map as it is called in many games, shows the entire map (greyscale), units (blue or red squares with a dark outline and in the case of the selected unit it is yellow), and objectives (white outlined blue or red squares).



- 1. The top bar shows the name of the Map and its dimensions in parentheses.
- 2. This is the full Mini-Map in greyscale. Clicking anywhere on this map will recenter the visible map on the game screen.
- 3. The yellow outline shows what part of the map is currently visible on the screen based on the level of zoom currently selected and the location on the main map.
- 4. You can change the level of the map zoom up or down with these buttons.
- 5. The Fit button will zoom the game map out so all of it fits on the screen.

14 Info View Panels

2000

There are five additional information panels that you will use during the game for various functions. There are the Unit Popup Menu, Unit Dashboard, Sub-Unit Inspector, Command Log, and Off-Map Assets. The following sections will detail them all.

14.1 The Unit Popup Menu

The Unit Popup Menu is the primary means of interfacing with the selected unit or units. Right-clicking on a unit will bring up the menu. You can also select multiple units and then right-click one of the units to bring up the menu. Any orders given to one selected unit will also apply to any other selected units.

14.1.1 General Menu Layout



- 1. The first section provides a means to open the Unit Dashboard (See Section **Error! Reference source not found.**) or open the Subunit I nspector (See Section **Error! Reference source not found.** below) for the unit right clicked on.
- 2. The second section of the menu has the SOP related commands. Set and Adjust SOP are covered in Section 11.5 above. The SOP Manager is covered in Section 23 below.
- 3. The third section of the menu shows all of the available orders for the selected unit. The selections will change based on the unit's capabilities. See Section 21 below for details of the orders.
- 4. The fourth section of the menu contains functions related to unit Command, Role, and Overlays.
 - Flash HQ Location Flash the hex location of the unit's immediate HQ unit.
 - Select Unit and Subordinates as Current Group This is a shortcut to select a formation of units based on a single selected unit.
 - Detach and Make Unit Independent Removes the selected unit from the formation and HQ it is under and places it as its own force. For most subunits it is better and safer to use the Order of Battle Tree to do subordinations see Section Error! R eference source not found..
 - Unit Role: Displays the unit's current role in the battle. Can be changed via the arrow and sub-menu that pops up. See Section Error! Reference source not found.
 - Show Clicking the arrow with bring up a sub-menu with the Unit Overlay options. See Section Error! Reference source n ot found. for details on the various overlays.

14.2 Unit Dashboard

The Unit Dashboard is the central interface for dealing with many important factors of the selected unit. Double-clicking a unit on the map will bring up the Dashboard. Having a unit selected and hitting F6 will also bring up the Dashboard. From the Unit Popup Menu, you can open

the Dashboard via the menu item selection there.

14.2.1 General Layout

2000



- 1. The top bar shows the name of the selected unit.
- 2. You can click the Lock to freeze the panel on the selected unit. The Expand/Collapse icon will collapse the tabbed section of the dialog to save space.
- 3. This area shows the counter of the currently selected unit. Below the counter is an indication of the current tactical posture of the unit.
- 4. This area of text relays the current SitRep (Situation Report) of the unit. This is the composition of the unit, hex the unit is in (hyperlinked-you can click to go there on the map), the unit's commander rank and name, the experience level of the unit, and the unit's role. Finally, an indication if the unit is under fire and the number of spotted enemy units. In cases of critical alerts, like low

ammo, a line will show up in this area noting the problem.

- 5. The information in this area covers the unit's Critical Ammo level (primary weapons), Readiness, Morale, Range to HQ (local HQ for the unit), and any Orders Delay. The percentages from 100% high to 0% low and have status icons to the right. These icons are a green circle for good condition, a yellow upward triangle for marginal condition, a red downward triangle for critical condition, and finally, a black square for a combat ineffective condition.
- 6. The tabbed area covers the unit's Orders, Subunits, Staff, and Diary information, as detailed in the following sections.



14.2.2 Orders Tab

2000

Orders Subunits	Staff Diary
1 Move Hasty to hex 0411 starting at 19:00	Move Hasty order 3 hexes from 312 arriving at about 1908 hrs.
2 Move Deliberate to hex 0711 starting at 19:08	Extra Delay Before Initiating this Order: 0 🗘 minute(s) 4
3 Move Deliberate to hex 1207 starting at 19:19	Order • Tactical Initiative: Slight SOP • Acceptable Losses: Do or Die 5
4 Assault to hex 1806 starting at 19:40	 Preferred Stand-Off Range: 0 hexes Fire Discipline: Medium Range (2/3's Max Range) Relocate When: Never
Screen in hex 1806 from around 19:56 1	 Movement: Use Cover Minefield Contact: In-Stride Breach Resupply: Trigger at 25% then Restore to 100% Readiness: Trigger at 25% then Recover for 30 minutes
Apply Cancel	Edit Order SOP 6

1. This window lists the unit's orders noting the type of order, the hex location of the order and the estimated start time of the order execution. As seen below, you can click to select any of the orders and then right-click to bring up a popup menu to change the selected order. The selection is context-sensitive based on the initial order.



- 2. If you change an order(s), you can then hit Apply to make the changes or Cancel to ignore changes.
- 3. This is a text summary of the current selected order with time and distance information.
- 4. This option, when shown, allows you to add additional delay time BEFORE an order starts. This is useful if you are trying to synchronize units to get to locations at the same time.
- 5. This window provided a summary of the unit's current SOP (Standard Operating Procedures) for the highlighted order.
- 6. Click this button to edit the current unit's SOP. See Section 23 below for details on how to set the SOP items.

14.2.3 Subunits Tab

2000

Orders Sub	ounits Staff	Diary	
MIII3GAI	M113GA1	 PzGrenadiers Infantry Unit Armaments: G3 Rifle: 80 of 80 bursts of fire 7.62mm MG3: 80 of 80 bursts of fire Hand Grenade: 12 of 12 bursts of fire PzF 44: 2 of 2 rounds PzF 44: 2 of 2 rounds PzF 44: 2 of 2 rounds EW Emitters: None 	2
PzGrenadiers	PzGrenadiers	EW Detectors None 	
PzGren [ATGM]	PzGren [ATGM]	3	

- In this window, you will see all the subunits within the selected unit on the map. If there are more units than can be seen in the dialog, a scroll bar will be shown to allow you to see all the items. You can click on any of the subunits in the first window to display information about that subunit in the second window. If units have fallen out or have been destroyed or died, icons will appear over the subunit art, and the information in the second window will note that state.
- This window shows a breakdown of the subunit's Weapons and current Ammunition levels, Emitters (radars) if they have them, or EW detectors (ESM or Radar detectors). The hyperlink at the top will open the Subunit Inspector (SUI) to see more details about the subunit.
- 3. You can move the splitter bar left or right to resize the windows.
- 4. You can resize the dialog by dragging the corner point. The dialog has a minimum size set by the game.

14.2.4 Staff Tab



The Staff tab of the Dashboard provides many valuable bits of information about the selected unit.

Under Staff Alerts and Reminders, you will get information on weapons that are out of ammo, what artillery units can support this unit (if available), unique unit capabilities, and any claims of enemy units destroyed.

Under Active Contacts, a list of detected enemy units is shown. Contact number, type of detection (visual, thermal, radar, etc.), number and type of units (if known), range of the contact, and a hyperlinked Hex location.
14.2.5 Diary Tab

2000

	√1-6 M		nerican Infantry Platoon [F4]	<u>6</u> 4	×
L 2 6	/A/1-6 Dug Ir	Me S N	2 x M113A2, 1 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal I2HB HMG and 1 x M47 Dragon (2 x APC, 3 x Inf and 1 x AT) in ex 2410. Lieutenant , Veteran experience, Main Effort role. <u>Ammo Alert.</u> Not under fire, 3 enemy units spotted as of 0656 hrs.	Critical Ammo: Readiness: Morale: Range to HQ: Orders Delay:	64% • 63% • 71% • 7/10 • 3 mins.
	oraci	5 5			
	TIME	TAG	MESSAGE		
	0645	sitrep	2/A/1-6 Mech with screen orders has 2 x M113A2, 1 x Mech Rifie, GL, 1 x 50 Cal M2HB HMG and 1 x M47 Dragon in hex 2410 at 939 82% ammo and 71% morale. 3 enemy unit(s) spotted.	, 1 x 40mm Mk 19 % readiness with	
	0645	orders	2/A/1-6 Mech - new orders received: Screen in hex 2410 starting a	at 0645 hrs	
	0645		2/A/1-6 Mech arrives in hex 2410 (elev. 3, cover 19%, mob. 65%)	from 2510.	
	0644	loss	2/A/1-6 Mech suffers 2 x M113A2 and 2 x Mech Rifle destroyed ir	n hex 2510	
	0644	orders	2/A/1-6 Mech - new orders received: Move Deliberate from hex 25 at 0644 hrs and with estimated finish at 0645 hrs	510 to 2410 start	ing
	0440	spot	2/A/1-6 Mech - spotted, at 2909, a VP Location		
	0407	claim	2/A/1-6 Mech claims 1 x BRDM-1 destroyed in hex 2709		
	0406	sitrep	2/A/1-6 Mech with screen orders has 4 x M113A2, 3 x Mech Rifle, GL, 1 x 50 Cal M2HB HMG and 1 x M47 Dragon in hex 2510 at 919 84% ammo and 80% morale. 3 enemy unit(s) spotted.	, 1 x 40mm Mk 19 % readiness with	9
	0406	orders	2/A/1-6 Mech - new orders received: Screen in hex 2510 starting a	at 0426 hrs	
	0406		2/A/1-6 Mech arrives in hex 2510 (elev. 3, cover 63%, mob. 81%)	from 2410.	
	0.000		anter and the second second second second	f 0040	

The diary tab lists messages related to the actions of the selected unit. Both the game Time and Tag (type of message) are listed with the Message. The message Tag can be of the following types:

- **sitrep** This is a breakdown of the current active subunits in the unit, hex location, unit readiness, unit morale and average ammo level, and the number of spotted enemy units.
- **orders** If the unit gets a new order or changes in orders, the new order is listed here with start and end times and hexes if available.
- **loss** If the unit loses any subunits, they are listed here and the hex they were lost in.
- **spot** This message notes that your unit has spotted an enemy unit, a temporary enemy bridge, a VP location, and other spottable items.
- claim If your unit kills or believes it has killed enemy subunits,

they will be listed in this entry with the number, type, and hex of the kills.

• **(empty)** – These entries are mainly updates on a unit moving to a new hex and the detail of the cover, concealment, and mobility of the hex moved into.

14.3 Sub-Unit Inspector (SUI)

The Sub-Unit Inspector is the primary tool for deep diving into all the information on a given sub-unit in the game. The following sections will detail all the various tabs and the information displayed. You can open this dialog with the F6 key for any selected unit.

14.3.1 General Layout

- 1. You can click the lock to freeze this dialog or click the "X" to close.
- 2. Sub-unit name and then the type of sub-unit in parenthesis.
- 3. Unit Code of the sub-unit from the data file.
- 4. Sub-unit silhouette or image if available via mod.
- 5. National Flag or Emblem.
- 6. This listing notes the number of the selected sub-units that are Active, Fallen Out, or Destroyed in the current scenario.
- 7. Date unit is active in the game.
- 8. This is a four-tabbed panel that covers the Platform, Weapons, Sensors, and Systems that the selected sub-unit has. These tabs are detailed in the following sections.
- 9. If there is more than one type of sub-unit available based on the Scope chosen, you can use the controls here to page through them.
- 10. You can use the drop-down selections here to look at other national data files (Source) in the scenario and change the Scope from Selected Unit, Units in the Scenario, or all units in the data file.
- 11. You can use this icon to drag the SUI larger or smaller.



14.3.2 Platform Tab

The Platform tab provides information related to the general capabilities of a given sub-unit. Here you will find the values for Victory Point cost, Crew size, Use date, and Size rating.

Then the Mobility Type and Maximum Speed.

Protection Ratings (Armor) for the Front, Flank (side), and Top/Rear of the sub-unit or a static Protection Factor for aircraft and helicopters are shown in this section.

Next, under Particulars, is a listing of platform-specific characteristics/traits that it has that can impact game play, if available.

Platform	Weapons	Sensors	Systems								
General											
Crew of 3. Profile size of 4.											
Mobility T	Mobility Type										
Track - maxi	imum speed 69 k	m/h.									
Protection	Protection										
AP /											
HEAT	Front	Side	Тор	Rear							
Turret	51.0 / 71.8	23.5 / 33.0	10.7 / 15.1	10.7 / 15.1							
Hull	58.6 / 82.6	27.0 / 38.0	12.3 / 17.3	12.3 / 17.3							
NBC protect	NBC protection: 80 out of 100.										
D-f											
Detensive	Mechanisms &	Engineer Abilit	lles								
 Hull to Tu 	urret Ratio, Type !	5 [HTR5]									
 NBC Prote 	ected [NBCP]										
Smoke Di	scharger-Normal	[SDN]									

- Advanced Composite Armor (Effectiveness 2), Hull; Front, Side, Rear, Top [ACAH2FSRT]
- Advanced Composite Armor (Effectiveness 2), Turret; Front, Side, Rear, Top [ACAT2FSRT]

14.3.3 Weapons Tab

2000

Every weapon system on a platform/sub-unit is listed on this tab with its various performance parameters and any unique characteristics that the systems possess.

Shown are the Weapon Name and Type. Then the number of rounds or bursts of ammo carried typically (those values can be different in scenarios based on supply and munitions loadouts). The damage rating for the weapon or munition is shown with its type. Lastly, the maximum range in meters is listed. If the weapon system has any unique characteristics used in the game, those are listed after the munition specifications.



 Armor Piercing (AP) – These are solid, long-rod projectiles used to defeat armor.

- **High Explosive Anti-Tank (HEAT)** This round uses an explosive charge to create a plasma jet that cuts through armor.
- **High Explosive (HE)** These rounds use a blast fragmentation warhead and affect an area.
- Area This type of damage reflects weapons that impact an area and are used against soft targets that cover an amount of ground.

14.3.4 Sensors Tab

The Sensors tab shows all the equipment on a platform that is used to detect, spot, or range enemy units on the map. If a system has detection capability, it will list the ranges (under optimal conditions) that it can Detect an enemy unit, Classify the type of enemy unit, and Identify the sub-units of an enemy unit. Other Sensor systems have an impact on combat calculations.

14.3.5 Systems Tab

2000

Any other systems that provide a unique capability not already covered in the other tabs will be noted here.

14.3.6 Further Information on Systems

To get more details on these various systems, you can check out the information in FM02: Battlefield Primer and in deeper detail in FM09: Data Structures and Editing.

14.4 Command Log

The Command Log is a dialog that shows all the latest Diary messages for all units in your force. It will list the last 50 entries. You can dig deeper by looking at the Diary in the Dashboard for each unit. This dialog can be opened and closed on the screen with the F7 key. The dialog does allow for expanding and collapsing via the arrow's icon in the upper right of the dialog. A complete listing of log entries can be found in the Operations Report on the Diaries tab.

3rd Me	ech Bde	Log (last 50) [F7]	×
TIME	TAG	MESSAGE	
1900		1 AD FARP status: Reinforcement at 2040 hrs.	
1900		1/MTR/7-6 Mech status: Reinforcement at 1930 hrs.	
1900		HQ MTR/7-6 Mech status: Reinforcement at 1930 hrs.	
1900		HQ 7-6 Mech status: Reinforcement at 1930 hrs.	
1900		2/A/2-1 Avn status: Reinforcement at 2100 hrs.	
1900		1/A/2-1 Avn status: Reinforcement at 2100 hrs.	
1900	sitrep	A/3-1 FA with on call orders has 8 x M109A2 and 1 x M577A2 C2V off-map at 100% readiness with 100% ammo and 70% morale. no enemy units spotted.	
1900	sitrep	3-1 FA with hold orders has 1 x M577A2 C2V, 2 x Headquarters and 2 x M35 2&1/2-Ton off- map at 100% readiness with 100% ammo and 70% morale. no enemy units spotted.	
1900	sitrep	3/C/3-35 Ar with hold orders has 4 x M1A1 Abrams in hex 0312 at 100% readiness with 100% ammo and 85% morale. no enemy units spotted.	
1900	sitrep	2/C/3-35 Ar with hold orders has 4 x M1A1 Abrams in hex 0312 at 100% readiness with 100% ammo and 85% morale. no enemy units spotted.	
1900	sitrep	1/C/3-35 Ar with hold orders has 4 x M1A1 Abrams in hex 0212 at 100% readiness with 100% ammo and 85% morale. no enemy units spotted.	
1900	sitrep	HQ C/3-35 Ar with hold orders has 2 x M1A1 Abrams and 1 x M113A1 in hex 0212 at 100% readiness with 100% ammo and 85% morale. no enemy units spotted.	
1900	sitrep	3/B/3-35 Ar with hold orders has 4 x M1A1 Abrams in hex 0512 at 100% readiness with 100% ammo and 85% morale. no enemy units spotted.	

14.5 Off-Map Assets

The Off-Map Assets dialog provides you with a listing of any of your forces that exist off-map for the scenario. This is currently any aircraft or artillery assets in a scenario that you can order to support your on-map forces. As you can see in the dialog below, this shows the headquarters and an artillery battery located 2km off the West edge of the game map.

- 1. Name of the overall force being supported by the off-map assets.
- 2. Name of the smaller off-map asset formations available to use.
- 3. The counter of each supporting off-map unit, name, type, size, training level, and off-map location of the unit
- 4. Menu hyperlink that will open the Unit Popup Menu so you can issue orders to these off-map assets.

- 5. This text block tells for each unit what its Current Orders are, Readiness, Morale, Ammo levels, and current Delay for orders to process.
- 6. This second text block shows the unit's composition by platform and type and then a breakdown of the ammo carried by the unit.

3rd Mer 2 3 R D Repor	ch Bde 1 0 ME rted at	Off-Map Assets (F8) CH BDE OFF- 1900 hrs, Jul 20 19	MAP ASS	SETS	×	A STATE OF A
<mark>(</mark> 2) <u>A. 3-:</u>	1 FA AI	ND SUB-ORDINATE	<u>s</u> 5	6		C
3 5 Me	H H	3-1 FA . Regular Headquarter Platoon, 2km W off- map	Hold Orders, 100% Readiness, 70% Morale, 100% Ammo, 0 mins. Delay	1 x M577A2 C2V, 2 x Headquarters and 2 x M35 2&1/2-Ton (3 x HQ and 2 x Utility). Ammo: 0 HE		Marriel In
s S	3-1 FA O Menu	A/3-1 FA. Regular SP Artillery Company, 2km W off-map	On Call Orders, 100% Readiness, 70% Morale, 100% Ammo, 0 mins. Delay	8 x M109A2 and 1 x M577A2 C2V (1 x HQ and 8 x SPArty). Ammo: 240 HE, 48 Smoke (vis)		
- 18 B			DETOXOF NEE			/

15 Staff Dialogs

One of the areas in the game that has had a massive increase in information for the player is the Staff Reports. These reports cover all aspects of your virtual Command Staff and should be used to help formulate your plan for battle and to keep tabs on various aspects of your force, and the battle as the scenario unfolds.

These reports can be accessed from the Staff Main Menu item at the top of the screen (see Section 11 above) or from the speed buttons on the floating Commander Panel (see Section 13.2 above).

At the bottom of most of the dialogs are buttons for Print and Close. Print will open a Printer Dialog box and allow you to print out what is on the tab to your printer or other printout options if available. The Close button will close the entire Staff Report.

15.1 Scenario Information

The Scenario Information (SI) dialog provided information on the Scenario Description and the Victory Status and Conditions information.

15.1.1 Scenario Description

The Scenario Description tab provides a detailed narrative of the scenario to be played. This provides some background on the events of the battle and an idea of the forces involved in the fighting.



15.1.2 Victory Status & Conditions

2000

The Victory Status and Conditions tab contains sections of information that detail or estimate if the game is in progress and how the current scenario is going.

	n Center							×
Scenario Description			itions					
ESTIMATED VICE A. 39TH MRD VICTO Our estimate, subject which would correspond % of starting force	TORY STATU: DRY STATU: t to fog-of-v ond to a Mar	ATUS AN S, AS OF Var, is tha Isginal Loss IRD 41 %	ND VICT 1120 HRS t your ford s. 2 BDE	ORY , JUL ce seiz	POINTS 21 1989 ed approx	DISTRIBUT	TON 1	points (VPs),
					2			
Scenario Enemy Losses		6,645	2	9,912				
Scenario Bonus/Penalty		0		0				
Scenario Total VPs		8,645		1,412				
A.1 Victory Condition DECISIVE LOSS TA	IS and Catas CTICAL LOSS	MARGINA	ss Thresho	old for	39th MRD D RESULT	MARGINAL WIN	TACTICAL WIN	DECISIVE WIN
0% - 29%	30% - 38%	39% -	49%	50% -	62%	63% - 73%	74% - 82%	83% - 100%
CATASTROPHIC FORCE LO THRESHOLD 30 % remaining strengt When a force's strength fai subtracted from that force' B. ESTIMATED OWN	ss h Us below the ab s result, and on UERSHIP OF	ove catastro e 'victory lev VICTOR	phic loss thre rel' being add Y LOCATI(shold, a ed to th DNS, A	'sudden dea e opposing fi IS OF 112	^{th'} is triggered, re: orce's result. O HRS, JUL 2	ulting in one 'victory i 1 1989	evel' being
39TH MRI	D		CONTESTED	& NEUT	RAL		2 BDE	
Hex 1508 (50	0 VP)					Не	x <u>822</u> (500 VP)	5
Hex 1607 (50	0 VP)					Hex	2726 (1,000 VP)	
Hex <u>2322</u> (50	0 VP)							
Total: 2,000	VP					Т	otal: 1,500 VP	
			6	Pri	nt		C	<u>C</u> lose .::

- 1. A graphical representation of the currently estimated victory level and a brief explanation below it.
- 2. A table breakdown of victory point (VP) allocations by type for each side of the battle. VP percentages are shown in the last line.
- 3. This bar shows the Victory Conditions level based on the percentage of VPs in the scenario.
- 4. This table shows the Catastrophic Force Loss Threshold for your force strength.

- 5. This table lists the ownership and value of all on-map VP locations.
- 6. This area has the Print and Close buttons for the report dialog.

15.2 Operations

The Operations Reports (Ops) provide a wealth of information about your forces and capabilities, show your mission orders, and provide a view of the map and your force placement.

15.2.1 Mission Briefing

The Mission Briefing tab provides all the information for the current scenario.

39th MRD Tactical Operations Center - Operations X
Mission Briefing Map Overlay SITREP Engineering Air Support Emitters Diaries Runners
39TH MRD MISSION BRIEFING
MG Kolesnikov,
1. SITUATION The lead elements of the 39th MRD have successfully created a small bridgehead over the Aisch river (Note: Overture Scenario). The US 2nd Brigade has recognized the significance of this penetration and are moving forces to counter our success.
More divisional resources are being sent to support and expand the bridgehead.
2. MISSION Secure crossing sites and expand the current bridgehead over the Aisch river.
<u>3. ATTACHMENTS AND DETACHMENTS</u> Two MRB from 120 MRR (1 MRB and 2 MRB)
4. COORDINATING INSTRUCTIONS Aviation
Attack nercopters are on station with a couple of sections available at all times.
Fire Support The Regimental Artillery Group (RAG) is deployed forward to support your defence.
Arriving soon will be elements of the 390 Artillery Regiment and the 120 Artillery Regiment. Also, support from 87 Artillery Regiment equipped with BM-21.
Engineer Support Two short bridges has been laid permitting forces to cross the Aisch River.
Map: Forchheim (Oberfranken), Bayern, West-Germany, 49*43'00"N 11*03'00"E 20 x 15 km area.

1. The Situation for the mission is stated in this section.

2. The Mission objective(s) are noted in this section.

2000

- 3. This section notes any additional forces added to your core forces to support the mission.
- 4. This section lists any Aviation, Fire Support (on and off-map artillery), and engineering assets for the mission.

As seen below, the map and the location of known Victory locations are shown.



15.2.2 Map Overlay

The Map Overlay tab shows the location of your forces and any spotted enemy forces. This map updates in real-time as the battle unfolds.

Below the map is a listing of all your on and off-map headquarters (HQs), their number of subunits, and the location of the HQs.



	3/PzGrenBtl 101	4	units	5020
		3	units	2434
X				<u>4822</u>
		1	unit	<u>2236</u>
100 K				
4575-3368				
		1		911
FARP THERE		1	unit	<u>1336</u>
2 2008				
	HHB 3-1 FA	4	units	2km SW off-map

15.2.3 SITREP

2000

The SITREP (SITuation REPort) tab has a graphical representation of your command cycle times (past, present, and estimated for the future) in Section A.

Section B list the number and types of subunits in your force, followed by a detailed breakdown of your forces by unit. This breakdown includes the counter, unit name, local leader name, type, and training level of the unit and the hex it is in. Also noted are the unit's readiness, morale, and ammo levels. Lastly, a breakdown is shown by platform and unit type.



15.2.4 Engineering

2000

The Engineering tab provides information about any Engineering assets you have in your force.

Section A notes the HQ name and hex location.

Section B lists out the dedicated Bridging, Mine Clearing/Laying, and General engineering vehicles or troops at your disposal.

Section C shows any planned or ongoing engineering activities on the map.



15.2.5 Air Support

The Air Support tab provides information about any available aircraft that you may be able to call in to support the battle.

Section A describes the current situation, including Air Superiority level (who controls the airspace over the battlefield), time of day, and current weather.

Section B lists all Air Assets you have at your disposal (if available in the scenario). The counter, type of aircraft, arrival time if the unit shows up after the start of the scenario, withdrawal time if a unit is called away later in the scenario, if the aircraft is night operations capable, and if the unit can fly in bad weather are shown in the panel. If there is an issue with capability, the table cell will be filled in with a red color.

Section C provides an hour-by-hour breakdown of the Airspace Control and weather (type of weather, visibility, cloud ceiling, and illumination level). If there is a weather-related item that poses a problem for aircraft use, the cell will be filled in red.

39											×
ſ	Mission Briefi	ng Map Overlay	SITREF	Er	ngineeri	ng Air		t Emitte	rs Diaries	Runners	
	39 MRD A	IR SUPPORT REI	PORT	9)							
	The current a	airspace status is: WE	AK WARSA	W PACT	AIR S	UPERIORIT					
		veather is: NIGHT, CL 0312hrs, dusk: 2146hi		IBILITY :	10,000	M, CLOUD		NG 330M.			
	B. AIR ASSE	<u>TS</u>									
		AIR ASSET		ARRI	VAL	WITHDRA	WAL	NIGHT OPS	ALL WEATHER		
	1/497 2 H	/497. Veteran Aircra ection, 2 x Su-17M2 F rriving off-map at 03	ft itter-D, 30 hrs.								
	2/497 2 H	/497. Veteran Aircra ection, 2 x Su-17M2 F rriving off-map at 04:	ft itter-D, 80 hrs.	0430hr:							
	C. (FORECA	ST) AIRSPACE STATL	IS AND W	EATHER	BYH	IOUR					
	HOUR	AIRSPACE CONTROL	WEATH	IER	VIS	SIBILITY	CLOU	JD CEILING	ILLUMINATION		
	0200 hrs		<u>۵</u> ۰۰۲	:							
	0300 hrs	Unknown	59*6) =),000m					
		Unknown	59*6)	10						
	0500 hrs	Unknown	58°	-	10						
					Pri	nt				Close	ai

15.2.6 Emitters

2000

The Emitters tab provides a detailed breakdown of any units with electromagnetic emitter equipment like radars. Of note, the status of the emitter is shown in a hyperlink that you can toggle on and off from this report. The type of emitter is described on the far right of the detailed information.



15.2.7 Diaries (Unit Logs)

The Diary tab of the Staff Reports lists all the information entries from the Command Log for all units of your force. By selecting a unit in the order of battle (OOB) list in the left window, all related log entries will be shown in the right window of the dialog. This window can be scrolled to see all the scenario events.

Under the OOB window is an option to Show Combined Diaries. Selecting this will show all unit entries in chronological order in the right-side window. The total number of entries is also noted in both modes.



15.2.8 Runners

The Runners tab provides information on the number of subunits by type and by platform type to give you a clear picture of how your force is doing at the current time in the scenario.

Section A is a graphical representation of the number of units of each type under your command. The dark bar portion represents those units still active out of the total number in the light bar. The totals and types are in the column on the right.

Section B is a tabled representation of your forces by type. The table notes each Type, the number of units that Started the scenario, those still Running, any units Withdrawn, any units that have Fallen Out (damaged/wounded and no longer combat effective), and those Destroyed (brewed up or killed).

Section C is a similar table to Section B, but by each platform by name and description.

	39 / 139	
	82 / 136	
	65 / 109	
	32 / 40	
	0/9	SP AT
	25 / 31	
	42 / 62	
ach bar represents the number of starting platforms. The dark part rej	8/8 presents the number of starting	DEPOT platforms which are still runnin
	DS 1111 21 1080	

Mission Briefing	Map Overlay	SITREP	Engineering	Air Support	Emitters Dia	
<u>. STATE OF 39TH</u>	I MRD, BY UNI	<u>T TYPE, AT</u>	<u>1120 HRS, JU</u>	<u>L 21 1989.</u>		
TYPE	STAF	TED	RUNNING	WITHDRAWN	FALLEN OUT	DESTROYED
Armored Carrier		136				
Helicopter						
Reconnaissance		57	36		18	
SP Artillery		78				
Utility Vehicle		82	70		10	
Totals		828	520	2	207	90

Mission Briefing	Map Overlay SITREP	Engineering	Air Suppo	rt Emitters	Diaries	
STATE OF 39T	H MRD, BY PLATFORM, AT	T 1120 HRS, J	UL 21 1989.			
PLATFORM	DESCRIPTION	STARTED	RUNNING	WITHDRAWN	FALLEN OUT	DESTROYED
20mm Mortar	Towed Mortar	22	14		4	
3mm SPG-9 RCL	Anti-Tank Infantry Unit					
MP-1P[T][M]	Tracked IFV	6	6			
3MP-2[M]	Tracked IFV				17	
IRDM-2	Recon Unit				6	
RDM-2[G]	Recon Unit				3	
TR-40[m]	Wheeled Utility Vehicle	12	10		2	
TR-60PB						
TR-60PB[G]	Wheeled IFV					
ARP (Static)	Static FARP for Helos					
	Wheeled Utility Vehicle					
leadquarters	Command Unit				3	
MT-55	Tank-Launched Bridge					
AT-LBu 1V12[m]	Forward Observer Unit	20				
vletis	Anti-Tank Infantry Unit				4	
PRP-3 Val[m]	Forward Observer Vehicle					
	Main Battle Tank				55	
-80U	Main Battle Tank					

15.3 Intelligence

The Intelligence Reports (Int) provide information about your enemy's forces and capabilities, kills, and claims against the enemy, and other factors that impact your ability to fight effectively.

15.3.1 Threat Assessment

The Threat Assessment provides you with your Intel sections assessment of the enemy forces you will be facing during the battle. Along with Threat Brief, you are given the map with graphics with the best estimation of what the enemy's plan may be. This should help with your planning for what you will do with your forces to complete your mission.

46C lactical Operations Lenter - Intelligence
Threat Assessment Enemy SITREP Reported Kils and Clarins Weather Forecast EW Report Enemy Off-Map Assets

THREAT ASSESSMENT FOR 24GC

COL. Deschamps.

2000

THREAT BRIEF

Intel reports indicate that TUBINGEN is the next target of the advancing Soviet forces. It appears that the 15th Tank Division has been given this task and are advancing with a Motor Rifle Regiment and a Tank Regiment in the first echelon.

This attack seems to be the main effort for the division, so expect it to receive additional fire support (likely an additional regiment) and, based on past attacks, some Attack Helicopters.





15.3.2 Enemy SITREP

The Enemy SITREP tab provides information on the estimated state of the enemy forces.

Section A provides an estimate of the enemy's Command Cycle for the past, present, and future cycles.

Section B shows the game map and the estimated locations of known enemy forces. The circles show a rough idea of the dispersion of those specific enemy units. This map is updated in real-time as more information is gained during the fight.



Below Section B is the listing and breakdown of the spotted enemy units. The size of the unit and a hyperlinked hex location are also shown, and the numbers in the left-hand column match those shown on the map. If an off-map unit has been detected, it is also noted on the list but shown as Off-Map with a distance and direction.

19.Motostr	elecký Div	Tactical Operations Center - Intelligence						×
Threat	Assessm	ent Enemy SITREP Reported Kils and Clain			eather Forecast	EW Report	Enemy Off-Map As	sets
			Ser.					
#	SYMBOL	GROUP		SIZE	LOCATION			
					5020			
	Ø							
	X							
	*							
8	Ø				2010			
	*							
•		3 x HQ and 24 x SPArty	3	units	2km W off-map			
O View		ctical Operations Center	Eri	nt]		Close	

Section C provides a range of numbers and types of enemy units that you may face in the scenario. This gives you a starting point for being able to track enemy losses and an idea of the number and type of threats you will be facing.

Section D provides a list of lost contacts over the last hour of the battle. This list shows the time of the contact, a contact number for tracking, a description of the contact based on the quality of the detection, the Quality of the contact (Classified, Identified, Detected, or Radar based), and the location of the lost contact. Contacts are lost when the unit moves out of the line of sight, or your units move or are lost and lose the line of sight to the target.

	t Assessm	ent Enemy SITREP Reported Kils and Claims Weather Fore	ecast E\	W Report Enemy Off-Map Ass
INT	ELLIGE	ICE SUMMARY OF ACTIVE ENEMY ASSETS, AT 1120 HRS,	JUL 21 1	<u>989.</u>
		dquarter subunits		
		ity Vehicle and 1 to 10 Depot subunits		
LO	<u> ST SPOT</u>	TING CONTACTS IN LAST HOUR, AT 1120 HRS, JUL 21 19	89.	
ME	CONTACT	DESCRIPTION	QUALITY	LOCATION
		Unknown		off-map, moving south-west
120		4 x M1A1 Abrams	only identified	2922, moving north-west
120 119 119	135 123	4 x M1A1 Abrams 1 x M1A1 Abrams	only identified identified	2922, moving north-west 615, moving north-east
120 119 119 119	135 123 134	4 x MIAI Abrams 1 x MIAI Abrams 4 x MIAI Abrams	only identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north
120 119 119 119 119	135 123 134 127	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1	only identified identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north 814, moving north-east
120 119 119 119 119 119	135 123 134 127 111	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2HB HMG and 1 x M47 Dragon	only identified identified identified identified	2922, moving north-west 515, moving north-east 2923, moving north 816, moving north-east 3112
120 119 119 119 119 119 119	135 123 134 127 111 109	4 x MIA1 Abrams 1 x MIA1 Abrams 4 x MIA1 Abrams 2 x MIA1 Abrams and 1 x MII3A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x MII3A2, 1 x MII3A1 and 2 x Headquarters	only identified identified identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north 814, moving north-east 3112 2015
120 119 119 119 119 119 118 118	135 123 134 127 111 109 114	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech RHE, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4	only identified identified identified identified identified identified	2222, moving north-west G15, moving north-east 2233, moving north S14, moving north-east 3112 2915 2814
120 119 119 119 119 119 119 118 117 116	135 123 134 127 111 109 114 131	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rife, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 1 x Stinger and 1 x M151 Jeep 4x4	only identified identified identified identified identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north 613, moving north-east 3112 2915 2814 814, moving north-east
120 119 119 119 119 119 119 118 117 116 116	135 123 134 127 111 109 114 131 133	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2HB HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 leep 4x4 3 x M1A1 Abrams	only identified identified identified identified identified identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north 814, moving north-east 3112 2935 2814 614, moving north-east 2822, moving north-east
120 119 119 119 119 119 119 118 117 116 116	135 123 134 127 111 109 114 131 133 149	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 1 x Stinger and 1 x M151 Jeep 4x4 3 x M1A1 Abrams Unknown	only identified identified identified identified identified identified identified identified radar only	2922, moving north-west 615, moving north-east 2923, moving north 814, moving north-east 3112 2935 2814 613, moving north-east 2822, moving north-west off-map, moving north-west
120 119 119 119 119 119 118 117 116 116 116	135 123 134 127 111 109 114 131 133 149 130	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M1I3A1 3 x Mct Aile, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M1I3A2, 1 x M1I3A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 1 x Stinger and 1 x M151 Jeep 4x4 3 x M1A1 Abrams Unknown 4 x M1A1 Abrams	only identified identified identified identified identified identified identified radar only identified	2922, moving north-west 515, moving north-east 2923, moving north 514, moving north-east 3112 2915 2814 614, moving north-east 2822, moving north-west off-map, moving south-west 814, moving north-east
120 119 119 119 119 119 118 117 116 116 116 116 115 110	135 123 134 127 111 109 114 131 133 149 130 139	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M13A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2HB HMG and 1 x M47 Dregon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 3 x M1A1 Abrams Unknown 4 x M1A1 Abrams 2 x Cavairy Scout end 2 x M3A1 Bradley[M]	only identified identified identified identified identified identified identified radar only identified	2922, moving north-west 515, moving north-east 2013, moving north 5114, moving north-east 3112 2015 20
120 119 119 119 119 119 119 118 117 116 116 115 110 103	135 123 134 127 111 109 114 131 133 149 130 139 110	4 x M1A1 Abrams 1 x M1A1 Abrams 4 x M1A1 Abrams 2 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 3 x M1A1 Abrams Unknown 4 x M1A1 Abrams 2 x Cavairy Scout and 2 x M3A1 Bradlev[M] 1 x M113A2, 2 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Oragon	only identified identified identified identified identified identified identified identified identified identified	2922, moving north-west 515, moving north-east 2933, moving north- 513, moving north-east 3132 2935 2834 514, moving north-east 2832, moving north-west 615, moving north-east 2835, moving north-
120 119 119 119 119 119 118 116 116 116 115 110 103 101	135 123 134 127 111 109 114 131 133 149 130 139 110 129	4 x M1A1 Abrams 1 x M1A1 Abrams 1 x M1A1 Abrams 2 x M1A1 Abrams 2 x M1A1 Abrams and 1 x M113A1 3 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M47 Dragon 1 x M113A2, 1 x M113A1 and 2 x Headquarters 1 x Stinger and 1 x M151 Jeep 4x4 3 x M1A1 Abrams Unknown 4 x M1A1 Abrams 2 x Cavalry Scout and 2 x M3A1 Bradley[M] 1 x M113A2, 2 x Mech Rifle, 1 x 40mm Mk 19 GL, 1 x 50 Cal M2H8 HMG and 1 x M419 Dragon 2 x M1A1 Abrams	only identified identified identified identified identified identified identified identified identified identified identified identified	2922, moving north-west 615, moving north-east 2923, moving north- 813, moving north-east 3112 2915 2814 814, moving north-east 2822, moving north-west off-map, moving north-west 814, moving north-east 2815, moving north 2815, moving north-east 2113 715, moving north-east

15.3.3 Reported Kills and Claims

The reported Kill and Claims tab provides a table tracking what your units have killed during the scenario.

The Unit column lists all your units.

The A/F/D column note which of YOUR units are still Active, Fallen Out or Destroyed.

The remaining Unit Type columns represent the enemy's forces and the number of kills (or fall outs) your forces are claiming.

At the very bottom of the table is a line with the grand totals for the A/F/D and enemy types columns.

																		×
Threat Accessment	Enormy CITI			Kils an				lasth	vr Eo	rocart		/ Poport	Ene		off Man	Accet		
Threat Assessment	Enerny SIT	KEP						veaun	21 1-0	recasi	EV	v Report	Ene	iny c	л-мар	Assets	•	
																		-
39TH MRD KILL	S / CLAIN	vis																
			51.V. 11.11	-														
A. TABLE OF KILLS	WADE BT	FRIEN	DLT UNI	тэ, м	30	F 11	201	185,	101	. 21 19								
UNIT	A/F/D	RECCE	IELO TANK	MECH	INF	SPAT	AT H	Q EN(G AD	SPARTY	ARTY	TRANSP	SUPPLY	AIR	DRONE	WMD	TOTAL	
HQ 1/15 TR	0/2/1																	
2/1/15 TR	0/9/4								1									
4/AA/15 TR	0/0/4																	
HQ 2/15 TR	0/3/0																	
2/2/15 TR					3													
1/489 ATB																		
UNIT	A/F/D	RECCE H	IELO TANK	MECH	INF	SPAT	AT H	Q EN(G AÐ	SPARTY	ARTY	TRANSP	SUPPLY	AIR	DRONE	WMD	TOTAL	
HQ 3/15 TR																		
2/AA/15 TR																		
4/RC/15 TR	2/2/0																	
HQ RC/15 TR																		
																Close		
					-													

Threat Assessment	Enemy SITF	REP						II.	We	ather	r Foi			/ Report		my (Off-Map	Asset	
2/3/11 RB	3/0/0																		
3/3/11 RB	3/0/0																		
1/4/120	9/1/3				6	1		1											
2/4/120	10/3/0																		
HQ 2/120	6/0/0																		
2/2/120	31/0/0																		
3/2/120	31/0/0																		
AT/2/120	3/0/0																		
	4/0/0																		
2/A1/2/120	4/0/0																		
4-AA/2/120	4/0/0																		
MTP/2/120	16/0/0																		
UNIT	A/F/D	RECCE	HELO	TANK	месн	INF	SPAT	AT	нο	ENG	AD	SPARTY	ARTY	TRANSP	SUPPLY	AIR	DRONE	WMD	TOTAL
	8/0/0							1											
1/2/120	31/0/0																		0
1/1/336 IHR																			
4/1/336 IHR	2/0/0																		
FARP 39th	22/0/0																		0
2 39 MRD (Fwd Div CP)																			
UNIT	A/F/D	RECCE	HELO	TANK	MECH	INF	SPAT	AT	НQ	ENG	AD	SPARTY	ARTY	TRANSP	SUPPLY	AIR	DRONE	WMD	TOTAL
F / D: number of subunit	ts that are Active	e, Faller																	

15.3.4 Weather Forecast

The Weather Forecast tab provides you with information and any impacts on systems of the weather for the scenario. Weather can have a significant impact on combat operations, and you, as the commander, should plan accordingly.

Section A provides details on the weather forecast for a 24-hour period. The time in hours of the weather conditions, along with Temperature, Cloud Cover, Precipitation if any, Wind speed and direction, Visual distance, Illumination range, and Cloud Ceiling, are listed in the table.

Section B notes the Time of Day for Dawn and Dusk, and the phase of the moon for night illumination.

Section C provides information on the impact on specific systems (Artillery, Air Defense, and NBC Operations) based on the weather at different times of the scenario.

24HF	RS FOREC	AST: 1989 JL	JL 21 0000HRS	- 1989 JI	UL 22 0000HRS			
HOURS	TEMP.	CONDITIONS	PRECIPITATION	WIND	VISUAL	ILLUM.	CLOUD CEILING	
	58 - 78°F			E 3mph	10000 - 10000 m			
18 - 00	66 - 74°F	overcast	some heavy rain	SW 6mph	50 - 10000 m	0 - 100%	220 - 860m	
Dawn: 0: C. SYST Artillery 00 - 00 06 - 1: 18 - 00	EMS IMP (5hrs: Redu 2hrs: Redu Dhrs: Redu	:42hrs. Dusk: ACT uced effective uced effective uced effective						
Dawn: 0. C. SYST Artillery 00 - 06 18 - 00 18 - 00 Air-Defe 00 - 06 00 - 12 12 - 18	EMS IMP (5hrs: Redu 2hrs: Redu 2hrs: Redu chrs: Redu 5hrs: Redu 2hrs: Redu 3hrs: Redu	:42hrs. Dusk: ACT iced effective iced effective iced effective ery iced detection iced detection						
Dawn: 0. C. SYST Artillery 00 - 04 06 - 12 18 - 04 Air-Defe 00 - 04 06 - 12 12 - 14 12 - 14 18 - 04	EMS IMP 5hrs: Redu 2hrs: Redu 2hrs: Redu 5hrs: Redu 5hrs: Redu 2hrs: Redu 2hrs: Redu 2hrs: Redu 0hrs: Redu	:42hrs. Dusk: ACT iced effective iced effective ery iced detection iced detection iced detection						

15.3.5 EW Report

2000

The EW (Electronic Warfare) tab provides information on the level of your EW efforts and what the enemy is doing to you currently. EW disrupts your communications with your troops, adding additional delay to issuing orders. The higher the hindrance, the longer the delays.

Section A details both your EW level versus the enemy, and the effects of the enemy EW on your forces. The main impact is a delay in your command cycle.

Section B graphs out the level of EW for both sides (yours in blue) hourby-hour for the scenario.



15.3.6 Enemy Off-Map Assets

The Enemy Off-Map Assets tab will list any units the enemy has off-map that are detected by radio intercepts, counter-battery radar, or other recon sources provided by friendly forces outside of your command. These units are ones that are being used against your forces.

Currently, those off-map assets are long-range artillery units. More types may be added in future updates.

If you have long-range artillery or airpower, you can target these enemy units.

39 MRD Tactical Operations Center - Intelligence		· · · · · · · · · · · · · · · · · · ·	1
Threat Assessment	Enemy SITREP	Reported Kills and Claims	
Weather Forecast	EW Report		1
SPOTTED ENEMY OFF-MAP Reported at 0200 hrs, Jul 21 1989 No spotted enemy off-map assets.	ASSETS		
	Print		#)

15.4 Personnel and Logistics

The Personnel and Logistic Reports (PL) provide information about the condition of your forces, when new units will arrive on the map and when other units on the map will leave, and the overview of ammunition use and quantity for your forces.

15.4.1 Staff Alerts

2000

The Staff Alerts tab warns you about any units suffering problems that degrade their ability to fight and maneuver on the battlefield.

This includes the following problems:

- Out of Command Range Impacts resupply and adds delays to orders being done.
- Low Morale, Readiness, or Ammo These can impact the effectiveness of fighting the enemy.
- **Insufficient Transport** Leg units no longer have carriers to move them quickly across the battlefield.



15.4.2 Detailed Unit Status

The Detailed Unit Status tab provides an order of battle (OOB) listing in the left windows where you can select a unit and then, in the right window, see the counter with the unit's name, training, type, and total victory point value. Readiness, Morale, and Ammo percentages show next, along with hyperlinks to the unit's headquarters and hex location. Then detailed information about the subunits is shown.

Below that, you will get the breakdown of subunits by name and type, plus the current number of Active Runners, Fallen Out, and Lost units. Next, there is a silhouette of the unit and its VP cost. Next is the type of mobility and top speed of the unit. Then a listing of basic protection values (for more detail, see the armor values in the Subunit Inspector (SUI-F6 key). The number of Crew and the Date of use is also listed. To the right of the information is a listing of the subunit's armaments and special capabilities. At the very bottom, there is a listing of units claimed as destroyed.



15.4.3 Reinforcements and Withdrawals

The Reinforcement and Withdrawals tab provides an order of battle (OOB) listing in the left window that shows the arrival or withdrawal time of units throughout the scenario. Selecting a unit in the right window will provide a subunit breakdown and details, as seen in Section 15.4.2 above.

Of importance in the right window is the time of arrival or withdrawal and the hex the unit will enter the map. Clicking the hyperlink for the location will flash the hex location on the map.



15.4.4 Ammunition

The Ammunition tab provides a means for you to track and review a unit's ammo use and remaining rounds by weapon and by munition for weapons that use multiple types. This reports updates as the scenario unfolds.

Section A runs down the Overall Ammunition Status of your force. The

table shows the weapon system and description, the basic starting loadout of the ammunition, the current number of rounds/bursts on hand, the percentage on hand, and the number of rounds or bursts expended.

Information in yellow is from units and subunits that have fired and expended ammunition. The values in white are units that have not engaged the enemy. Currently, there may be duplicated entries from different subunit types with the same weapon system (the 125mm D-81TM below being a case).

39th MRD Tactical Operations Center - Personnel and Logistics										
Staff Alerts Detailed Unit Status	Reinforcements	and Withdra	wals Amn	nunition						
9TH MRD - AMMUNITION STATUS eported at 1120 hrs, Jul 21 1989 verall status, followed by detailed report by unit. OVERALL AMMUNITION STATUS										
AMMO TYPE / DESCRIPTION	BASIC LOAD	ON HAND	% ON HAND	EXPENDED						
125mm D-81TM / High Explosive										
9M112 Kobra / Anti-Tank Guided Missile	66	36	54	30						
.22mm 2A18 (D-30) / High Explosive	840	516	61	600						
M113 Konkurs / Anti-Tank Guided Missile	32	24	75	8						
PG-7V / Rocket Propelled Grenade	222	198	89	24						
25mm D-81TM / Armor Piercing	165	150	90	15						
0mm GP-25 / Grenade Launcher	1176	1152	97	24						
M311 Tunguska / Surface to Air Missile	8	8	100	0						
25mm D-81TM / Armor Piercing	16	16	100	0						
25mm D-81TM / High Explosive Anti-Tank	17	17	100	0						
M120 Ataka / Anti-Tank Guided Missile	48	48	100	0						
22mm S-13[AT] / Medium AT Rocket	60	60	100	0						
M115 Metic / Anti-Tank Guided Missile	84	84	100							
	Print									

Section B Shows each unit and the ammunition for each significant weapon system (no small arms weapons listed). Each entry contains the

unit's name, unit composition, counter, and then the table showing each weapon system's ammunition in the same format detailed in Section A above.

Latt Alei	rts Detailed Unit Status Reinfo	rcements and V	Vithdrawals		Inition	
'11 R	В					
-	AMMO TYPE / DESCRIPTION	BASIC LOAD	ON HAND	% ON HAND	EXPENDED	
	73mm 2A28 Grom / High Explosive Anti-Tank	30	30	100	0	
💄 М	73mm 2A28 Grom / High Explosive	30	30	100	0	
11 R	в					
		BASIC LOAD	ON HAND	% ON HAND	EXPENDED	
••	AMMO TYPE / DESCRIPTION	BASIC LOAD				
	73mm 2A28 Grom / High Explosive Anti-Tank	30	30	100	0	
11 RB M	AMMO TYPE / DESCRIPTION 73mm 2A28 Grom / High Explosive Anti-Tank 73mm 2A28 Grom / High Explosive	30 30	30 30	100 100	0	
11 RB M 120 30B1 ar	AMMO TYPE / DESCRIPTION 73mm 2A28 Grom / High Explosive Anti-Tank 73mm 2A28 Grom / High Explosive nd 3 x T-808[M].	30 30	30	100 100	0	
120	AMMO TYPE / DESCRIPTION 73mm 2A28 Grom / High Explosive Anti-Tank 73mm 2A28 Grom / High Explosive nd 3 x T-80B[M]. AMMO TYPE / DESCRIPTION	BASIC LOAD 30 30 BASIC LOAD	30 30 ON HAND	100 100 % ON HAND	0 0 EXPENDED	
11 RB M 120 BOB1 ar	AMMO TYPE / DESCRIPTION 73mm 22428 Grom / High Explosive Anti-Tank 73mm 2428 Grom / High Explosive d 3 x T-808[M]. AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive	BASIC LOAD 30 30 BASIC LOAD 24	30 30 0N HAND 0	100 100 % ON HAND	0 0 EXPENDED 24	
11 RB M 120 80B1 ar	AMMO TYPE / DESCRIPTION 73mm 22428 Grom / High Explosive Anti-Tank 73mm 2428 Grom / High Explosive ad 3 x T-806[M]. AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 125mm D-81TM / High Explosive	BASIC LOAD 30 30 BASIC LOAD 24 12	30 30 0N HAND 0 0	5 ON HAND 0 0	0 0 EXPENDED 24 12	
7120 5081 ar	AMMO TYPE / DESCRIPTION 73mm 2A28 Grom / High Explosive Anti-Tank 73mm 2A28 Grom / High Explosive nd 3 x T-808[M]. AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 125mm D-81TM / High Explosive 9M112 Kobra / Anti-Tant. Guided Missile	BASIC LOAD 30 30 BASIC LOAD 24 12 18	30 30 0N HAND 0 0 3	100 100 100 86 ON HAND 0 0 16	0 0 EXPENDED 24 12 15	
120 30B1 ar	AMMO TYPE / DESCRIPTION 73mm 2A28 Grom / High Explosive Anti-Tank 73mm 2A28 Grom / High Explosive nd 3 x T-808[M]. AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 9M112 Kotra / Anti-Tank Guided Missile 125mm D-81TM / High Explosive	BASIC LOAD 30 30 BASIC LOAD 24 12 16 108	30 30 00 HAND 0 0 3 93	100 100 100 96 ON HAND 0 0 16 86	0 0 24 12 15 15	
11 AB M 120 BOB1 ar	AMMO TYPE / DESCRIPTION 73mm 22428 Grom / High Explosive Anti-Tank 73mm 2428 Grom / High Explosive AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 9M112 Kobra / Anti-Tant Guided Missile 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank	BASIC LOAD BASIC LOAD 24 12 18 108 45	30 30 30 0 0 0 3 93 45	100 100 100 0 0 16 86 100	0 0 24 12 15 15 0	
11 RB M 120 80B1 ar	AMMO TYPE / DESCRIPTION 73mm 22428 Grom / High Explosive Anti-Tank 73mm 2428 Grom / High Explosive AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 9M112 Kobra / Anti-Tank Guided Missile 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank	BASIC LOAD 30 30 BASIC LOAD 24 12 18 108 45 45	30 30 0 HAND 0 3 93 45 45	100 100 100 0 0 16 86 100 100	0 0 24 12 15 15 0 0	
(120 30B1 ar	AMMO TYPE / DESCRIPTION 73mn 22428 Grom / High Explosive Anti-Tank 73mn 2428 Grom / High Explosive AMMO TYPE / DESCRIPTION 125mm D-81TM / High Explosive 125mm D-81TM / High Explosive 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank 125mm D-81TM / High Explosive Anti-Tank	BASIC LOAD 30 BASIC LOAD 24 12 18 108 45 45 108	30 30 30 0 HAND 0 0 3 93 45 45 45	5 ON HAND 100 100 100 100 16 86 100 100 100	0 0 24 12 15 15 0 0 0 0	

15.5 Fire Support

2000

The Fire Support (FS) Staff Report provides information about your artillery and air units available in the scenario, a listing of fire missions and strikes planned and in progress, and the fire missions in the Fire Support Control Center (FSCC) queue.

15.5.1 Fire Support Assets

The various sections will note Mortars, Tube Artillery, Rockets, and Strike Aircraft assets available to use during the scenario. Each entry shows the counter. Under the counter is a Menu hyperlink to the Orders Menu Popup Dialog so you can issue orders to these units. The first text block provides the unit's name, training level, type, and size (artillery formations are normally called batteries), location (on map hyperlinked hex or off-map with distance and map edge), under FSCC control toggle via the hyperlink, arrival or withdrawal time if needed, and finally the unit's local HQ.

The next block states the current Order and then the current Readiness, Training, and Ammo level percentages.

The next block of information shows the unit's composition in detail and unit type and a listing of munitions available.

The last block notes the details of any Fire Mission currently in progress.

At the bottom is information on what units this fire support unit can provide fires for and the possible delay time for the call to be processed in the command chain.

Tactical Opera	tions Center - Fire Support			×
Fire Supp	oort Assets Fire Missions Fire	e Support Control Center		
39 MR	D ACTIVE FIRE SUPPORT	ASSETS		
Reported	at 0200 mrs, Jul 21 1989			
A. ARTILLI				
W MTR/3/172 13 • 0	MTR/3/172 MRR. Veteran Artillery Company, unspotted in <u>5201, under FSCC</u> control. Arrival in 20 minutes. HQ: <u>HQ 3/172 MRR</u> .	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	6 x 120mm Mortar, 6 x MT-LB Tyagach[m] and 1 x UAZ Jeep (6 x Arty and 7 x	No detailed targeting report available.
Menu			Ammo: 180 HE, 60 Smoke (vis)	
	MTR/3/172 MRR is acting in support of all	units, involving 1-5 hops ar	nd 2-27 mins of latency.	
W MTR/2/172 13 0 Menu	MTR/2/172 MRR. Veteran Artillery Company, unspotted in <u>4702, under FSCC</u> control. HQ: <u>HQ 2/172 MRR</u> .	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	6 x 120mm Mortar, 6 x MT-LB Tyagach[m] and 1 x UAZ Jeep (6 x Arty and 7 x Utility). Ammo: 180 HE, 60	No detailed targeting report available.
	MTR/2/172 MRR is acting in support of all	units, involving 1-5 hops ar	Smoke (vis) nd 2-27 mins of latency.	
	MTD /1 /172 MDD Materan Artillon	On Call Orders	6 x 120mm Mortar, 6 x	No detailed
w 🔪	Company, unspotted in <u>5903</u> , <u>under FSCC</u>	100% Readiness,	MT-LB Tyagach[m] and 1 x UAZ Jeep	targeting report available.
13 ° 0	HQ: <u>HQ 1/172 MRR</u> .	100% Ammo,	(6 x Arty and 7 x Utility).	
			Ammo: 180 HE, 60 Smoke (vis)	
	MTR/1/172 MRR is acting in support of all	units, involving 1-5 hops ar	nd 2-27 mins of latency.	
375PA/172 8 0	3/SPA/172 MRR. Veteran SP Artillery Platoon, unspotted in <u>6102</u> , <u>under FSCC</u> control. HQ: <u>HQ 1/172 MRR</u> .	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	2 x MT-LBu 1V12[m] and 6 x 2S1 Gvozdika (2 x Recce and 6 x SPArty). Ammo: 168 HE, 36	No detailed targeting report available.
	3/SPA/172 MRR is acting in support of all u	inits, involving 1-5 hops an	Smoke (vis) d 2-27 mins of latency.	
		Print		<u>C</u> lose .:i

15.5.2 Fire Missions

2000

The Fire Missions tab shows a listing of all fire missions for your forces. The information shown in each entry is the Start and Finish time of the fire mission in-game time, the Status of the mission Active or Planned, the Contact number of the enemy if known/spotted, the Target if known/spotted, and its location if known/spotted, Type of Fire Mission ammunition being used, Rounds shows the total number of rounds to be fired at the target, Duration states the amount of time of the fire mission, Asset shows the counter image of the firing unit, and Asset Status shows the average ammo percentage and unit readiness level.

	Operations	Center - F	ire Suppor	t							×
Fire	e Support A	ssets		lissions	Fire Supp	ort Control Cente					
391) FIRE		IONS							
A. L	IST OF A	ACTIVE	AND P	LANNED	FIRE MIS	SIONS, AS OI	F 1120	HRS, JUL	21 1989.		
#	START- TIME	END- TIME	STATUS	CONTACT	TARGET	ТҮРЕ	ROUNDS	DURATION	ASSET	ASSET STATUS	
									W 1/1//390 14 B		
									W 2/1/390 14 B		
3	1125	1130	planned		<u>2913</u>	HE - Neutralization	30 rnds	5 mins	SPA/1/120 8 B	75% ammo 100% readiness	
							30 rnds		W 1/1/390 14 B		
5	1125	1130	planned		<u>2913</u>	HE - Neutralization	30 rnds	5 mins	W 2/1/390 14 B	72% ammo 100% readiness	
									SPA/2/120 8 B		
					ENV BODE		20 rode	Emine		050/ 3000	
						Print			and the second second	Close	:::

15.5.3 Fire Support Control Center (FSCC)

The Fire Support Control Center tab provides a listing of all requested fires on targets that have been spotted or off-map targets detected for counter-battery fire. The information shown in each entry # is the ID number of the fire support request, Sent is the time of the request (if logged), Time is when the request is needed, Priority is a ranking of importance (higher is more important), Contact is the ID number of the target, Target is the type of target and noted if it is moving, Location is the hex or off-map info of the target, and Spotter notes which unit is making the request of the spotted target.

You can also use this listing to find targets for manually entered fires from your artillery by noting the hex locations and target types.

								×
Fire Si	innort Asse	ets	Fire Mis	sions	Fire Support Control	Center		
The Se			THE HIS	310113				
39TH	MRD	FSCC	:, AS O	F 1120	HRS, JUL 21	1989		
					CTC			
<u>A. QU</u>			JUFFUR					
#	SENT	TIME	PRIORITY	CONTACT	TARGET	LOCATION	SPOTTER	
	0000 hrs	ASAP				5km W off-map		
01451	0000 hrs	ASAP	35	149	Counter-Battery	5km W off-map		
	0000 hrs	ASAP						
01500	0000 hrs	ASAP	13	122	Hard Target, moving	0416		
	0000 hrs	ASAP			Hard Target, moving			
01469	0000 hrs	ASAP	12	110	Soft Target	2713	HQ 1/120	
01435	0000 hrs	ASAP			Soft Target		1/1/120	
01421	0000 hrs	ASAP	10	111	Soft Target	3112	4/RC/15 TR	
	0000 hrs	ASAP			Hard Target, moving	0914	HQ 4/15 TR	
01468	0000 hrs	ASAP	7	110	Soft Target	2713	HQ 1/120	
01486	0000 hrs	ASAP			Soft Target		4/RC/15 TR	
01452	0000 hrs	ASAP	6	111	Soft Target	3112	4/RC/15 TR	
01484	0000 hrs	ASAP		134	Hard Target, moving	2923	2/3/15 TR	
01483	0000 hrs	ASAP	4	109	Hard Target	2915	2/4/120	
01482	0000 hrs	ASAP			Hard Target, moving	2922	2/3/15 TR	
01453	0000 hrs	ASAP	4	134	Hard Target, moving	2923	2/3/15 TR	
	0000 hrs	ASAP						
01439	0000 hrs	ASAP	4	133	Hard Target, moving	3021	2/3/15 TR	
	0000 hrs	ASAP			Hard Target, moving			
01446	0000 hrs	ASAP	3	133	Hard Target, moving	3021	2/3/15 TR	
01479	0000 hrs	ASAP		114	Soft Target	2814	2/4/120	
01478	0000 hrs	ASAP	2	115	Hard Target, moving	0716	10/AA/15 TR	
01476	0000 hrs	AS AD	<u></u>	130	Hard Target moving	001/	HO 2/15 TP	
					Print			lose

16 The Game Map

2000

All the action in the game takes place on beautifully rendered maps of real-world terrain. Each hex represents 500 meters of distance, hex face to hex face. The map shows terrain elevations, terrain types, roads, rails, and map markers. Knowing the effects of these elements is critical for success on the battlefield.



16.1 Moving the Map

There are a few ways to move around the map during the game and they are as follows:

- Map scrolling by placing the mouse cursor near a map or program edge. This is defined in Game Options.
- You can left-click and drag any non-unit part of the map to a new position on the screen in real-time. Clicking a unit will highlight the unit.
- You can click the Mini Map and center the game map to the chosen location based on the zoom level.

16.2 Zooming the Map

There are a few ways to zoom the map during the game and they are as follows:

- Rolling a mouse wheel will zoom the map in and out by the set increments if your mouse is equipped as such. There is a setting in the game option to reverse the direction of the zoom function.
- You can click the Mini Map (+) and (-) buttons. The Fit button will zoom the map out so the whole map is visible on the screen.
- You can go to the Option menu and select the Map Zoom Option item and select a zoom from the menu.

16.3 Flyout Panel/Unit Hint

The Flyout Menu activates if you hover the mouse cursor over a stack of units or a hex on the map. The Flyout menu appears after a second or so showing you the terrain under the counters or markers, any significant markers like VP markers, bridges, mines, or obstacles, and each of the counters present in the stack. At the bottom of the Flyout menu you also get the hex location (column/row), hex elevation, cover, concealment, and mobility values.

Beyond being helpful in seeing stacked units, you can right click on units in the Flyout to issue orders and even shift-click units to group select them.



16.4 Elevations

On the game map, you will notice that the ground is colored differently based on its elevation. The more elevated the terrain is, the lighter the basic green color will be. Elevated sections of the terrain are outlined in a visible shaded edge

You can also check the hex elevation by hovering on the tile and seeing the information on the Flyout or in the Status Bar at the bottom right of the screen, or go to the Terrain Overlay menu and select Elevation Values.

Placing units on higher terrain will provide them with a better line of sight.



16.5 Terrain

The map is made up of various terrain elements applied over the elevations.

Each type of terrain has mobility, concealment, and cover values that impact spotting, combat, and movement in various ways. The values are set in the Map Values Editor for each map used in the game.



 Clear – A few small elements visible on the elevation art. These tiles are not really "clear", as they have a small number of rolling hills, some trees, field, and buildings. These elements have a small amount of cover and concealment capability.



• Fields - Cultivated farm fields. Relatively flat solid terrain (in the summer and if it is not raining). One of the more numerous terrain types in central Europe. Fields do provide some concealment with the crops during the growing seasons.

• Forest/Orchards – Lots of trees of various types cut

with the occasional path, trail, or road. Not so thick that

driving over them is prohibited. Orchards show smaller

trees in nicely spaced rows. Trees can also be found along





• Rural – Houses and small buildings found in villages and towns. These built-up areas provide good cover and concealment and decent mobility with many roads. They also provide good ambush sites for infantry against armored vehicles. They are depicted as orange squares, some trees, and minor roads.



 Urban – Larger government buildings, shops, and apartment complexes. These built-up areas provide good cover and concealment and decent mobility with many roads. Also provide good ambush sites for infantry against armored vehicles. They are depicted as brown squares, few trees, and some roads.



 Industrial – Factories and warehouses. These built-up areas provide good cover and concealment and decent mobility with many roads. They also provide good ambush sites for infantry against armored vehicles. They are depicted as gray squares, occasional trees, and roads.



• Named Landmarks – On several maps there are some named landmarks like airfields, depots, or hills with heights. These are cosmetic, but informational.

16.6 Roads

2000

The map has a few types of major road networks represented for use in the game.

Each type of road provides improved mobility trough the various types of terrain found on the map.



• **Road** – These are basic two-lane country roads paved and in decent condition. These roads provide a suitable means of movement for forces through the various terrain on the map. Roads are shown as gray lines with black borders.



• **Highway** – These are multilane roads paved and in good condition for heavy traffic. These roads provide a reasonable means of movement for forces through the various terrain on the map. Highways are shown as wide yellow lines with black borders.



• **Autobahn** – These are modern very wide multilane roads built to allow fast movement of traffic and military vehicles. These roads provide an excellent means of movement for forces through the various terrain on the map. Autobahns are shown as double orange lines with black borders.

16.7 Railroads



• **Railroad** – While we do not have trains or move things by rail in the game, we do show railways as alternating black and light gray lines on the map. Rail bridges are also shown on the maps and can, in a pinch, be used to cross units over water.

16.8 Water Obstacles

The map has a few types of water obstacles that can hamper the movement of military units across the map. There are different means to cross these obstacles.



• **Stream** – These waterways are small, narrow, and shallow. With a bit of prep time units can cross these without the aid of bridges or engineering bridges.



• **Minor River** – These waterways are wide enough and deep enough to require a bridge (road or engineering) or amphibious vehicles to cross (with some prep time). Most of these will be names on the map.



• **Major River** – These waterways are vast and deep and must be crossed by bridge (in this case shown by two bridge markers) or swam at slow speeds by amphibious capable vehicles. Most of these major rivers will have names on the map.



• **Lakes** – Lakes and ponds are various sizes of enclosed water obstacles. The only means of crossing these obstacles is an engineering bridge or two or to have amphibious units that can slowly swim across to the other side. In most cases, going around them is the better plan.

16.9 Bridges

As noted in the section above, the primary way to cross rivers and streams is to use a bridge. These markers are shown on the map as wide light gray/white semi-transparent rectangle with black edges, and they are placed on the map across water obstacles and meet up with ends of roads.



- Road and Rail bridges both use the same marker.
- A Blown bridge is denoted with a red cross over it. Bridges can be in a blown state as part of the scenario design or can be blown with engineering units during a scenario.
- Specific engineering units can place temporary bridges across water obstacles. These bridges are colored blue for NATO owned and red for Warsaw Pact owned bridges.

16.10 Map Markers – Full Hex

Full hex map markers apply their effects on the entire hex and any units within. The color shows ownership. Red for Player one and Blue for Player two. Unowned markers are in yellow.



- **Brew/Casualty Kill Markers** A small blue (Player 1) or red (Player 2) smoking tanks or crosses showing where a subunit vehicle/squad was destroyed or fell out.
- **Chemical Contamination** The hex at this location is contaminated with persistent chemicals. Units can suffer losses if they move through these areas and become contaminated.
- **Crater** A small image showing the impact point of a barrage or air strike. Craters cause a slight movement penalty in the hex.
- **Fortification** A purposely built defensive structure made to protect forces from enemy fire. Units can screen or hold in them to gain a significant protection advantage. Not currently in the game.
- **Gas Cloud (Nonpersistent)** The hex contains a non-persistent chemical cloud. Units entering run the risk of losing subunits. These clouds will dissipate over time and pose no lingering threat.
- **Improved Position (IP)** An engineered defensive position which provides additional protection to units in them.
- Minefield A mixed anti-tank/anti-personnel minefield that attacks all who enter the location but particularly those who do not know it is there. Engineering units can clear lanes in these fields for safe movement.

- Obstacle An engineered barrier that obstructs the movement of forces leading to movement delays. Engineering units can clear lanes in these fields for safe movement.
- Radiation Contamination The hex is littered with highly radioactive debris and fallout after a nuclear strike. Entering these can cause losses to subunits based on the NBC protection level of the units passing through. Units moving through become contaminated and must be "cleaned" when out of the hazardous terrain.
- **Reduced Fortification** Marker shows a Fortification that has been damaged by engineers or combat and is no longer able to provide protection to unit in it. Not currently in game.
- Reduced Improved Position (IP) Marker shows an Improved Position (IP) that has been damaged by engineers or combat and is no longer able to provide protection to unit in it.
- **Reduced Minefield** Marker shows a Minefield that has been cleared by engineers with lanes making it safe to pass through.
- **Reduced Obstacle** Marker shows an obstacle that has been cleared by engineers with lanes making it safe to pass through.
- **Smoke: Normal** An obscuring cloud that reduces the visibility into and through it extensively unless a unit is using a thermal sight.
- Smoke: Thermal A thermally obscuring cloud that reduces the visibility into and through it considerably unless a unit is using a radar system for spotting.
- **Smoke: Multi-Spectral** An obscuring cloud that blocks visual, thermal and radars from seeing into it and past it.
- **VP Location** A banner with a point value that is awarded to the owner (blue-Player 1 and red-Player 2) who holds the objective at the end of the game. Unclaimed VP locations are shown with a split NATO/Warsaw Pact symbol. The point values for these locations can be split with different values for each side.

16.11 Map Markers – Hex Edge

Hex Edge Map Markers are placed along the edge of a hex, and the marker's effect only applies when crossing that hex edge. These markers are shown as full on the top of the picture below or reduced at the bottom of the image for each type. The color shows ownership. Red for Player one and Blue for Player two. Unowned markers are in yellow.



- **Fortification** A purposely built defensive structure made to protect forces from enemy fire. Units can screen or hold in them to gain a significant protection advantage. A Reduced Fortification has been damaged by engineers or combat and is no longer able to provide protection to units in it. Not currently in the game.
- **Improved Position (IP)** An engineered defensive position which provides additional protection to units in them. A reduced IP marker shows an Improved Position (IP) that has been damaged by engineers or combat and is no longer able to provide protection to units in it.
- Minefield A mixed anti-tank/anti-personnel minefield that attacks all who enter the location but particularly those who do not know it is there. Engineering units can clear lanes in these fields for safe movement. A Reduced Minefield shows that it has been cleared by engineers with lanes making it safe to pass through.
- Obstacle An engineered barrier that obstructs movement leading to movement delays. Engineering units can clear lanes in these fields for safe movement. A Reduced Obstacle shows an obstacle that has been cleared by engineers with lanes making it safe to pass through.

16.12 MCOO Map Legend

The following hatches and lines are found on the Modified Combined Obstacle Overlay (MCOO) and have the following impact on game play for ground-based units. These effects do not hamper movement of air units.



2000

• **Impassible Terrain** – Terrain with a red cross hatching is considered impassable by ground units. Units cannot travel into or through this type of terrain. There is no impassible terrain currently in the game.



• **Impassible Hex Edge** – Hex edges shown with a red solid line are impassible to ground forces. This indicates a slope that is at an incline/decline that is too steep for ground units to traverse. This is seen in hexes with multiple elevations at an edge.



• **Slow-Go Terrain** – Terrain with the red hatch is noted as slow-go terrain. This means your ground units will be slowed down as they navigate more restricted lanes of travel. This terrain is mainly seen in forested hexes in the game.



• **Built-Up Terrain** – Terrain with an orange hatch is built-up areas like villages, towns, and cities. Unit will be a bit slower through these areas. These hexes are also a potential danger for units moving through as cover and concealment for enemies is high in these areas.



• **Open Terrain** – The grey terrain zones are considered open ground. These hexes have a few hills, trees, or buildings, and can be crossed without slowing down. They also show clear lanes of fire and line of sight. These areas are good to avoid if moving into an enemy area and having clear lanes of fire from cover is

excellent when defending.



• **Road Network** – The black or dark gray lines show the road network on the map. This terrain will have better movement rates than open ground and also allow for faster travel through any Slow-Go or Built-up terrain.



• **Water Obstacles** – The solid blue lines or blue filled hexes represent water obstacles that require bridging or units with amphibious capability to cross over them. Other units can cross with road bridges.

16.13 Animated Fire Lines

Flashpoint Campaigns offers two types of fire line animations. The default basic fire lines or direct-fire based weapon animations. You can turn on the weapon-based effects from the Options menu.

16.13.1 Classic Fire Lines

These are the fat red/blue (default colors, transparency, and width, can be changed in the User Preferences dialog) lines from shooter to target.



16.13.2 Main Gun Fire Animation

2000

These are narrow "semi-transparent" straight line from shooter to target. Fast moving colored projectile with a thin vapor trail moving from shooter to target. A wide muzzle blast smoke animation at the shooter location.



16.13.3 Autocannon/Machine Gun Animation

These are narrow "semi-transparent" straight line vapor trail from shooter to target with three short colored projectiles moving from shooter to target. Three narrow muzzle blasts smoke animations at the shooter location.



16.13.4 Anti-Tank Guided Missile Animation

These are wiggly trajectory vapor trails from shooter to target (representing ATGM course corrections) and a fat, colored projectile with bright orange tail (engine) and vanishing smoke trail. There is launch blast smoke animation at the shooter location.



16.13.5 Surface-to-Air Missile (SAM) Animation

These are hooked trajectory vapor trails from shooter to target (representing off-angle launch followed by tracking) and a fat accelerating color projectile with persistent smoke trail. There is launch blast smoke animation at the shooter location.



16.13.6 Fire Line Colors and Scaling

Projectile colors follow User Preferences for Line of Fire colors for both sides. You may want to switch to more tracer like colors like yellow, orange, or red to brighten up the default colors (brighter is the new default for new installs).

Animation sizes follow map scaling and will scale up and down with changes in zoom levels.

Animation speed follows other animation speeds, but capped at a maximum speed of 10. Reduce animation speed below 10 to slow down fire exchange animations.

17 Unit Counters

2000



Units are the individual playing pieces in the game. Units are composed of one or more subunits, such as vehicles, aircraft, artillery pieces, or squads of men.

For example, a tank brigade HQ unit

composed of 3 subunits might contain a T-80 command tank, a BMP-2 armored personnel carrier, and a BTR-60 command vehicle. The details of the counter are noted below. Units can also be a mix of unit types that are used together for operation needs. One of the most common mixed units are Mechanized units with both Infantry Fighting Vehicles (IFVs) or Armored Personnel Carriers (APCs), Infantry squads, and weapon teams. Aircraft units like helicopters or Close Air Support (CAS) assets are always of the same type in a unit but could have different roles like attack and recon.

The unit counters in the game contain several important values to show information to the player on the state of the unit. These items are detailed in the following section.

17.1 Counter Information Layout

The image below shows all the various bits of information contained on most of the counters in the game. Understanding these items and their

meaning is an essential part of the game.



• Unit Silhouette (Sil) - The primary constitution of the unit is shown by the central graphic. In this case, a tank is shown, so you may assume that the unit is predominantly composed of those types. Vehicles of all types, artillery, and aircraft are shown with vehicle graphics. Non-vehicular units use NATO symbolic graphics. Suppose the unit is composed of carrier vehicles and dismountable passengers. In that case, the vehicle Sil will be shown while the unit is moving, and the dominant passenger NATO Symbol will be shown. In contrast, the unit is stationary to indicate that the passengers have dismounted.

- **Unit Designation** Immediately below the unit graphic will be an identifying unit designation. These tags allow the player to more quickly identify where the unit belongs in the general organization of his forces. This information is shown only to the owning player and long tags are truncated to fit.
- **Unit Status** To quickly show the combat effectiveness of a unit there is a symbol just below the unit's designation.
 - **Green Circle** Indicates the unit is combat effective and is in good order with ammo and readiness levels.
 - **Yellow Triangle** with the point up denotes a unit that is of marginal fighting capability. It has possibly taken some losses or is low on ammo, readiness, or morale and its combat abilities are reduced.
 - **Red Inverted Triangle** Indicates a unit with critical combat effectiveness condition. It is deficient in ammo, readiness, or morale, and has taken significant losses or a combination of these effect. These units should be pulled out of combat for resupply as they are not very combat effective in this state.
 - **Black Square** Indicates a unit has reached combat ineffectiveness and is no longer capable of practical combat action. These units are usually out of critical ammo, are very low on readiness, have shattered morale, or sustained heavy losses in a number of subunits.
- **Unit Size** The three dots at the top center tell us the size of the unit, in this case a platoon. The size indicators are "X" = brigade, "III" = regiment, "II" = battalion, "I" = company (approx. 10 subunits), "..." = platoon (approx. 3-5 subunits), "..." section (1 or 2 subunits), and ".' = an individual subunit. This information is shown only to the owning player. **NOTE**: For headquarters units the unit size shown is the size of the command, not of the HQ unit itself.
- **National Color** Every unit of a nation has a color-coded background for the unit counters. The Soviets are red, Americans are green, and the French are blue. Each nation's background is unique and allows the players to tell the various forces apart.
- Is Headquarter Unit The "H" in the upper right corner means

that this unit is a headquarters unit. Some are formally organized to be headquarters, and some are just acting as such. In either case, an H will appear in this location. This information is shown only to the owning player. These units provide the chain of command and communications link to their subordinates.

- Active Emitter If a unit is equipped with a Radar system, either Air Search or Ground Search and it is activated, an orange box will be displayed on the counter to show an active emitter.
- Unit Order The white letter ("M") in the lower right of the counter indicates the unit's current Order. Valid orders are the following: "A" = Assault, "M" = Move Deliberate, "2" = Move Hasty, "S" = Screen, "H" = Hold, "B" = Barrage, "G" for Gas Attack, "C" = Counter-Battery, "E" = Engineering Action, "R" = Resupply, "O" = On call, "F" for Fallback (Scooting), "W" for Withdrawing, and "Z" for helicopters that are in Hunt mode. This information is shown only to the owning player. These orders will be explained in more detail in Section 20 below.
- **Spotted Indicator** If the unit has been sighted by the enemy, then a tiny white dot will be drawn in the bottom of the counter to the left of the unit order. This is based on being lazed, shot at, or a reasonable estimation of "we see them so I bet they can see us" for your units and spotting the enemy. **NOTE:** This indicator will only show if the option to Show Enemy Units is turned on.
- **Movement Direction and Type** If a unit is currently in motion, then a small triangle will be shown pointing in the direction that will be moved in next. If the triangle is black, the unit is utilizing road movement via a hasty move order and is going for speed over combat readiness. A blue triangle indicates a Deliberate Move order, and the unit is moving slower and will use both road and off-road movements to the objective while being ready for combat. A red triangle indicated a unit moving in an Assault order and is combat ready. Assault movement is a bit faster than deliberate trading cover for speed to close on an objective.
- **Number of Active Runners** The large number in the bottom left corner is the number of subunits mission-capable ("10" in this example). A subunit is mission capable (also known as a "runner") if

it is physically and psychologically able to carry out its orders. The other possible states are destroyed and fallen out. A tank that has thrown a track, a truck with a conked-out engine, or an infantry squad so shattered that it cannot rise from the bottom of its trench are examples of subunits that have fallen out. Fallen-out subunits count equally with destroyed subunits for victory purposes but can be recovered between scenarios in a campaign game.

Movement Class – The letter in the upper left of the counter indicates the unit's current movement type. These types are as follows: "L" = Leg, "W" = Wheeled, "T" = Tracked, "R" = Rotor, "P" = Propeller, "J" = Jet, "R" = Rocket, "S" = Static (non-movable).

18 Specific Unit Roles

The *Flashpoint Campaigns Professional-Modern War* game engine has a vast array of unit types covering the major platforms (vehicles, aircraft, helicopters, field guns, etc.) and squads of the modern battlefield. The primary unit types are described below.

NOTE: Roles can be changed in game and impact how the AI tries to use the units. Recce units will try to be out front locating the enemy. Following that are the Main Effort (mainly armor) and Line (mainly mechanized/infantry units. Just behind those or mixed with are Overwatch units (Air-defense and dedicated Anti-tank units). Finally, units in a Support role (mainly Headquarters and Artillery units) who should stay at the rear of the force.

18.1 Recce Role

Recce (Recon or Reconnaissance) units are ideal scouts and should be used to find enemy units and to build a picture of how and where the enemy is attacking. Reconnaissance units can safely operate outside the command range with no penalties (they are trained to do this) and often have better equipment and sensors to spot enemy troops. Most of them are also harder to spot, but the downside of these units is (in most cases) that they are only lightly armed and armored.

Recon units are, in most cases, not meant to stop enemy line forces, but to locate them for you to plan how to deal with them with your line and

other forces like artillery. It is also critical as a commander to find and eliminate enemy recon units and deny them the ability to find and attack you.

18.2 Main Effort and Line Roles

Units with tank, infantry, or mechanized infantry subunits are defined as "Main Effort" or "Line" units. Main Effort units are those tasked with taking ground and objectives and are usually tank-based units. Line units are the second line of attacking units and are generally the mechanized parts of the force. These unit types make up most of the player's combat force. Line units can be divided into three types: Infantry, Mechanized (armored fighting vehicles and infantry), and Tanks. The specific capabilities of these units may vary, but in general, these are their uses in battle:

- **Infantry** These units are weak in the open and often in need of support, but when well-hidden and armed with specialized weapons like ATGMs, they pose a severe threat to any unit out there.
- **Mechanized** These units are quick, but often only lightly armored and should not be expected to hold their ground in the open against enemy tanks. Depending on the armaments of the unit, however, they can seriously damage enemy infantry and armor.
- **Tanks** Tanks are the best units to kill the enemy's tanks and other armored fighting vehicles at range. Tanks have the toughest armor protection of any platform in the game and large cannons able to destroy enemy tanks at ranges over 2000 meters. Tanks are high-value assets, so don't throw them away recklessly in battle.

18.3 Overwatch Role

Units in the Overwatch role are used to provide some form of defense for the units in the Main Effort or Line groups. These units usually follow behind the Main Effort and Line forces as units move and they sit ahead of any support units in the rear. The capabilities of these units vary, but in general these are their uses in battle:

• Anti-Tank (AT) – These units are weak in the open, but when wellhidden pose a serious threat to any unit out there. These weapons

are mainly used to kill tanks, but can also take out infantry fighting vehicles. Weapons used can be ATGMs, tank guns, recoilless rifles, and other anti-armor systems.

- Air Defense (AD) These units specialize in finding and destroying aerial threats over the battlefield. These units need a good line of sight in and around the rest of your forces and should be used to keep them protected from enemy helicopters and aircraft. These systems can be gun or missile based and usually have air search radar or other optical sensors to find and track air threats.
- **Artillery** In some cases, self-propelled artillery units with short ranges like mortars can be in an overwatch role if they provide fires for main effort/line units that they are part of the formation with.

18.4 Support Role

2000

Units in the Support Role provide a variety of functions for the rest for the force. These functions are as follows:

- **Headquarters** Headquarters units are the command network of your forces. These units are the ones that draw up plans and issue orders to their subordinate forces or relays orders to other forces. Keeping these units alive and in command range of their subordinates will have a significant impact in your force's ability to fight and win battles. Most upper-level headquarters are full of troops, trucks, and command vehicles and not really meant to fight toe-to- toe with enemy units. Lower-level headquarters for companies and platoons usually have the same type of units as those they command, like tanks, and can lend firepower during a battle. Headquarters have some of the following abilities:
 - Each order out to a unit and each situation report back from a unit is a "radio event". Excessive use of the radio can reveal a unit's location and it will be shown on the map in a 'detected' spotted state if it is not detected already. If the unit is an HQ and the enemy staff is enabled to give FSCC missions, then a high priority fire request against the HQ will be entered into the enemy FSCC mission queue. Bottom line, move your HQs on occasion if orders traffic is high or risk getting them shelled.
 - If an HQ unit is destroyed, then another unit will be promoted to

fill its spot in the chain of command. This is called HQ resubordination. Any unit that has subordinate units is a de-facto headquarters unit, whether it is officially described as such or not. This state is not dependent on having HQ vehicles as subunits.

- The Chain of Command chart on the Map Page will show what the unit hierarchies currently are. The highest HQ (marked with "HQ" as its unit icon) is in overall command. Depending on the situation there may be intermediate level HQs as well.
- HQ units can indirectly sight any enemy unit that its subordinate units have sighted. The highest HQ sights everything that any friendly unit has sighted. This is important for generating FSCC requests and reflect passing sighting of the enemy up the command chain.
- Involuntary Movement: When a unit is forced to retreat it will move in the direction of immediate safety, or if there is none, towards its parent HQ.
- **Engineering** Engineering units are used to do specific tasks such as laying a bridge over a stream or river, clearing mines and obstacles, and blowing bridges to deny their use to the enemy. One of the significant changes from earlier version of the game is the use of dedicated engineering assets on the map to do those functions listed above. This includes information reports dedicated to engineering assets and activities. Currently supported in the game are dedicated short span bridging units and engineering troops. The bridges are used to cross water obstacles and the engineering troops do all the other functions. These units usually travel in the rear of the forces and then move up to do specific tasks. These are not combat capable units and should not be placed into combat with the enemy.
- Artillery Artillery is the King of Battle. These weapon systems represent guns, rockets, and mortars that can reach tens if not hundreds of kilometers into enemy territory and deliver several different types of munitions on targets with devastating effect. These assets can also be on or off-map depending on the scenario design. Several reports and information panels such as the Fire Support panel provide details on these units and allow you to see

what they are doing and access to order them to fire on targets of your choosing. There is also an option to have these assets placed under FSCC (Fire Support Control Center) control which will use the AI to direct their fires on spotted enemy units. When these units are on map, they should be placed behind your forces but in range of the enemy to be able to fire on them. Artillery units can, when pressed and capable (noted as direct fire capable and carrying the right ammunitions), engage in direct fire against attacking units. Artillery units both on and off-map can be subjected to enemy counter-battery fire. This is returned enemy artillery fire based on locating your firing batteries via counter-battery radars and other means. It would be best if you got in the habit of shooting and then moving to avoid losses.

- **On-Map Air Support** Various types of helicopters are included in the game. There are Attack, Recon, and Utility versions of Helicopters. Helicopters can carry a variety of weapons geared to anti-armor or anti-personnel missions, but they can also be assigned to perform reconnaissance tasks. In future updates, we will add the utility/transport helicopters for airborne assault operations. Helicopters are just like any other on-map unit except for the following differences:
- They ignore all terrain costs when moving.
- They move much faster than the ground units based on their cruise speed and flight profile.
- Depending on movement orders, helicopters will fly Nap of the Earth (NOE) using terrain to screen and cover their movements when Hunting (a helicopter specific order for moving and attacking enemy targets) or doing a Deliberate Move. They will fly at low altitude if executing a hasty move.
- They do not count against stacking limits in the location they occupy.
- They do not suffer NBC (Nuclear, Chemical, and Biological) attacks if they move through a contaminated hex location.
- They do not suffer minefield attacks if they move through a mined location.

- Unit Posture Helicopter units cannot dig in or fortify.
- Helicopters with mast mounted sensors receive a bonus to spot and a bonus not to get spotted when looking for enemy units.
- To resupply, helicopters must fly back and land at a FARP (Forward Arming and Refueling Point) unit. If the FARP is missing, then the units will go to the current highest HQ on the map to resupply.
- Off-Map Air Support Off-Map Air support are units of propeller or jet powered aircraft with various missions designed to strike targets on the battlefield. All aircraft are held off-map in particular loiter areas for commitment to air strikes under the player's direction or FSCC control. When the air strike is complete the surviving aircraft either return to base to rearm if out of ammunition or go back on station if weapons are still available. After rearming they will return to the loiter area to await future assignment. Doctrine generally allows for a certain number of fixed wing air close air support sorties within 40 km or so of the Forward Edge of the Battle Area (FEBA). Since the FEBA is an extremely high-risk area for these valuable assets, availability will be limited, and strikes should be reserved for high value targets. Long-range artillery and helicopter assets remain the preferred platforms for routine fire missions within this zone. Offmap strike aircraft have the following capabilities:
 - Aircraft that are rated All-Weather can fly anytime visibility is 500 meters or better (in rain/snow). Non-All-Weather aircraft are grounded if the weather is poor.
 - Aircraft that are rated for Night Operations can fly normally at night. Those units without this rating are grounded and cannot fly at night.
 - Close Air Support (CAS) aircraft are equipped to strike ground targets.
 - Level Bombers fly high over the battlefield and drop weapons against ground targets.
- SEAD (Suppression of Enemy Air Defenses) aircraft are equipped with special anti-radiation missiles (ARMs) that seek out and destroy air search radars rendering Surface to Air systems (SAMs)

useless. They do not affect optical and Infra-Red (IR) systems.

 Most scenarios will have a limited amount or air strikes (if any) and those assets will be available for a limited amount of time.

19 Special Unit Types

2000

The game has a couple of special units that need to be explained as to how they are used.

19.1 Weapons of Mass Destruction (WMDs)

Tactical nuclear warheads and persistent and non-persistent chemical weapons are a part of the battlefield. These weapons are delivered by Surface-to-Surface Missiles (SSMs), artillery, or aircraft. These weapons will be noted in your scenario briefing if they are available for use. Nuclear and Persistent Chemicals leave contamination behind that can kill units entering those contaminated areas.

These weapons cost a certain amount of victory points to use and should therefore not be used lightly. It is highly advised that you only use these specialized weapons against extremely high value (and tightly packed) targets. Make sure to launch strike missions of these weapons only where they can be decisive!

19.2 Inactive Units

History shows that not all units on the immediate battlefield that could have participated did. Accordingly, the scenario designer is allowed to place units on the map and then mark them as "inactive". This makes them unavailable for player orders or relocating in the deployment area until their release is triggered by one of the actions below. While inactive units have the following restrictions:

- Inactive units are drawn on the map, but they have a gray overlay to denote their status and the critical message line in the UDP will say "Inactive".
- They can be browsed but cannot be given orders of any type.
- They cannot be repositioned during the setup phase.

- Active and inactive units may stack together within normal stacking limits.
- An inactive unit cannot become the supreme HQ.
- Inactive unit radio messages are not counted towards traffic levels.

These units become active when:

- When attacked (direct fire, indirect fire, or air strikes).
- When an enemy appears within the units SOP standoff range or 1500 meters whichever is greater.

Once activated, these units behave in a usual fashion.

19.3 Logistical Units

Logistics are an essential part of the battlefield. Units fighting the battle require fuel and ammo and the troops need food and water. While the game engine abstracts the use and tracking of logistical forces for ground units (resupply orders are important and discussed in Section 21 below), a new unit called a FARP (Forward Arming and Refueling Point) has been added to the game for helicopter operations. When an attack helicopter runs low on ammunition or has low readiness or morale from combat operations, they can be ordered back to the FARP to reload and to recover.

In future expansions, we may look to include additional logistical units for supply and other functions.

19.4 Unmanned Aerial Vehicles (UAVs)

UAVs or drones were a new item in the 80s and very few of them were in operation. While we don't have any in the current batch of scenarios, it is possible to add them, and UAVs may be seen in the future. When these platforms are on-map, they are treated like helicopters and the player can plot their moves in the same fashion. When they are off-map assets, the fly in and conduct strikes just like the human-crewed aircraft noted in Section 18.4 above.

20 Order of Battle (OOB) Tree

2000

One important function of the Spotlight Panel (F10) is the Order of Battle Tree. The OOB tree provides a listing of all your units and shows which units report to (are subordinate to) which headquarters. This information is vital as command delays and resupply capability are tied to a unit's distance from its local/primary headquarters.

In some cases, you as the commander may want to move units under another command or change up the composition of a formation to better suit the mission at hand. There are two functions to help with the arrangement of units. Resubordination and Reorder. They are described below.



20.1 Unit Resubordination



To move a unit from one command to another you need to click on the unit to move, in this case **3/D/1-69 Ar**, and then drag the unit out and up to the new HQ you want it to be a part of and release the mouse button. In this case we are subordinating it to **HQ B/1-15 Mech**. After releasing the button, the units should appear at the bottom of the new HQ's formation as seen in the right image.

Once a unit is attached to a new HQ, it will use that HQ for communication and resupply based on the new HQ's command ranges. Adding more units to a new HQ also increases the amount of generated radio traffic and adds to the chance of the enemy locating that HQ.

20.2 Unit Reorder

Once you resubordinate a unit into a new command, you may wish to move it into a different place in the subordinate order. Using the Reorder function can make those changes.



At the bottom of the Spotlight Panel, check the Reorder function. Then click and drag the unit you want to move and release it on the unit you want to be above.

21 Issuing Orders

2000

You control your forces by giving orders to your units. Be aware that a certain period is needed by the staff to formulate and transmit your orders. The unit will need time to prepare for the new order that is a function of the type of order, the training, readiness, and the tactical situation of the unit to which it is issued.

Orders take as long as they take to run to completion, and this may not coincide neatly with the Orders Phase intervals. Orders persist to the next turn if you do not issue new ones. If you keep interrupting orders with new orders, the delay time will increase as orders have to be rescinded and then new orders will be generated for the units.

21.1 Unit Popup Menu

Orders can be given to a unit by right-clicking on the unit icon on the map and selecting an order from the displayed Unit Popup Menu. Some

orders require selecting to set them (Screen, On Call, Hold, Resupply, etc.). Others require the player to designate waypoints or target points (Moves, Assault, Barrage, Hunting, etc.). With these last orders you must finish the order by hitting selecting one of the options in the Orders on Arrival dialog that pops up when you are done selecting waypoints for the move.

If you decide during issuing a move or bombardment order that you want to do something else, you can click the Esc key to stop the order. Accepting an order and then issuing a new order can also be done. This case does not add additional time to the command delay as the order is not yet in process.

In the image below, you can see the Orders Block of the Unit Popup Menu. The listed orders may be in two sections of the dialog and show up based on the type of unit with Orders that are proper to use for the particular unit type.

For more detailed information about plotting movement, see Section 22 below.



Orders on Arrival - 2/4/PzGrenBtl 102			
When this unit reache	s its final destination, its orders are then to:		
Hold	Ground units dig in and defend in place		
<u>S</u> creen	Use cover / stand off 0+ hexes from enemy		
<u>R</u> esupply	Rest and resupply		

You can also open the Unit Popup Menu by clicking on the hyperlinked <u>Menu</u> option beneath the unit counter in some reports and displays. This is useful for Off-Map Assets like artillery and air units.

Tactical Operations Center - Fire Support		
Fre Support Assets Fire Missions Fire Supp 2/3 ID ACTIVE FIRE SUPPORT ASSE Reported at 1400 hrs, Jul 23 1989 A. MORTARS MTR/1-15 Mech. Veteran SP Artillery On 1 Company, unspotted in 318, under FSCC 0n10, unspotted in 318, under FSCC 500, 000 0n10, unspotted in 318, under FSCC 500, 000 001, unspotted in 318, under FSCC 500, 000 001, unspotted in 318, under FSCC 500, 000	172/39 MRD OFF-MAP ASSETS Reported at 1400 hrs, Jul 23 1989 A.SU-24 Flight Lingular Bettion, 90km Micru	 Withdrawel in 180 minute(s)
Meau2 Unit Dashboard F4 SOP Manager Ctrl+K Subunit Inspector F6 Assault Move Pasty Screen Hold Rest and Resupply ✓ Is Under FSCC (Staff) Control On Call Barage Counter Battery Flash HQ Location Select Unit and Subordinates as Current Group Detach and Make Unit Independent Unit Role: Overwatch Show	B. SU-24 FLIGHT 2 Su-24 FLight Arcraft Section, Solar Def Manager Unit Dashboard Unit Dashboard Unit Dashboard Unit Dashboard Unit Dashboard Unit Dashboard Suburit Interestor Ret and Reupph I Suburit Interestor Beach and Make Unit Independent Unit Role: Support	Withdrawal In 179 minute(s)
<u><u> </u></u>	ntClose	

21.2 Primary Unit Orders

- **Assault** Move in a spread-out formation using both road and offroad movement to be ready to attack an enemy.
- **Move Deliberate** A more defensive move than Assault, but still can travel on or off-road.
- **Move Hasty** Faster than Assault and Deliberate moves, but trades speed for defensive coverage uses. It sticks mainly to roads.
- Screen A non-moving state of seeking moderate cover and ready to attack or move if required.
- **Hold** A non-moving state of seeking the best cover in the hex and in some cases, digging in for improved defensive protection if the unit is in the hex for 30 minutes. This is the best choice for defending locations.
- **Rest and Resupply** The unit is in a state of rearming, refueling, and resting to recover readiness and morale. This only works if the unit is not in combat. Aircraft and Helicopters will return to base to rearm and refuel.

21.3 Indirect Fire Specific Orders

- **Is Under FSCC (Staff) Control** This toggle allows you to have the Staff AI provide fire missions for the unit or place it under your direct control. Not really an order, but affects how orders are done for this unit.
- **On Call** The unit is ready for new orders, either movement or barrage.
- **Barrage** These are orders to fire certain types of munitions at a set of targets on the map.
 - Suppression Fire Low rate of fire of high explosive (HE) rounds that has limited kill power, but does inflict readiness loss to targeted units.
 - Neutralizing Fire High rate of fire of high explosive (HE) rounds maximizing kill power and inflicting readiness loss to targeted units.

- Saturation Area Fire This option is found only on multiple rocket launchers. It allows all the unit's rockets to be fired off in rapid succession and strike a much larger target zone. If this mission is chosen, you can only select one target point and the rounds will land in the target hex and the surrounding six hexes. This is a devastating attack that can cause severe losses to man and machine. Units firing a saturation attack automatically go to zero ammo and must resupply before shooting again.
- Smoke Fires rounds that deploy a smoke screen of various types that obscure vision and sensors.
- Scatterable Mines (FASCAM) This ammunition deploys a hexwide minefield in the targeted hexes.
- Improved Conventional Munitions (ICM) These rounds deploy several submunitions capable of destroying both armored and soft targets.
- Nuclear Munition These are single rounds with a tactical nuclear warhead that can cause massive area-wide damage and nuclear contamination.
- Chemical Munition These rounds can drop persistent or nonpersistent chemical attacks into hexes. Non-persistent strikes will dissipate over time.
- Counter Battery Your units are set to fire on located enemy artillery units. While on Counter-battery they will not shoot other missions.

21.4 Engineering Specific Orders

- **Remove (Blow) Bridge** Allows an engineer to blow a fixed bridge if they are in an adjacent hex.
- Lift Mines Allows an engineer to clear lanes in a minefield for units to pass safely through.
- **Remove Engineered Obstacle** Allows an engineer to remove obstacles to create lanes for units to pass through.
- **Demolish Positions** Allows the engineer to destroy improved position in a hex.

 Lay/Recover Bridge – Allows a Short-Span Bridging vehicle to place or retrieve a temporary bridge over a hex -side water obstacle.

21.5 Helicopter Specific Orders

• **Hunt** – This makes the helicopter move from point to point looking for enemy units to engage while doing its best to use terrain to mask its movement.

21.6 Aircraft Specific Orders

- **Is Under FSCC (Staff) Control** This toggle allows you to have the Staff AI provide fire missions for the unit or place it under your direct control. Not really an order, but affects how orders are done for this unit.
- **On Call** The unit is on station and waiting to be called back in for a strike.
- **Air Strike** Order an aircraft to attack a given hex with its carried ordinance. Depending on the type of aircraft and weapons, targets may be restricted to specific types.

21.7 Unit Orders Delay Factors

Orders take time to transmit, absorb, and implement. Some are fast and some will take time. For many orders there is a preparation time before the order can commence and then a period during which the order is executed. If the unit is On Call or is already performing the same kind of order requested (i.e., Move to Move, Screen to Screen, just with different parameters) then the Orders Delay equals 2 minutes. Otherwise, the Orders Delay equals the standard Orders Delay (2 to 60 minutes, average 5 to 10 minutes).

Other delay factors include:

- If the unit is being rested, then the Orders Delay is increased by 10 minutes.
- If the unit needs to relinquish a Dug In posture, then the Orders Delay is increased by 5 minutes.
- If the unit is not currently moving and the new order requires movement, then the Orders Delay is increased by 5 minutes.
- If the unit is under fire, then the Orders Delay is increased by 50%.
- If the scenario electronic warfare intensity is Medium then the Orders Delay is increased by 20%, if EW intensity is High then it is increased by 33%.
- If the unit is ordered to Assault, then the Orders Delay cannot be less than 30 minutes.

These are base delays and will vary based on training level of the forces, readiness of the forces and command and control losses.

21.8 Involuntary Orders Changes

Not all units always follow orders under all circumstances. Selfpreservation will take over long before the very last bullet is fired, or life is lost. There may be an involuntary change of orders if the unit reaches a stress threshold limit. This limit is calculated using the current morale, training and readiness levels, losses, HQ proximity, and national factors for following orders and command flexibility. If the limit is exceeded, attacks will stall, and defenses will turn into retreats. Specifically:

- Assaults, Moves, and Resupply orders become Screens
- Screens, and Holds become Scoots to relative safety
- Specialist units (e.g., artillery, supply, etc.) revert to On Call or Scoot to safety
- Overwatch and Support units will stop advancing if their associated Main Effort and Line units are lost in battle.
- Units in a group move will halt movement to keep spacing and formation by role (recon front, main effort, and line, then overwatch, and support in the rear).

NOTE: Units doing an automatic Scoot will show an "F" for the orders type when moving. Units that trigger a Withdrawal via SOP settings, will show a "W" for their orders. As a player, you cannot set these orders types, they are reactions to whatever is going on in the game with the unit in question.

21.9 Issuing Group Orders

It is possible to give orders to more than one unit at a time by the following means:

- Shift + Left mouse clicking on each unit you wish to issue a standard order to. These can be units from different groups and headquarters.
- Select All Subordinate units in a formation by selecting their HQ with Alt + Left mouse click. This will highlight all subordinate units in that group.



To issue any orders to the selected group, right-click on any of the highlighted units to see the Unit Popup Menu and select an order. If you select a movement order, the AI will provide intelligent pathing to keep the units in a cohesive formation and then spread them out at the final waypoint in defensive locations (if possible) to avoid stacking. You can select each unit and alter the placement of the waypoints as you see fit.

NOTE: Select the most used order for all waypoints that you want and then use each unit's Dashboard to change the type of movement order at various waypoints. See Section 22.1.1 below

See more information in Section 22 below.

22 Plotting Movement and Fires

One of the primary functions as Commander is to direct your forces across the map to take or hold objectives. You will need to know how to order your forces and how to utilize artillery assets and airpower to achieve your mission goals and to preserve your forces the best you can. The following information will show you how to move your units, issue orders, adjust and change movement types along the path and how to

issue artillery and air strike on target locations.

22.1 Movement

2000

To order a unit or group of units (See Section 21.9 above) Right click on them to bring up the Unit Popup Menu. From there select a movement order. In this case, a Deliberate Move. Next select up to six waypoints to path the unit to the location you want it to end up in. The AI is smart and will path the units in an intelligent fashion based on the terrain and your SOP selections (See Section 23 below). Once you have selected the path you can click on the Commit button in the Plotting Mode dialog that popped up when you started placing waypoints. If you wish to stop and cancel the order, you can click the Cancel button.





After pushing the Commit button, an Orders on Arrival dialog will pop up and you can set the final order state of the unit. The options for this box vary to match the type of unit and any special orders it has access to.

Orders on Arrival - 2/RC/CS	ST/1 R22eR
When this unit reache	s its final destination, its orders are then to:
Hold	Ground units dig in and defend in place
Screen	Use cover / stand off 1+ hexes from enemy
Resupply	Rest and resupply

In this case we will select a Screen order. Now the final path is shown for the unit.



At this point if you need to adjust the path, you can click and drag the Waypoint Marker to a new hex location. In this example we will move Waypoint #2 to the south to the road junction. To make this a better move we also need to move Waypoint #1 one hex to the south to make the path choose the road heading south-east.



At this point you also have the option to Right click on any waypoint and pop up a Waypoint Editor menu.



Selecting the Edit Waypoint menu option will open the Unit's Dashboard

on the Orders tab to allow you to make several changes to the order as detailed in the following sections. You can remove the waypoint by selecting the Delete Waypoint menu option. This will also delete any SOP setting for that waypoint. At the bottom is an estimated arrival time of the unit to that waypoint and the type of move to that waypoint.

Hovering over a Waypoint with the mouse will bring up a hint showing the Unit Name, Waypoint Number and Movement Order, and the start and arrival time of the unit to that waypoint.



22.1.1 Chaining Different Movement Orders

After plotting a set of waypoint movements, you have the option to go into the Dashboard for any unit (must be done per unit even if a formation or group move is issued) and change the standing order. Below is the initial plotted set of move orders for our unit.



To view and change an order, select the waypoint order you want to change and right-click on it to bring up a menu of optional orders. In this case let's select a Move Hasty order so the unit moves the first part of this move quicker.



After changing the order, the waypoint order shown changes, the arrival times change for all waypoints as the first time is shorter, and the counter changes from a Deliberate Move marker (blue triangle) to a Hasty Move marker (Black Triangle).



For some attacks you may want to have the opening waypoints that are

in friendly territory to be hasty and then move to Deliberate Moves when enemy contact is possible and then shift to Assault if you are taking a contested objective. You can also change the terminal (final) order at this point as well.

22.1.2 Altering Waypoint Timing

In some cases, you as the commander may want several units to arrive in an area at the same time or close to it as events can alter that timing. To change the final time of arrival in the last waypoint, you have the option to set a delay time for each selected order in the Dashboard. As you alter the times with a delay you can set your point of timing. From there you can alter other units to have the exact arrival time by adjusting arrival at your scheduled time.



In the case above adding 7 minutes of delay to the start of the first order shifts the time to start the Screen in the destination from 06:33 to 06:40.

22.1.3 Lost Transport Indicator

Another quality-of-life addition to the unit counter is the Lost Transport Indicator. When a unit (mechanized or motorized – vehicles and squads/teams) can no longer move its troops due to losses of the transport subunits, the Leg movement indicator (L) turns orange to note this condition. This helps to show the difference between a dismounted unit that shows the "L" indicator when troops are out of the transports in a non-movement order.



22.2 Fires

The other aspect of plotting orders is setting up fire missions. This covers both on and off-map indirect fire units like mortars, guns, and rockets if any of these assets are available in the scenario. To issue a bombardment order, open the Unit Popup Menu by either right-clicking on an on-map artillery unit or open the Fire Support report and click on the <u>Menu</u> hyperlink. Once open, click on the Bombardment option in the menu to open the mission menu with the attack options.

B. ARTIL	LERY			
A/3-1 SPAr 9 0	A/3-1 SPArty. Regular SP Artillery Company, 2km SW off-map, <u>under FS</u> control. HQ: <u>HHB 3-1 SPArty</u> .	<u>scc</u>	On Call Orders, 100% Readiness, 70% Morale, 100% Ammo,	8 x M109A2 and 1 x M577A2 C2V (1 x HQ and 8 x SPArty). Ammo: 208 HE, 32
<u>IVIC</u>	Unit Dashboard		involuting 1 E house and 2	ICM, 48 Smoke (vis)
	SOP Manager	Ctrl+K	involving 1-5 nops and 3-	22 mins of fatency.
T.	Subunit Inspector	F6	On Call Orders,	8 x M109A2 and 1 x
R/2-11	Rest and Resupply		100% Readiness, 70% Morale	M577A2 C2V (1 x HQ and 8 x
9 • ~	Is Under FSCC (Staff) Control		100% Ammo,	SPArty).
Me	On Call			Ammo: 208 HE, 32 ICM_48 Smoke (vis)
	Barrage	•	Suppression fire (1x)	
	Counter Battery		Neutralizing fire (3x)	
	Flash HQ Location		Smoke - Visual Blocking	
	Select Unit and Subordinates as Current Grou	ıp	Improved Conventional I	Munitions (ICM)
3	Detach and Make Unit Independent			ALSO.
R	Unit Role: Support	+		

NOTE: The choices of mission types is based on the ammunition allocated to the firing unit by the scenario designer.

Once you have selected the type of fire mission, the Plotting Mode dialog will pop up and tell you that you can place up to six Target Reference Points (TRPs) on the map and within range of the unit (inside its indicated Maximum Range (shown on the map) and beyond any Minimum Range indicated for the unit. These locations are where the munitions will drop.

The only other possible coverage of a strike is with rockets that can do a Saturation Strike the is centered on the selected hex, but also hits the

ring of hexes around the TRP.



After hitting the Commit button, the hexes being attacked will be highlighted and fire lines from the firing battery will be shown on the map. The Dashboard will also pop up automatically (you can turn this off in the game options) so you can set various parameters of the fire missions and even change the type of fire mission.

A/3-1 SPArty - American SP Artillery Company [F4]	Key Armo: 100% • Readnes: 100% • Moral: 70% • Range to HQ: -/- • Orders Delay: • 0 mins.
Barrage HE at Nex 4500 Fring from 02:00 Mason Preset: HE - Neutralization 2 Barrage HE at Nex 4908 Fring from 02:05 Barrage HE at Nex 5009 Fring from 02:10 Mason Preset: HE - Neutralization 4 Barrage HE at Nex 5111 Fring from 02:15 Daraton: Sart time: ASAP munutes 02:20 Annual Cont Time from 02:15 Daraton: Time from 02:15	
Apply Cancel	Edit Order SOP

On the Orders Panel for a Fire Mission, you have the following options to adjust or change for the selected TRP:

- Mission Preset This dropdown allows you to change the type of bombardment mission from the type set initially with the setting of the TRPs. If the mission is changed from the original via the Ammunition dropdown, then the Preset will be called Custom.
- Ammunition There is the option here to select different types of ammunition. This is helpful in cases like HE rounds where a few different type may be available.
- **Rounds** You can set the number of rounds to shoot on the mission. The total number of available is noted after the slash (/). You cannot shoot more rounds than you have.
- **Start Time** You can set the time to ASAP which will fire as soon as the orders delay is done (for opening salvos during the first turn set up, planned missions will start to fall immediately). There is the option to delay the mission several minutes if timing is vital to your plan.
- **Duration** This sets how long the mission will last and sets the number of rounds per minute that get fired. In the example below that would be 2 rounds per gun in the unit per minute over 10 minutes. With eight tubes in this units that is 16 rounds impacting every minute.
- **Area Fire** If the artillery unit is a rocket launcher, The Area Fire option will be active and if checked, will fire a saturation strike (target hex and the surrounding ring of six hexes). This strike fires all rockets on the launching platforms.



22.3 Calling in Airstrikes

To call in an Airstrike, you need to have available aircraft in the scenario. There are two ways to check and then call in an airstrike. The first option is to open the Fire Support Report and look at the Fire Support Assets tab. In this case Section B shows available Close Air Support (CAS) that you can call in. The second way is to open the Off Map Asset (OMA) dialog and look for what aircraft you have.

Aircraft may not be available until they arrive as a reinforcement to provide support and that will be noted in the dialogs. Most aircraft will also have a hard withdrawal time when they return to base and can no longer be used. Weather and time-of-day can also impact air operations. Some aircraft are not capable of night or all-weather operations over the battlefield. Aircraft have one other threat that you as the commander need to consider and that is the current Air Superiority level over the battlefield. If control of the air is owned by your side, your air strike has a much better chance to get to the target and deliver ordinance on targets. If the airspace is contested or owned by the enemy, your air strikes run the risk of being run off or worse, shot down.

Tactical Opera	itions Center - Fire Su	pport		innà tu'	×
Fire Supp	oort Assets F	ire Missions Fire	Support Control Center		
Vispavis 8 0 Menu	1/SPA/15 TR. Ve Platoon, unspotted control. HQ: <u>SPA/15 TR</u> .	eteran SP Artillery In <u>4506</u> , <u>under FSCC</u>	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	2 x MT-LBu 1V12[m] and 6 x 2S1 Gvozdika (2 x Recce and 6 x SPArty). Ammo: 180 HE, 24 ICM, 36 Smoke (vis)	No detailed targeting report available.
	1/SPA/15 TR is actir	ng in support of all units	, involving 1-4 hops and 2-	14 mins of latency.	
Z/SPA/15 T 8 0 Menu	2/SPA/15 TR. Ve Platoon, unspotted control. HQ: <u>SPA/15 TR</u> .	eteran SP Artillery in <u>4507</u> , <u>under FSCC</u>	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	2 x MT-LBu 1V12[m] and 6 x 2S1 Gvozdika (2 x Recce and 6 x SPArty). Ammo: 180 HE, 24 ICM, 36 Smoke (vis)	No detailed targeting report available.
	2/SPA/15 TR is actir	ng in support of all units	, involving 1-4 hops and 2-	14 mins of latency.	
3/SPA/151 8 0 Menu	3/SPA/15 TR. Ve Platoon, unspotted control. HQ: <u>SPA/15 TR</u> .	eteran SP Artillery in <u>4607</u> , <u>under FSCC</u>	On Call Orders, 100% Readiness, 75% Morale, 100% Ammo,	2 x MT-LBu 1V12[m] and 6 x 251 Gvozdika (2 x Recce and 6 x SPArty). Ammo: 180 HE, 24 ICM, 36 Smoke (vis)	No detailed targeting report available.
	3/SPA/15 TR is actir	ng in support of all units	, involving 1-4 hops and 2-	14 mins of latency.	
B. CLOSE	AIR SUPPORT				
Su-24 Flin 2 A Menu	Su-24 Flight 1. R 90km E off-map, <u>un</u> Withdrawal in 180 r	egular Aircraft Section, I <u>der FSCC</u> control. ninutes.	Air Strike Orders, 100% Readiness, 65% Morale, 100% Ammo,	2 x Su-24 Fencer (2 x Air). Load-out: 8 x KAB-1500L-F, 10 x 30mm GSh-6-30	Airstrike at <u>2211</u> with opportunity radius 1 at 1400hrs
Su-24 Flig 2 0 Menu	Su-24 Flight 2. Re 90km E off-map, <u>un</u> Withdrawal in 179 r	egular Aircraft Section, I <u>der FSCC</u> control. ninutes.	On Call Orders, 100% Readiness, 65% Morale, 100% Ammo,	2 x Su-24 Fencer (2 x Air). Load-out: 8 x KAB-1500L-F, 10 x 30mm GSh-6-30	No detailed targeting report available.

2/39 MRD Off-Map Assets [F

172/39 MRD OFF-MAP ASSETS Reported at 1400 hrs. Jul 23 1989

A. SU-24 FLIGHT 1 Su-24 Flight 1. Regular Aircraft Section, 90km E off-map	Air Strike Orders, 100% Readiness, 65% Morale, 100% Ammo, 0 mins. Delay	2 x Su-24 Fencer (2 x Air). Load-out: 8 x KAB-1500L-F, 10 x 30mm GSh-6-30	 Withdrawal in 180 minute(s)
B. SU-24 FLIGHT 2 Su-24 Flight 2. Regular Aircraft Section, 90km E off-map	On Call Orders, 100% Readiness, 65% Morale, 100% Ammo, 0 mins. Delay	2 x Su-24 Fencer (2 x Air). Load-out: 8 x KAB-1500L-F, 10 x 30mm GSh-6-30	 Withdrawal in 179 minute(s)

Selecting the hyperlinked Menu option will bring up the Unit Popup Menu and you need to go down to the Strike section that looks as seen below and select the Airstrike option.

If you want to order in air units instead of the FSCC doing it when targets of value show up, you should click the Is Under FSCC (Staff) Control and turn the check mark off. Selecting On Call will cancel any strikes and return the aircraft to its on-station location where it awaits a call to strike.

There is also the option on the menu (not shown) to Rest and Resupply, this will return the aircraft to base to rearm and refuel and then return on-station for future use.

✓ Is Under FSCC	Is Under FSCC (Staff) Control				
On Call					
Air Strike					

After selecting an Airstrike, the Plotting Mode dialog pops up and you can select a single hex to be the target of the airstrike.



Select a target hex and click the Commit button to issue the order. Pressing Cancel will stop the order and return you to the game with the aircraft On Call.

Once the aircraft is ready to attack it will appear on the map near the target location and will attack the best target it sees in the area. The discretionary radius of target selection is set in the Nation Data and cannot be altered.

23 <u>Standard Operating Procedures</u> (SOP)

One of the more requested feature from Red Storm was the ability to set Standard Operation Procedures in more detail for your units. We have that now and it is a very powerful tool for you as the commander to wield. This tool gives you the flexibility to adjust many different operational parameters of your units, per unit, per waypoint, and for new orders. Grayed out parameters are not available for the selected unit.

These SOPs can be applied to the selected unit or easily copied to other

units in the formation or of similar platform type.

To open the SOP Manager, you can right click on a unit or select <u>Menu</u> hyperlink from a report and select it from the Unit Popup Menu, select a unit and hit Ctrl+K on the keyboard, or click on the Edit Order SOP button on the Orders tab of the Dashboard for the selected unit.

OP Manager			×
T	2/A/8 CH, Type = Tank Uni	t	
2/4/8 CH	Scope - Default SOP for Ne	ew Orders	Scope
4 M	Stance -		
	Tactical Initiative	: Generous	
	Acceptable Losses	: Moderate	
	Preferred Stand-Off R	ange: 🚺 🗘 Hexes	
	Combat -		
	(Direct) Fire Discipline	Medium Range (2/3's Max Range)	
	Relocate When	: After taking any losses	
		: All Requesting Units	
	Movement -		
	Preferences	: 😫 Concealment 🔵 Roads 🔵	Avoid NBC
Apply to All Units of	Minefield Contact	: In-Stride Breach	
Same Type	Transports -		
Apply to This		Range: 1 🗘 From End of Path,	
and Later Unit Orders		🛛 🗘 From Enemy	
		Support Passengers	
	Recovery -		8
	Resupply: Trigger at 25	🗧 🕅 % then Recover to % 🗖 🔻	100 🗘
	Readiness: Trigger at 25	🗘 % then Recover for Minutes 🔽) <u> </u>
	Automatically Apply Current S	ettings on Scone Change	
	- Automatically Apply Current 3	cange on Scope Change	

23.1 Scope

2000

The Scope sets which order (new, current singular order like Screen or Hold, or per waypoint of a move) the settings are applied to. Once all the setting are adjusted to the parameters you want for the unit(s) there are options on how to Apply them as noted in Section 23.7 below.

Selecting the "? Scope" button will pop up the following message providing information on how the Scope is used.



23.2 Stance

- **Tactical Initiative** This is the likelihood of a unit deviating from its orders or pathing based on the current situation it is in (under fire, outnumbered, etc.). These settings are None, Slight, Moderate, or Generous.
- Acceptable Losses This is the unit(s) willingness to take losses before seeking a change in orders. This works with the Tactical Initiative above to set how a unit reacts. The settings for this item are Do or Die, Substantial, Moderate, or Minimal.
- **Preferred Standoff Range** The number of 500m hexes you wish the unit(s) to be distant from any detected enemy units.

23.3 Combat

- **Direct Fire Discipline** This sets the range or ability to shoot at enemy units in direct fire. The available settings are Refuse fire, Hold until fired on, Point blank (0 to 1 hex), Short Range (1/3 Max Range), Medium Range (2/3 Max Range), and Maximum Range.
- **Relocate When** This determines under what condition a unit will seek to scoot to a new location for better protection or to avoid enemy fire. The possible selections are After each fire mission, After all fire missions, While enemy spotted, After receiving any fire, After receiving direct fire, After taking any losses, After taking direct fire losses, or Never. Some of these settings work better for certain types of units. The after-fire missions settings work better for artillery for instance.
- Provide Direct Support to This setting is for Indirect Fire Units only and allows you to set specific direct support operations for your artillery assets. The default setting is support for All Requesting Units. This is equal to General support as noted in Section 25.4 below. Other options that support specific units are Unit in the same formation or lower, Specified HQ or lower, or Refuse all requests (which stops the FSCC from using this unit in any supporting call for fires). In the selection box below is a listing of units to attach support to.

23.4 Movement

- **Preferences** When a unit moves from waypoint to waypoint there are a few options for how that travel can be done. Hasty move will prefer roads, and Deliberate or Assaulting move orders will mix roads with cross country movement. You can set stricter movement preferences by check the boxes for Concealment (more off-road and seeking better covered terrain to move through, Roads (favor taking roads instead of cross country), and Avoid NBC (which will path units around NBC contaminated locations on the map).
- **Minefield Contact** This is the unit(s) response to entering a minefield. The options here are Ignore and Run (do not delay and accept the potential for more subunit losses crossing the field), In Stride Breach (units slow down to follow a leader through the field

hoping to avoid mines by travelling in the same tracks), or Stop and Reduce (units halt and either wait for engineers to remove enough mines to open a path through or do the work themselves at a slower rate).

23.5 Transports

2000

- **Passengers Disembark at Range** There are two options for disembarking transported troops and teams from their carriers. The first option is setting a few hexes (500m) from the final waypoint. This is useful for assaults or recon efforts in hostile territory. The other option is setting a few hexes from a spotted enemy. This is useful if on the move and your troops encounter unexpected enemy contact.
- Carriers when Empty Once transporting APCs (Armored Personnel Carriers) or IFVs (Infantry Fighting Vehicles) disembark their troops or teams, this setting tells the transporting units what they should do. For APCs the better choice is to Hide Nearby (seek cover and do not engage the enemy) as these vehicles are usually poorly armed and armored. The other option is Support Passengers (seek good cover, but engage enemy units with on-board weapon systems) to improve firepower against the enemy, but risks losing transports to enemy fire.

23.6 Recovery

- **Resupply** This option lets you set a limit for the unit's Ammo level and when it hits the trigger level or below, the units will go into resupply until it either Recovers to the set percentage over time or recovers for a set amount of time which restores an amount of ammo based on the amount of time set.
- **Readiness** This option lets you set a limit for the unit's Readiness level and when it hits the trigger level or below, the units will go into resupply until it either Recovers to the set percentage over time or recovers for a set amount of time which restores an amount of readiness based on the amount of time set.

23.7 Inspect and Apply

There are six buttons on the left of the dialog that are used to do the following:

- **Inspect Selected Unit** If you want to select and see the SOPs for another unit on the map, select a new unit on the map and then click the Inspect Selected Unit button to have the SOP Manager display its SOP values.
- Apply to This Unit Only Applies all the changes made only to the selected unit.
- **Cancel** Restores the original SOP values before any changes are made. Once You do an Apply, there is no way to revert changes via this option.
- **Apply to Self and All Subordinates** This setting is helpful if you want to set all the units in a formation (HQ and subordinates). The higher the HQ, more units will be changed down the order of battle chain. When applied a dialog will pop up showing all the affected units.



• **Apply to All Units of the Same Type** – This setting is useful if you want to set all the units of a selected type (like Tanks, APCs, HQs, etc.). When applied a dialog will pop up showing all the

affected units.



 Apply to This and Later Unit Orders – This option allows you to take the current SOP setting and apply them to all the orders in the Scope list.

At the bottom of the dialog is a check box to Automatically Apply Current Settings on the Scope Change. If this is active, any changes that are applied to the indicated scope will apply if you select a new unit and click the Inspect Selected Unit button. With it active if you switch to a new order in the scope selection, any changes will be applied to the previous order scope.

23.8 Copy SOPs via the Spotlight Panel

There are a few more tricks with SOPs. Once you have a SOP loaded (and edited) in the SOP Manager, you can apply it to parts of the OOB Tree in the Spotlight Panel (toggle the view with F10 to see the OOB Tree is the Unit Details are showing). Select a unit to paste the current SOP setting in the SOP Manager and right-click. From the popup menu select the option you wish to "paste" to the selected unit.



The trick with the SOP Manager is to keep it open, go out and paste the SOP where you need it. Think of it as a clipboard more than an editor for a single unit's SOP. You can apply the setting to any number of units in the Spotlight.

24 Spotting and Line of Sight (LOS)

The ability to detect, that is distinguish between a military platform, and its surroundings is heavily impacted by illumination, especially when not equipped with excellent Thermal Imaging or Night Vision equipment.

So, the game play panel gives you weather conditions and weather/meteorological visibility. The rings indicate this unit's ability to detect military units.

Spotting requires that the spotting unit have a clear Line of Sight (LOS) to the target and that the target be visible to the spotter at that range. Having a clear LOS to spot a target is required to shoot at it.

It is possible only to see a small number of subunits in a unit depending on the cover and concealment value of the hex is that the enemy is in and if there are other factors like movement, smoke, or weather effects.

24.1 Spotting Units

A unit has a maximum spotting range within which it can potentially see any enemy unit. This will generally equal the maximum visible range for the time of day and weather except when:

 The unit is firing or moving - its attention is presumed to be at least partly concentrated on that task and unit sighting is slightly reduced.

The unit posture is Very Exposed; it is presumed to be feeling unthreatened and is not particularly attuned to its surroundings. Unit sighting range is slightly reduced.

Spotting is evaluated after every move, change of posture, burst of fire, and type of sensor capable of spotting enemy units. Spotting range is a function of weather, visibility range, posture, orders, readiness, currently moving, currently firing, special equipment like ground radar and thermal imaging, smoke, terrain, elevation, observation height, etc. Each sensor and means of spotting are checked versus each possible subunit meeting both the range of spotting and spottable range distance.

Units also have an individual "spottable range". Spottable range is a function of unit posture, size, terrain, currently moving, currently firing, etc. Enemy units beyond this range cannot spot them unless special sensors are involved. For example, a small non-firing infantry unit on a hilltop can see a long way but can be spotted from only a very short distance.

The current spotting and spottable ranges for each unit can be viewed by selecting the Show LOS (Ctrl-L) or Show Spottable From (Ctrl-O) function on the orders menu. Spotting states:

- **Undetected** the unit counter is not revealed to the enemy in any way. There will be no indication that it is in a particular location at all.
- **Detected** The contact may be as imprecise as a rising cloud of dust or a fleeting glimpse of unknown vehicles between some trees or buildings. The unit counter with nationality and question mark (?) but no other details will be revealed. This contact is not strong enough to count as spotted target for artillery or other types of combat. The unit is not browsable in this state and does not show up in the tally of enemy runners. If Automatic Spotting is enabled, then all enemy units will be shown in this state at the minimum.
- **Classified** The unit type has been revealed with a fair degree of accuracy. Some counter details are shown. An example of a Classified unit would be a tank company, or an artillery unit that has fired and given away its location, or an HQ that has been too busy on the radio, or a unit that has been previously spotted and has not yet moved away.

• **Identified** – The unit is close enough and has been seen long enough to determine the exact types of subunits in the enemy unit and most of the unit counter information is shown.

All headquarters and artillery units are deemed to automatically spot every enemy unit spotted by any friendly unit via radio communication and that allows the Staff FSCC to direct fires at known targets.

Units that disappear from LOS may become "lost" and need to be reacquired to be identified again.

24.2 Line of Sight (LOS)

Due to a combination of elevation and terrain considerations the potential exists to have sweeping vistas in some directions and to be all but blind in others. A view from one hex to another is considered blocked if there is an intervening elevation or if the accumulated visual clutter due to cover, wrecks, and smoke along the LOS drops the visibility below 10% for most units.



LOS is checked in two steps:

First, there is a hard check of elevations between each spotter and each subunit in the target unit. If a line from one hex to the other is broken by an elevation at or above the line at the location the LOS is blocked.

If the first check passes, the second test is to see if the accumulated visual hindrance from the terrain, smoke, wreck, etc. falls below 10% and is considered blocked.

Recon units and units with thermal sights have a bonus that improves their ability to see deeper into terrain or through smoke.

24.3 Time of Day and Weather Impact

Visibility during the night is the same as during the day, and basically determined by the dust and water particles in the air. On a clear night, you can see as far as the moon allows, and you might see distant flashes from guns firing. We cap visibility at 10km for Western Europe via the weather data.

Illumination at night is low (between 0% with no moon to 40% at full moon) vs 100% during the day and an in-between value during the dawn and dusk transitions. Even though the visual range may be several thousand meters at night, visual spotting range is a function of the night illumination level. Without thermal or other means of illumination, optical spotting at 0% illumination is not possible.

For more information on Time of Day see Section 28 below. For more details about the types of Weather in the game, see Section 29 below.

25 Combat Operations

Combat is the very focus of this game. Because of that, it is very detailed and may be confusing at first. In this section, everything that has to do with combat is explained. The different unit and ammunition types that are included in the game will make sure that a lot of different types of combat will occur during a scenario or a campaign. Even chemical (persistent and non-persistent) and nuclear weapons might be used.

25.1 Unit Postures

During the course of a battle, units will go through various changes in

Posture. This is a measure of how visible and how protected a unit is based on its movement state and the local terrain. Posture states are listed below:

- **Very Exposed:** Unit moving/sitting in terrain with no real cover or concealment regardless of order. Very easy to spot. No additional protection from the terrain against any form of enemy fire.
- **Exposed:** Unit moving/sitting in terrain with minimal cover or concealment based on order. Moving units are easier to spot. No additional protection from the terrain against any form of enemy fire.
- **Covered:** Unit moving/sitting in terrain with useful cover or concealment. Spotting dependent on movement and terrain levels and thermal/radar signature is mildly degraded. Depending on terrain, protection from direct fire is a function of the cover afforded by the terrain.
- **Dug In:** Unit sitting in terrain with a Hold order will spend 20-30 minutes to dig into the covered terrain or units in an Improved Position location. Unit is difficult to spot and thermal/radar signature is reduced a moderate amount based on the cover of the terrain. Extra protection from the terrain against any direct enemy fire. Not effective at artillery or air strike damage.
- **Fortified:** Unit sitting in a fortification with extreme cover and concealment. Very difficult to spot and radar and thermal signatures are greatly reduced. Extra protection from the fortification provides more reduction against any form of enemy fire.

25.2 Unit Facing

There is no control over unit facing in the game. It is assumed that the units are smart enough to show frontal aspect if the enemy is detected. If caught by surprise, a target unit at range may have some subunits get hit in the flank as they are not in a defensible position. At a range of one hex, there is an increased chance of getting a flank attack on a target unit as some of the subunits are assumed to be close enough and in a position where flank shots are possible. If both the attacker and defender are in hex, attacks have a better chance to be flank or rear aspect shots as cover and spacing allows for more advantageous engagements. Infantry attacking armored fighting vehicles (AFVs) in

built-up terrain (cities and forest) have a bonus to these better aspect shots.

25.3 Direct Fires

2000

All combat occurs during the turn resolution phase. Spotting is checked for all units and then each unit with Assault, Hold, Screen, Move -Deliberate, Move - Hasty, or Direct Support orders look for suitable targets among the enemy units that it can sight directly or indirectly in some cases. A combat event for each pairing of attacker and defender is created and entered in the main game event queue.

The combat event is resolved between the two units at the subunit level. The attacking unit calculates the quality and quantity of fire that it can effectively project against the defender given the number of subunits that it has, the armaments that they mount and their effectiveness versus the target subunit, the range to the target, armaments base accuracy, attacker orders, crew quality, suppression from incoming fire, multiple targets, and special bonuses such as advanced gun sights.

This effective projection of fire is applied to the defending unit which will take losses in relation to the quantity and intrinsic protection rating of its runners, defender orders, posture, usable terrain bonus, movement, stealth, range, and special bonuses such as armor (Chobham, advanced composite, laminated, or reactive). The defender is also penalized if he has not sighted the attacker - surprise is assumed for the first few shots - and if the range is one or less then there is a further penalty due to the assumption that more flanking shots are available when at such close range.

The attacker uses up munitions by the round or burst used to engage the enemy and is marked as "firing". This "firing" status makes it easier for other units to spot it during the turn. Attacking also reduces a unit's readiness a small amount as the crew deals with rigors of loading and firing weapons or scanning for targets. Units occasionally gain a boost to morale if they achieve kills without taking losses.

Defending units can take losses because of combat. These losses are tracked to individual subunits. Readiness and morale will both be degraded in these cases. Morale can take a bigger hit if the HQ is out of range or if a friendly unit within 1000 meters is wiped out. Units are not mindless zombies that die to the last subunit. If losses in the unit are too great and readiness and morale are low, a unit will spontaneously give up its mission orders and try to retreat to a safer location by scooting.

25.4 Indirect Fires (IDF)

Where direct fires have the shooter seeing the target, indirect fires rely on another unit to spot a target and provide targeting information for the indirect fire units to use to shoot with. The advantage of indirect fire is its much longer ranges and less exposure to direct combat. Indirect fires are guns, rockets, and mortars that fire munitions (or are munitions in the case of rockets) over the battlefield.

These systems show up on the map as various explosion animations in the target hex based on the type of munitions used. In our earlier Red Storm game, artillery fired in a piecemeal fashion with several rounds being resolved each turn they attacked. Now, each gun fires rounds, and the attack lasts over a duration as shells are fired until the mission is over. This means enemy units can move into and out of the hex(es) being attacked. In some cases, the fire will be adjusted to follow targets if they are under direct observation and there are timely communications with the observer and shooter.

Artillery fire missions can be of a few types as noted below:

Direct Fire – Some field gun equipped artillery platforms can point themselves at an enemy and fire directly. The wisdom of this is highly debatable but it can be done. Interestingly, Soviet tactics put great store in this technique and 122mm and 152mm SP howitzer assets can be attached to their assault formations to use direct fire against targets. While it is certainly much quicker than trying to organize on call fire the cost to the lightly protected artillery would be horrendous. They used this technique extensively in the second half of WW2 with the SU-76 (76mm guns mounted in light tank chassis) and the 2S1 and 2S3 vehicles are the inheritors of that tradition. All other force structures might want to consider this a measure of last resort.

Pre-Plotted Fires – These fire missions represent pre-registered targets for the artillery units to shoot at the start of a battle. For the AI player the artillery barrages need to be setup in the Scenario Editor to

start right at the start of the battle. For the player, these kind of strikes need to be plotted in the Setup Phase before the start of the battle and will start falling right when the first turn is executed.

Direct Support – These are artillery assets that are dedicated to supporting a selected unit or set of units. These assets will not take on fire support requests from other units or provide counter battery fires and are ready to perform fire mission only for the enemy units spotted by the units placed in direct support. These missions usually have slightly shorter command delays than the General Support operations.

General Support – These are artillery assets that will take requests for fire from any friendly unit on the map and process them based on target type, urgency, and availability via the FSCC. Standard command delays exist for this type of support.

Counter Battery – These assets are set to fire on located enemy artillery units that are in range of the counter battery unit. This includes both on and off-map assets and targets.

25.4.1 Fire Support Control Center (FSCC)

Fire support mission requests are made either through player intervention during the orders phase or automatically through their staff FSCC (AI) during the turn resolution phase. Line units will automatically generate fire support requests during the turn resolution based on their sighting activities as the turn unfolds. Fire support requests are also generated by the staff when ordered to prepare a fire support plan as part of the AI planning cycle.

Fire support requests are rated for target type, priority, and weight of fire, type of munition needed, and are queued in descending order of importance (priority multiplied by weight of fire requested). Fire support requests are discarded if the target is lost or too much time passes between the initial call and the unit being able to shoot. This is done as not to waste ammunition shelling the empty ground.

During turn resolution the FSCC is called to match fire support requests to available air and artillery assets. To be "available" an artillery unit must have an On Call, Direct Support, or Counter Battery order and otherwise be ready to fire (i.e., not wiped out, not moving, not already assigned a FSCC mission, etc.) or be an On Call aircraft. Other missions are served first by eligible artillery units with Direct Support orders, then by General Support units, and finally by units with Counter Battery orders if they are available.

Available air and artillery units are assigned to the mission until the requested weight of fire has been accumulated. The necessary combat events are created in the game event queue and the selected units will fire. The fire support request is marked as done and the rest of the list is processed until the supply of available artillery units is exhausted.

Artillery units that have manually been assigned a Barrage mission will fire as ordered and revert to On Call when done shotting all missions. At that time, they will be available to service FSCC or player requests. If an artillery unit runs low or out of ammunition, it will go on a resupply order to replenish its stocks. Depending on SOP settings, artillery units will scoot after shooting to avoid potential enemy counter battery fire.

25.4.2 Observed Versus Blind Fire

When shooting with indirect fire assets, they can fire on known observed targets or on locations where targets were detected by electronic means or lost visual contacts where there is no observer to the fire. Observed fires will have a better chance to hit and also the ability to shift hexes if the target moves into a new hex. Blind fires will be much less effective for the same volume of fire when there is no one to adjust the fire to the targets.

25.5 Air Defense (AD)

There are both dedicated anti-air units and some units with weapons capable of engaging air targets in the game. These platforms are defined as follows:

Surface to Air Missile Units (SAMs) – These units use surface to air missiles with radar, IR, or optical guidance to track and engage enemy aircraft and helicopters. These units have a limited number of missiles and usually have air search radar or advanced optical systems to find targets.

Flak Units (AAA) – These units rely on cannons or machine guns to engage air targets with a wall of lead or proximity fuse explosives.

Ammunition for these units is tracked in bursts of fire. These units can have air search radars and other optical means to find and track targets.

Air Defense Limited (ADL) Units – Some units have machine guns, auto-cannons, or in some cases Anti-Tank Guided Missiles (ATGMs) that can be used to engage air targets in limited capacity. For these units to shoot at an air target they have to be the target of an air-strike or engaging a hover helicopter or engaging a helicopter approaching them in a roughly 30-degree cone (these weapons cannot effectively track a moving crossing target).

Some platforms may have a mix of these systems to use.

25.6 Air Strikes

2000

When an airstrike is called in the air strike controller will automatically select the best value target location for the air strike within the discretionary radius allowed (they will default to the stated target if other targets only tie it for value). The target value is based on the number of visible targets less apparent air defense strength. If the target location is entirely empty of targets when the air strike arrives, the attack is aborted, and the aircraft returns to its on-call station.

An airstrike attack starts with the sound effect of the approaching jet(s) and the following sequence of events happens:

- The target location will flash, and the attacking aircraft will appear over the target unit.
- All eligible defending units (Air Defense (AD) units and units with air defense capable weapons) located within range of the target location will attempt to detect the attacking aircraft.
 - Air defense units are much better than standard units with antiair weapons. Units with Air Defense Capable weapons must have the aircraft approaching it directly to engage.
- Those AD units which happen to spot the fast-moving attackers will fire during the approach.
 - If the aircraft is a Level Bomber flying at higher altitudes above the battlefield will only be engaged by weapons that reach the target altitude.

- Both aircraft and air defense units have a few electronic and other systems used to both degrade the performance of the enemy.
- Combat hints will alert the player to radar detections, AD attack evasions and finally loss of aircraft if one or more is shot down. If an aircraft is shot down, then an appropriate sound effect is played.
 - Pilot readiness plays heavily into their ability to detect AD fire and avoid it. If you push your pilots on repeated passes the fatigue may lead to a mistake and a loss of the aircraft and crew.
- On the ordnance delivery pass the bomb special effects are rendered in the impact location and combat losses immediately applied to all units located there. Friendly and enemy units are both equally at risk if they occupy the impact location.

When the mission is over the aircraft will be given Resupply orders if it is out of ammo or it will return to its on-call station awaiting another strike order. Aircraft given a Resupply order will return to base to rearm and refuel and will be available again after 30+ minutes.

25.7 Helicopter Hunting

One of the new orders in the game is the Hunting Order for helicopters. This order allows you to set several waypoints (up to six) that the helicopter will fly between looking for enemy units to Spot (Recon Helicopters) or engage (Attack Helicopters). The helicopters will continue to move from hex-to-hex masking with cover where possible. Helicopters under fire will attempt to scoot away from the attacking units. When an armed helicopter runs out of munitions it will fly back to the nearest FARP (Forward Arming and Refueling Point).

25.8 NBC Warfare

These weapons are extremely powerful and not to be taken lightly. Weapons of mass destruction come in three types: Nuclear weapons, Persistent Chemical weapons, and Non-persistent Chemical weapons.

NOTE: The game does not include Biological weapons on the battlefield.

Nuclear Weapons - A nuclear strike (has a very awesome animation) is

resolved as a series of separate attacks against all units caught within the blast range. For game purposes we assume a tactical nuclear capability of approximately a 10kt yield with a 2 km blast radius. Subunits will be eliminated based on distance from the blast center in accordance with their intrinsic protection rating, NBC rating, cover, and posture. Units also suffer massive losses in both readiness and morale even if they survive the blast and they are automatically contaminated with radiation. Contamination can cause additional losses over time if not dealt with in a short time after the attack. All bridges, smoke clouds, minefields and chemical contamination within the blast zone will be eliminated. The ground will be contaminated out two hexes from the blast center for the rest of the game. Units moving through the contaminated zones run the risk of additional losses and get contaminated. All helicopters within a 5 km radius will be eliminated by the blast's shock wave. To decontaminate units, they must enter a Resupply order and spend time being cleared of the hazard.

Persistent Chemical Weapons - A persistent chemical strike consists of various nerve or blood agents that can quickly incapacitate or kill exposed troops. Units caught in a persistent chemical attack can suffer losses based on their NBC rating and take a considerable loss of readiness while getting into protective gear (MOPP suits) and suffer additional morale loss from the attack. Persistent chemical strikes leave markers on the map for the rest of the game. Any units moving through are attacked and contaminated. Like nuclear contamination, chemical contamination can be removed by a resupply order. Contaminated units fight with reduced combat effectiveness caused by the protective gear.

Non-Persistent Chemical Weapons - A non-persistent chemical strike consists of various nerve or blood agents that can quickly incapacitate or kill exposed troops. Units caught in a non-persistent chemical attack can suffer losses based on their NBC rating and take a significant loss of readiness while getting into protective gear (MOPP suits) and suffer additional morale loss from the attack. Non-persistent chemical strikes leave a gas cloud on the map that will dissipate over a short period of time based on the weather conditions. Any units moving through the gas cloud are attacked.

25.9 Electronic Warfare (EW)

Electronic Warfare is the art of spectrum warfare. This is the use of electronic equipment to jam or spoof radio communications or jam search radars. This work is done by assets above your command level, but may benefit your forces if your side is working to disrupt the enemy. On the other hand, if the enemy is disrupting your forces, command delays will increase as your communication efforts are hampered by enemy action.

In a scenario, these levels are set by the scenario designer, and you can review the levels in the Intelligence Report. The enemies EW interference is noted on the Command Panel as well.

25.10 Air Superiority

Air Superiority is a rating of whose force controls the airspace over the battlefield. When your forces own the air, your air strike can get on the map with weak opposition from enemy fighters. If the enemy owns the skies, there is a greater risk of losing air strikes on the way to their mission targets and even on-map helicopters can fall victim to an air-to-air missile from a fighter. All these actions are abstracted with messages popping up on the screen when interdictions occur in the game.

In a scenario, these levels are set by the Scenario designer, and you can review the current level in the Operations Report or note the level under the weather panel display on the Game Panel.

26 Combat Soft Factors

One of the key factors that impacts combat operations are those things known as Combat Soft factors. These are the soft data items that represent the human elements found on the battlefield. The three key element used in the game are Readiness, Morale, and Training.

26.1 Readiness

Readiness is a number from 1 to 99 (best) representing the ability of the unit to perform as required. Readiness is lost during combat and movement actions. Readiness is recovered when a unit sits in place

without being fired on or if it resupplies. The rate of recovery per hour for the unit is shown. If a unit's readiness goes critically low, it will be noted in the Staff Alerts.

26.2 Morale

2000

Morale is a number from 1 to 99 (best) representing the mental state of the unit. Morale is lost in combat by taking losses or being close to friendly units that take losses. Morale is recovered slowly by rest and resupply and occasionally by obtaining kills against other units. If a unit's Morale goes critically low, it will be noted in the Staff Alerts.

26.3 Training

An identifier representing the average amount of prewar training received. These training levels range between Untrained, Green, Average, Veteran, and Elite. The higher the unit's level of training, the more likely it is to perform better on the battlefield, suffer less readiness and morale reduction from events and recover faster from those losses. This training level is noted before the primary type of unit in many detailed information displays like the Spotlight Panel.

27 Supply and Logistics

Supply is the Achilles heel of all modern armies. It is burned at a ferocious pace during operations and commanding officers are constantly mindful of 'topping off' their units. Given the basic scale and duration of the game, ammunition is likely to be far more of a limiting factor than fuel, rations, or other forms of supply.

The lesson of the 1973 Arab Israeli war was that ammo gets used up far faster than expected; rates of 5 times greater than expected were not unheard of. It is an integral part of the command dilemma to be able to ration it out effectively.

In game terms, resupply is presumed to occur whenever a unit receives Resupply orders and there is a lull in the action and the supply trucks and other vehicles can come forward and provide ammo and fuel to combat vehicles in place. Alternatively, individual vehicles drive a short distance to the rear to resupply and then return to their original location. As stated earlier, for a unit to resupply, it must be clear of enemy units and combat. Units within the command radius of their HQ can get fully resupplied on ammo and gain more readiness and morale recovery. Units outside of the command radius get a small percentage of ammo replacement and gain a more minor improvement in readiness and morale.

27.1 Ammo Loadouts

One of the new feature of the game is tracking ammunition down to a single round and by type for most weapon systems. Where this new system really is utilized is with gun systems that use different munitions and rocket pods. In the future other weapons will be converted over to having munition options as required.

Ammo loadouts are set by the scenario design for each unit and during combat those munitions are used per subunit based on the combat situation and available rounds.

The ammunition available for a unit and its subunits are noted in several places. It can be seen in the Subunits Panel of the Dashboard for each subunit and on the Ammunition tab in the Personnel and Logistic Report for the entire unit. See the images below.

For indirect fire units, the Fire Support Report Assets tab also notes the total load of munitions for the units.

More information is shown in the Ammunition report, and it shows the number of rounds expended up to that current time in the battle.

Orders Subunits Staff Diar	У
MIAI Abrams MIAI Abrams MIAI Abrams MIAI Abrams	M1A1 Abrams Main Battle Tank Armaments: 120mm M256 (Medium Tank Cannon): 20 of 20 Armor Piercing rounds, 20 of 20 High Explosive Anti-Tank rounds 7.62mm M240: 120 of 120 bursts of fire 50 cal: 90 of 90 bursts of fire 7.62 M240: 90 of 90 bursts of fire EW Emitters: None EW Detectors None



10 PzG Bgde Tact	ical Operations Center - Personnel and Logistics						×
Staff Alert	s Detailed Unit Status Reinford	ements and V	/ithdrawals		unition		
C/C/1 2 4	C D						
2 x Cavalry Sc	CK put and 2 x M341 Bradlev(M)						
					EXACUDED		
L Ø	40mm M203 / Automatic Grenade Launcher	BASIC LOAD	15	26 ON HAND	EXPENDED		
6/C/1-2 AC	RCM 71C L TOW / Apti Tapk Guided Missile	24	24	100	0		
4 S	Bow-Are Flow / Anti-Tank Guided Missile						
7/C/1-2 A	CR						
4 x MIAI Abra	ms.						
I	AMMO TYPE / DESCRIPTION	BASIC LOAD	ON HAND	% ON HAND	EXPENDED		
7/C/1-2 AC	120mm Mi256 / High Explosive Anti-Tank	80	80	100	U		
4 ° S	120mm M256 / Armor Piercing						
8/C/1-2 A	CR						
4 x M1A1 Abra	ms.						
T	AMMO TYPE / DESCRIPTION	BASIC LOAD	ON HAND	% ON HAND	EXPENDED		
8/C/1-2 AC	120mm M256 / High Explosive Anti-Tank	80	80	100	0		
4 S							
MTR/C/1-	2 ACR						
T	AMMO TYPE / DESCRIPTION	BASIC LOAD	ON HAND	% ON HAND	EXPENDED		
3 0							
	_				_		
		<u>P</u> rint				<u>C</u> lose	
					Jack C	~	

27.2 Resupply

When units are issued a resupply order (see Section 21.2 above) ammunition levels for all weapons are placed back to full based on the

scenario designer loadout levels.

27.3 Automatic Emergency Resupply

If this is selected in Game Options, then any unit which runs out of ammunition is automatically restored to 30% ammo if it falls below 5%. Unit orders have no effect on emergency resupply and the unit may be moving or fighting at the time. This option may help new players.

27.4 Why No Fuel Tracking?

Given the short time and relatively short distances covered in the game, we assume there is enough fuel for the operation on the map to take place. When units perform a resupply for ammunition and to recover readiness and morale, we assume fuel tanks are topped off as well. In the future we may take a more detailed approach for fuel tracking, but for now it sits beyond a trackable concern compared to the other factors we do cover.

28 Time of Day

The simulation engine deals with four different times of day. Dusk and dawn occur at the times of day appropriate to the region for the month of the year of the scenario.

During the game when a time-of-day changes, a popup dialog will show with the relevant information for the change. Also, during the game, depending on the time of day, the weather panel and map will have distinct changes in color to show the various times of day.

28.1 Dawn

2000

Dawn occurs roughly 90 minutes before sunrise. During this time there is a thermal inversion of surface temperatures that degrades thermal sight detection ranges and the accuracy of optically guided weapons. The map will show with a gradually disappearing night shade as the sun rises. Illumination will also increase as the sun comes up.



28.2 Day

Day is the time is between sunrise and sunset then the maximum possible visibility occurs. Thew map is shown free of any color adjustment during the day.



28.3 Dusk

Dusk occurs roughly 90 minutes after sunset. During this time there is a thermal inversion of surface temperatures that degrades thermal sights and optically guided weapons. The map will show with a gradual darkening as the sun sets (orange to dark). Illumination will also decrease as the sun goes down.



28.4 Night

Night is the time from after sunset until sunrise. The maximum visibility is determined by the level of illumination based the phase of the moon. Night operation of aircraft may be impacted if those aircraft are not capable of night operations.

NOTE: While visibility may be extensive in distance, objects cannot be seen visually without having illumination or using sensors that work without light (Thermal, Radar, IR systems).



29 Weather

Weather plays an important role and has a significant influence on visibility and can also impact the performance of certain weapons and sensors. The Weather in game is dynamic and based on real-world weather data. A weather forecast is available in the Intelligence Staff Reports and you should review it to know when and for how long the weather may change. The following sections will give a summary of the available weather types currently in the game.

During the game when the weather changes, a popup dialog will show with the relevant information for the change.

29.1 Clear



Clear weather means no precipitation and little to no clouds with extended visibility ranges based on the time of day, moon phase at night, and cloud cover. Clear weather has no adverse impact on weapons or sensors. At night the moon symbol is

shown.

Cloudy 29.2



Cloudy weather means a mix of sun and clouds with no precipitation and suitable visibility ranges for all methods of spotting. Cloudy weather may have an impact on close air support operations if the cloud deck is too low. At night the

sun is replaced with a moon symbol.

29.3 Overcast



Overcast weather means a blanket of clouds with no precipitation and very little to no sunshine. Overcast conditions still have reasonable visibility ranges for all methods of

spotting. Overcast weather may have impact on close air support operations if the cloud deck is too low.

29.4 Light Rain



Light rain is scattered showers with minimal impact to visibility, weapons, and sensors. Visibility ranges will still be decent in these conditions. This type of weather does not really impact the effectiveness of your fighting forces.

29.5 Moderate Rain



Moderate Rain is a constant widespread rain that has a moderate impact on visibility. Moderate rain may impact the accuracy of some optically guided weapons and degrade the range of detection for thermal imaging sensors. This type of

weather does have some adverse effect to your fighting forces and may halt air operations.

29.6 Heavy Rain



Heavy Rain is a constant heavy downpour that impacts visibility. Heavy rain will impact the accuracy of some optically guided weapons and degrade the range of detection for thermal imaging sensors. It is essential to take these factors into account when the weather is abysmal on the battlefield. Heavy rain can stop air operations for specific aircraft.

29.7 Snow



Even though the game is set in the spring/summer of 1989, you can make scenarios in the fall and winter and in the case of winter, snow can be a condition. Snow impacts vision and

has an impact on weapons and sensors and can also impact aircraft and helicopter operations.

Fog / Mist / Haze 29.8



Fog/Mist/Haze sits low to the ground and dramatically reduces visibility ranges and impacts thermal sights and other sensors

and weapons when present. Fog or mist has a better chance of occurring at night and at dawn. It will burn off within a few hours after sunrise. Fog/Mist/Haze can occur in Clear, Cloudy, or Overcast weather states.

29.9 Weather and Movement

While weather does impact operations, weapons, and sensors in the game engine, there are currently no impacts to ground movement based on terrain and weather. The Development Team does want to address this in a future update so seasons and weather change movement rates.

30 Victory Conditions and End Game

The victory conditions for each player are specified in detail in the mission briefings. The most important way to ensure victory is to find and secure the victory point (VP) locations that have been placed on the map by the scenario designer. Blue locations are secured by player 1, red locations by player 2 and yellow locations have not been secured yet by either. An unsecured location becomes "secured" if a friendly ground unit passes through it. Air units like helicopters can fly over these location and engage or spot enemy units, but they cannot "take" an objective. The values of the different locations are shown in the map marker, and in the Scenario Information Staff Report.

Players also get victory points for knocking out or destroying enemy subunits. The value of each subunit is shown in the Subunit Inspector. The exact number of VP points is awarded whether the subunit is destroyed or just minimally damaged – either way it is a mission kill and that is what is being measured.

30.1 Game End and Mission Post-Mortem

The game is over when the end of the scenario time limit is reached or when the force strength of one side or the other drops below 30% and triggers "Sudden Death". The length of the game in hours is defined in the mission briefing. Force strength is the percentage of active unit's VPs over the total number of force VPs (so it starts at 100% and goes down as you accrue losses) for each side.

Once one of these end game triggers is reached the Battle Over screen seen below is displayed and there is somber end game theme music to listen to as you review the mission postmortem.

A representative of the General Staff Inspectorate provides a quick review of your combat actions/combat decisions. This person holds your fate in his hands, and is also harried, short of sleep and unlikely to take a finely balanced view of the nuances of your performance. The general will quickly evaluate your performance, telling you if you did an excellent job, you failed your mission, or something in between. This will be based on your victory points. Next a Star Rating is shown with the filled stars indicating a basic "X" out of seven (7) rating for the mission. Next the percentage of VPs awarded is noted and a listing of enemy subunits you claimed will be shown. Finally, the general will tell you in what shape your force is in based on losses and fallouts and an estimation of recovery time to get back up to full combat strength.

Click the Proceed button to continue to the Scenario Information Report to see the Post-Mortem results.



30.2 Final Report

The Final Report (see below) is a repeat of the Battle Over screen and allows you to see that information again as well as noting which Battle Plans each side used if it was under AI control.



30.3 Butcher's Bill

2000

The Butchers Bill is a tally of all the units lost (Destroyed or Fallen Out) during the battle. The information is displayed in several forms and compares your forces to those of your enemy.

Section A of the Butcher's Bill has a graph showing the breakdown of subunits for both sides with the long faint bar showing the number of starting units of that type and the short darker bar showing units remaining of the type. Starting and ending numbers are also listed with each row.



Sections B and C show the state of your forces by Unit Type and by Platform respectively in a tabled format.

Section B looks at each general Type of subunit, how many Started the scenario, how many are still Running at the end of the scenario, any subunits that have Withdrawn, the number of subunits Fallen Out (Damaged/Wounded), and finally the number of subunits Destroyed (Destroyed/Killed in Action). The final Totals for each column are shown at the bottom of the table.

Section C looks at each type of Platform in the battle, a Description of that platform, how many Started the scenario, how many are still Running at the end of the scenario, any platforms that have Withdrawn, the number of platforms Fallen Out (Damaged/Wounded), and finally the number of platforms Destroyed (Destroyed/Killed in Action). The final Totals for each column are shown at the bottom of the table.

. STATE OF 2 B	DE, BY UNIT TYPE,	AT 1100 H	IRS, JU	L 21 1989.			
ТҮРЕ	STARTED	RUNI	NING	WITHDRA	WN FALL	ENOUT	DESTROYED
Air Defence	10		5			4	1
Armored Carrier	60		26			19	15
Depot	8		8				
Headquarter							
Helicopter	10		8				2
Reconnaissance	10		5			3	
SP Anti-Tank							
SP Artillery	54		54				
Tank							
	54		12				
Utility Vehicle	29						
Totals C. STATE OF 2 B	DE, BY PLATFORM,	AT 1100	209 HRS, JU	JL 21 1989		82	46
Defility Vehicle Totals C. STATE OF 2 B PLATFORM	DE, BY PLATFORM, DESCRIPTION	AT 1100 I	209 HRS, JU	JL 21 1989 RUNNING	WITHDRAWN	FALLEN OUT	46 DESTROYED
C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2H8 HMG	23 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit	AT 1100 I	209 HRS, JU IRTED 7 9	JL 21 1989 RUNNING 8 3	WITHDRAWN	82 FALLEN OUT 3 6	46 DESTROYED 1
C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt	AT 1100 I STA	209 HRS, JU RTED 7 9 6	JL 21 1989 RUNNING 8 3 4	WITHDRAWN	82 FALLEN OUT 3 6	46 DESTROYED 1 2
Utility Vehicle Totals C. STATE OF 2 Bi PLATFORM 40mm Mk 19 GL SO Cai M248 HMG AH-64A Apache Cavairy Scout	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit	AT 1100 I STA	209 HRS, JU RTED 7 9 6 10	UL 21 1989 RUNNING 3 3 4 5	WITHDRAWN	82 FALLEN OUT 3 6 3	46 DESTROYED 1 2 2
Contains Contai	29 337 DE, BY PLATFORM, Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Stetic FARP for Helos	AT 1100 I STA	209 HRS, JU RTED 7 9 6 10 8	UL 21 1989 RUNNING 8 3 4 5 8	WITHDRAWN	B2 FALLEN OUT 3 6 3	46 DESTROYED 1 2 2 2
C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) Headquarters	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit	AT 1100 I STA	209 HRS, JU RTED 7 9 6 10 8 21	UL 21 1989 RUNNING 8 3 4 5 8 19	WITHDRAWN	FALLEN OUT B S S S 1	46 DESTROYED 1 2 2 1
Dtillty Vehicle Totals C. STATE OF 2 Bi PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) Headquarters M1026 HMMWV	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheelad Utility Vehicle	AT 1100 I STA	209 HRS, JU RTED 7 9 6 10 8 21 2	UL 21 1989 RUNNING 8 3 4 5 8 19 2	WITHDRAWN	FALLEN OUT 3 6 3 1	46 DESTROYED 1 2 2 1
Utility Vehicle Totals . STATE OF 2 B PLATFORM 40mm Mk 19 GL S0 Cal M2H8 HMG AH-64A Apache Cavalry Scout Hesdquarters M1026 HMMWV M106A2	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Mortar	AT 1100 I STA TGM/	209 HRS, JU RTED 7 9 6 10 8 21 2 2 6	RUNNING S S 4 5 8 19 2 6	. WITHDRAWN	FALLEN OUT FALLEN OUT S G 1 1	46 DESTROYED 1 2 2 1
Utility Vehicle Totals C, STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) Headquarters M1026 HMMWY M106A2 M109A2	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Artillery	AT 1100 I	209 HRS, JU RTED 9 6 10 8 21 2 2 6 21 2 2	RUNNING S S 4 5 8 19 2 6 24	WITHDRAWN	FALLEN OUT FALLEN OUT S G 1 1	46 DESTROYED 1 2 2 1
C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) M10642 M10942 M10942 M1042	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Artillery Self Propelled Artillery	AT 1100 I	209 HRS, JU RTED 7 9 6 10 8 21 2 2 6 2 2 6 2 2	UL 21 1989 RUNNING 3 4 5 8 19 2 6 24 24	L. WITHDRAWN	FALLEN OUT B B B B B B B B B B B B B B B B B B B	46 DESTROYED 1 2 2 2 1
Utility Vehicle Totals C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout Headquarters M1026 HMMWV M106A2 M109A2 M113A1	29 337 DE, BY PLATFORM, Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Mortar Self Propelled Artillery Self Propelled Artillery Tracked APC	AT 1100 STA TGM/	209 HRS, JU RTED 7 9 6 10 8 21 2 2 6 6 24 24 9	UNNING S S 4 5 8 19 2 6 24 24 5	L. WITHDRAWN	FALLEN OUT 3 6 3 1 2	46 DESTROYED 1 2 2 1 1 2
Utility Vehicle Totals C. STATE OF 2 B PLATFORM 40mm Mk 19 GL S0 Cal M2H8 HMG AH-64A Apache Cavairy Scout FARP (Static) Headquarters M1026 HMMWV M106A2 M110A2 M113A1	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utilisy Vehicle Self Propelled Artillery Self Propelled Artillery Tracked APC	AT 1100 I STA	209 HRS, JU RTED 7 9 6 10 8 21 2 2 2 6 24 2 2 4 9 9	UL 21 1989 RUNNING 5 3 4 5 8 19 2 6 24 24 24 5 5 19	WITHDRAWN	FALLEN OUT 3 6 3 1 2 16	46 DESTROYED 1 2 2 1 1 2 2 1 0
C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) M1026 HMMWV M106A2 M113A1 M113A1 M1151 Jeep 4X4	23 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Artillery Self Propelled Artillery Self Propelled Artillery Tracked APC Wheeled Utility Vehicle	AT 1100 I STA TGM/	209 HRS, JU RTED 7 9 6 10 8 21 2 6 24 2 4 9 9 15	RUNNING B 3 4 5 8 19 2 6 6 24 5 5 19 9	L. WITHDRAWN	FALLEN OUT 3 6 3 1 2 16 2	46 DESTROYED 1 2 2 2 1 1 2 10 4
Jtility Vehicle Fotals STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Gal M2H8 HMG AH-64A Apache Cavairy Scout AH-64A Apache Cavairy Scout AH-64A Apache Cavairy Scout H10526 HMMWV M106A2 M109A2 M110A2 M113A1 M113A2 M151 Jeop 4x4 M154 Jeop 4x4	23 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Scammand Unit Wheeled Utility Vehicle Self Propelled Antillery Self Propelled Antillery Tracked APC Tracked APC Wheeled Utility Vehicle Wheeled Utility Vehicle Main Battie Tank	AT 1100 I STA TGM/	209 HRS, JU RTED 7 9 6 6 10 8 21 2 2 4 24 24 24 24 24 24 24 5 5 5 4	RUNNING B 8 4 5 8 19 2 6 24 24 24 24 5 19 9 9 16	L WITHDRAWN	E 82 FALLEN OUT 3 6 3 1 1 2 16 2 19	46 DESTROYED 1 2 2 1 1 2 2 1 0 4 19
Utility Vehicle Totals C. STATE OF 2 B PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG 64H-64A Apache Cavairy Scout FARP (Static) Headquarters M1026 HMMWV M106A2 M109A2 M119A1 M113A1 M113A2 M113A1 M113A2 M113A2 M113A2	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utilisy Vehicle Self Propelled Artillery Tracked APC Wheeled Utilisy Vehicle Main Battle Tank	AT 1100 I STA TGM/	209 HRS, JU RTED 7 9 6 6 20 20 21 2 6 21 2 2 6 24 24 24 24 9 45 54 4	IL 21 1989 RUNNING 3 3 4 5 8 19 2 6 24 24 5 19 9 16 4	. WITHDRAWN	FALLEN OUT 3 6 - 1 - 2 16 2 19	46 DESTROYED 1 2 2 1 1 2 2 1 0 4 19
AUGUITY Vehicle Totals PLATFORM 40mm Mk 19 GL 50 Cal M2HB HMG AH-64A Apache Cavalry Scout FARP (Static) M10642 M10642 M10642 M119A1 M119A2 M151 leep 4x4 M151 leep 4x4 M151 22-Ton[m]	29 337 DE, BY PLATFORM, DESCRIPTION Infantry Support Unit Infantry Support Unit Attack Helicopter - Gun/A Rkt Infantry Unit Static FARP for Helos Command Unit Wheeled Utility Vehicle Self Propelled Artillery Self Propelled Artillery Tracked APC Tracked APC Tracked APC Wheeled Utility Vehicle Main Battle Tank Wheeled Utility Vehicle	AT 1100 I STA TGM/	209 209 HRS, JU RTED 7 9 6 10 8 21 2 6 24 24 24 24 24 9 9 45 15 54 4 8	RUNNING 8 3 4 5 8 19 2 6 24 5 19 9 16 4 8	L WITHDRAWN	FALLEN OUT 3 6 3 1 2 16 2 19	46 DESTROYED 1 2 2 2 1 1 2 10 4 19

Sections D and E show the state of the Enemy forces by Unit Type and by Platform respectively. The information is in the same format as noted above for Sections B and C.

Scenario Descript	ion f	Final Report But	cher's Bil	Victory Status	s & Conditions		
D. STATE OF 3	9TH MRD	<u>), BY UNIT TYPE,</u>	AT 1100 H	<u>RS, JUL 21</u>	<u>1989.</u>		
TYPE		STARTED	RUNNING	WITHDR	AWN FA	LLEN OUT	DESTROYED
Air Defence							
Armored Carrier		136					
Anti-Tank							
Artillery							
Engineer							
Headquarter			59				
Helicopter		8					
infantry		109	80			19	
Reconnaissance			48				
SP Anti-Tank		70	3				
SP Artillery		/8	/8				
Utility Vehicle Totals		82 828	82 627		2	139	60
Utility Vehicle Totals E. STATE OF 39	OTH MRD	82 828	82 627 AT 1100 H	RS, JUL 21	2 1989.	139	60
Utility Vehicle Totals E. STATE OF 39 PLATFORM	OTH MRD	82 828 , BY PLATFORM, DESCRIPTION	82 627 AT 1100 H STARTED	RS, JUL 21	2 1989. WITHDRAWN	139	60 T DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG	OTH MRD	82 828 , BY PLATFORM, DESCRIPTION Support Unit	82 627 AT 1100 H STARTED 24	RS, JUL 21 RUNNING 17	2 1989. WITHDRAWN	139 FALLEN OUT 6	60 T DESTROYED 1
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar	OTH MRD	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar	82 627 AT 1100 H STARTED 24 22	RS, JUL 21 RUNNING 17 22	2 1989. WITHDRAWN	139 FALLEN OUT 6	60 r DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20	DTH MRD	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar tillery Gun	82 627 AT 1100 H STARTED 24 22 18	RS, JUL 21 RUNNING 17 22 18	2 1989. WITHDRAWN	139 FALLEN OUT 6	60 r DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 2S1 Gvozdika	TH MRD Infantry S Towed Ma Towed Ar Self Prop	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar Unitery Gun elled Artillery	82 627 AT 1100 H STARTED 24 22 18 30	RS, JUL 21 RUNNING 17 22 18 30	2 1989. WITHDRAWN	139 FALLEN OUT 6	60 r DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gyozdika 253M1 Akatsiya	TH MRD Infantry S Towed Ma Towed Ar Self Prop Self Prop	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar tillery Gun elled Artillery elled Artillery	82 627 AT 1100 H STARTED 24 22 18 30 24	RS, JUL 21 RUNNING 17 22 18 30 24	2 1989. WITHDRAWN	139 FALLEN OU' 6	60 I DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gyozdika 253M1 Akatsiya 256 Tunguska	Th MRD Infantry S Towed Mr Towed Ar Self Prop Self Prop	82 828 , BY PLATFORM, DESCRIPTION Support Unit orlar tillery Gun elled Artillery elled Artillery elled Flak	82 627 AT 1100 H 24 22 18 30 24 4	RS, JUL 21 RUNNING 17 22 18 30 24 4	2 1989. WITHDRAWN	139 FALLEN OU 6	60 I DESTROYED 1
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gvozdika 253 MJ Akatsiya 256 Tunguska 30mm AGS GL	Th MRD Infantry S Towed Ma Self Prop Self Prop Self Prop Infantry S	82 828 , BY PLATFORM, DESCRIPTION Support Unit Support Unit elied Artillery elied Artillery elied Flak Support Unit	82 627 AT 1100 H STARTED 24 22 18 30 24 4 16	RS, JUL 21 RUNNING 17 22 18 30 24 4 13	2 1989. WITHDRAWN	139 FALLEN OU 6	60 f DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gyozdika 253M1 Akatsiya 256 Tunguska 30mm AGS GL 73mm SPG-9 RCL	Th MRD Infantry 9 Towed Ma Towed Ar Self Prop Self Prop Self Prop Infantry 9 Anti-Tank	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar tillery Gun elied Artillery elied Artillery elied Artillery elied Flak Support Unit c Infantry Unit	82 627 AT 1100 H 24 24 22 18 30 24 4 16 4	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 	2 1989. WITHDRAWN	139 FALLEN OUT 6 3	60 T DESTROYED 1
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gvozdika 256 Tunguska 30mm AGS GL 73mm SPG-9 RCL BM-21 Grad	DTH MRD Infantry S Towed Mr Towed Ar Self Prop Self Prop Self Prop Infantry S Anti-Tank Self Prop	82 828 , BY PLATFORM, DESCRIPTION Soupport Unit ortar elied Artillery elied Flak Support Unit elied Flak Support Unit elied Artillery elied Flak support Unit elied Accket Launcher	82 627 AT 1100 H STARTED 24 22 18 30 24 4 16 4 16 4 24	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 24	2 1989. WITHDRAWN	139 FALLEN OU' 6 3	60 I DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm P-20 251 Gvozdika 255 Miguska 30mm AGS GL 73mm SPG-9 RCL BMP-1P[T][M]	The MRD Infantry S Towed M Towed Ar Self Prop Self Prop Self Prop Self Prop Self Prop Self Prop Tracked I	82 828 , BY PLATFORM, DESCRIPTION Support Unit elied Artillery elied Artillery elied Artillery elied Flak Support Unit elied Rocket Launcher FV	82 627 AT 1100 H 24 22 18 30 24 4 16 4 24 4 6 24	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 24 4 24 6	2 1989. WITHDRAWN	139 FALLEN OU 6 3	60 T DESTROYED 1
Utility Vehicle Totals PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gyozdika 255M1 Akatsiya 256 Tunguska 30mm AGS GL 73mm SPG-9 RCL 8M-21 Grad BMP-1[T][M]	DTH MRD Infantry 3 Towed M Towed Ar Self Prop Self Prop Infantry 5 Anti-Tank Self Prop Infantry 5 Anti-Tank	82 828 DESCRIPTION Support Unit ortar tillery Gun elied Artillery elied Artillery elied Artillery elied Artillery elied Artillery elied Flak Support Unit elied Rocket Launcher FV FV	82 627 AT 1100 H STARTED 24 22 18 30 24 4 16 4 24 6 7	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 24 6 4 4	2 1989. WITHDRAWN	139 FALLEN OU 6 3 3 2 2	f DESTROYED
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 253 Gyozdika 256 Tunguska 30mm AGS GL 30mm AGS GL 30mm 25-9 RCL BMP-10[TM] BMP-11[M] BMP-21(M)	The MRD Infantry 1 Towed Ar Self Prop Self Prop Self Prop Infantry 1 Anti-Tank Self Prop Tracked I Tracked I	82 828 , BY PLATFORM, DESCRIPTION Support Unit elied Artillery elied Artillery elied Flak Support Unit cinfantry Unit elied Rocket Launcher FV FV	82 627 AT 1100 H 24 22 18 30 24 4 16 4 24 6 7 22	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 24 6 4 24 6 4 22	2 1989. WITHDRAWN	139 FALLEN OU' 6 3 3	60 DESTROYED 1 1 1 1 1 1 1 1 1 1 1 1 1
Utility Vehicle Totals E. STATE OF 39 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gvozdika 253M1 Akatsiya 256 Tunguska 30mm AGS GL 73mm SPG-9 RCL BMP-21(T)[M] BMP-2(T)] BMP-2(T)] BMP-2(T)] BMP-2ksh	DTH MRD Infantry S Towed M Towed Ar Self Prop Self Prop Self Prop Self Prop Self Prop Tracked I Tracked I Tracked I Command	82 828 , BY PLATFORM, DESCRIPTION Support Unit Illed Artillery elied Artillery elied Artillery elied Flak Support Unit elied Flak Support Unit elied Rocket Launcher FV FV FV FV j Vehicle	82 627 AT 1100 H 24 22 18 30 24 4 16 4 16 4 6 7 24 6 7 22 19	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 13 4 24 6 4 22 13	2 1989. WITHDRAWN	139 FALLEN OU' 6 3 3 2 2 6	60 I DESTROYED 1 1 1 1 1 1 1 1 1 1 1 1 1
Utility Vehicle Totals E. STATE OF 35 PLATFORM 12.7mm NSV HMG 120mm Mortar 152mm D-20 251 Gvozdika 253M1 Akatsiya 256 Tunguska 30mm AGS GL 73mm SPG-9 RCL BM-21 Grad BMP-1[T][M] BMP-1[T][M] BMP-1[T][M] BMP-2[M] BMP-2	DTH MRD Infantry ! Towed M Towed Ar Self Prop Self Prop Self Prop Infantry ! Anti-Tank Self Prop Tracked I Tracked I Tracked I Comman Recon Un	82 828 , BY PLATFORM, DESCRIPTION Support Unit ortar tillery Gun elied Artillery elied Artille	82 627 AT 1100 H STARTED 24 22 18 30 24 4 16 4 4 6 7 7 22 19 9 9	RS, JUL 21 RUNNING 17 22 18 30 24 4 13 4 24 6 4 22 13 7	2 1989. WITHDRAWN	139 FALLEN OU 6 3 3 3 4 2 4 5 6 6 2	60 T DESTROYED 1 1 1 1 1 1 1 1 1

30.4 Victory Status and Conditions

Section A provides a graphical and tabled representation of the final Victory Point Distribution and game result.

The colored bar at the top shows via the white bars where your score landed, and then some text noting the percentage of VPs gained and the result of the battle. Next is a table showing the breakdown of starting forces and VPs awarded for both sides in the scenario that reaches the final VP distribution total.

Section A.1 shows the colored bar and the distributed VP values that

match up to the various victory conditions for your force. These percentages are based on the starting VP conditions for the scenario and allow for unbalanced forces in a scenario, but provide real victory conditions based on these ratios. Lastly, the Catastrophic Force Loss Threshold that triggers Sudden Death.

2 Bde Scenario Informa	ation Cent	er							×
Scenario Descrir	ation	Final 6	Report	Rutche	ar's Bill Victor	/ Status & Condition	4		
Scenario Descrip	JUOIT	T II IGI T	Серогс	Duttine					
VICTORY ST	TATUS	AND	VICTOR	ҮР(00 н	DINTS DISTR RS, JUL 21 198				Ê
Your force seiz	ed 48%	ofthet	total victor	y poi	nts (VPs), which		a Contested R		
		:	2 BDE		39TH MRD				
% of starting for	ce		42 %		55 %				
Scenario Enemy I	Losses		7,655		7,437				
Scenario Exited									
Scenario Bonus/	Penalty -		0		0				
Scenario Total V	Ps		8,905		9,687				
VP distribution			48 %		52 %				
A.1 Victory Con	nditions	and Ca	tastrophic	Loss	Threshold for 2	Bde			
DECISIVE LOSS	тастіся	AL LOSS	MARGINAL L	oss	CONTESTED	MARGINAL WIN	TACTICAL WIN	DECISIVE WIN	
0% - 18%	19% -		28% - 389	6	39% - 51%	52% - 62%	63% - 71%	72% - 100%	
No 18% 19% - 27% 28% - 38% 39% - 51% 52% - 62% 63% - 71% 72% - 100% CATASTROPHIC FORCE LOSS TARESHOLD 30 % remaining strength									
View Enemy Scen	nario Infor	mation Ce	nter		Print)		Close	.::

Section B provides a table of VP location ownership by side and contested and neutral (not owned) locations.

B. OWNERSHIP OF VICTORY LOCATIONS				
2 BDE	CONTESTED & NEUTRAL	39TH MRD		
Hex 2726 (1,000 VP)	Hex 2322 (500 VP)	Hex 1508 (500 VP)		
		Hex <u>1607</u> (500 VP)		
		Hex 1706 (500 VP)		
		Hex 822 (500 VP)		
Total: 1,000 VP	500	Total: 2,000 VP		

Section C provides details on how ownership of the VP location was determined based on local units and time remaining in the game.



30.5 Sudden Death

Once a side has triggered "Sudden Death" by having their forces drop below the indicated Catastrophic Force Loss Threshold, the outcome of the scenario will be a foregone conclusion. By the time a force has been eroded down to 30% of its starting value, it has become combat ineffective in the grand scheme of the battle and is assumed to pull back remaining forces to be available in the future.

There is the option to continue playing until the end of the scenario time or until the point you wish to end the game via the menu.

NOTE: It is infrequent to improve on the Sudden Death evaluation as your forces are combat ineffective and usually will suffer more losses if the Sudden Death point is ignored.

31 Campaign Game Play Overview

On the Main Menu screen select Start New: Campaign.

2000

Main Menu:						
Start New:		Edit:				
Scenario	Saved Scenario	Scenario				
Campaign	Saved Campaign	Campaign				
PBEM++ Multiplayer	PBEM++ Multiplayer	Map				
	PBEM Classic					

The available campaigns are listed with a campaign description positioned beneath. Select one and hit Proceed to continue.



Set the Game Play options for fog of war as usual.

NOTE: You cannot pick which side you will play or what your opponent will be. You will play the side the campaign author has specified, and it will be against the AI.

Next you can choose the Battle Plan for the campaign scenario if there is more than one or select it to be picked at random.

Battleplan Selection				
Battle Planning Options:				
Campaign: Big Red One				
Scenario: CA1 Fog of War				
If desired, the side played by the computer may use a battle plan. Chose 'Random Selection' for the computer to use a random battleplan, or pick a specific battleplan for the computer to use. Alternatively, uncheck the selection box to use no battle plan at all.				
Computer Player Plan Selection:				
Random Selection				
One Two Punch				
Proceed				

Clicking Proceed will load the scenario, and you can begin to play. The program title bar tells you the name of the campaign and which scenario in it you are currently playing.



Play the scenario to a conclusion or end it early (if more than 2/3s has been played) via the top menu Game / End Game Now selection. After the standard Battle Over dialog, you will be asked to save the campaign in progress as a .CAV file. Select a file name and click on the Save button.

	Save Flashpoint Campaign file					
	Colonel Cruz, please save your campaign game progress now.					
	E:\Dev\FCDev\Modules\FCSS\Saved\ 🔎					
Line and	File Name		File Date			
	Campaign One		2021-07-13 14:14:33			
	Campaign One - Failure		2021-07-13 18:37:51			
	Campaign One 12 Jul		2021-07-12 16:46:43			
5	Campaign One 13 Jul		2021-07-13 11:46:51			
T	Campaign One 13 Jul B		2021-07-13 11:49:05			
, i	compargin one to sai b					
a						
k)						
1						
	File Name: Campaign One 16 J	ul.cav				
Sec.			<u>S</u> ave <u>C</u> ancel			
73	Contract management of the second					

You will then see the following message:



Clicking on Proceed will take you to the Staff Summary of the TOC Scenario Information dialog for the usual post-mortem debrief. Note that there is a new tab in this dialog called "Campaign Chronology". This report will show you the accumulated campaign information to date. It contains:

- The campaign description
- For each scenario you will see:
 - The scenario briefing
 - The game time the scenario ended and the distribution of VPs, both for the scenario and the campaign so far
 - The staff evaluation received for that scenario
- When the entire campaign is complete, a final summary evaluation will be appended for you to review.

When the player has finished the scenario post-mortem, use the Game / Start Next Campaign Scenario menu option to go to the next scenario.

The new scenario will load, and the player's core forces will be imported and placed in the appropriate setup areas.



The Force Recovery dialog will be shown to detail how much rest, recovery, and replacements your core force has received. This report summarizes a lot of meaningful detail!



The player will now receive the mission briefing for the scenario and play can start. When this scenario is complete, the same process will be used to start the third and final scenario.

When this final scenario concludes, a campaign summation screen will be shown:



The game end-state can then be browsed in the usual way. The TOC Scenario Info Campaign Chronology will now be complete.



From here you can select the close button and return to the Main Menu and start another battle or campaign.

32 Designer Notes

The following section contains some designer notes and thoughts on various topics covered in the game. These items pair well with the information in the Battlefield Primer (FM02) and add more background to the various features and capabilities of the game engine.

32.1 Infantry

Infantry units perform best when dug in and in areas with plenty of cover. In built up areas like cities infantry can take down unsupported

tanks. In the open, infantry becomes very vulnerable to all types of fire. Digging infantry out of high cover can be a real chore and usually requires the use of artillery and your own infantry to remove.

32.2 Planning

However accurate it may be that plans don't survive contact with the enemy, maneuver must be carefully pre planned. The operational commander can expect to feel more like a traffic cop than a battlefield commander of WWII vintage once maneuvering has begun. However, this is as it should be. Victory can depend on units getting to the same place at the same time. Traffic jams (only one company sized maneuver element fits easily in one map location) are gifts to opposing air and artillery forces. Hostile helicopters love a giant traffic jam and are incredibly effective in destroying them.

In addition to the requirement to pre-plan, players must remain flexible to meet the rapidly changing situations common in modern combat. The reason for this necessity is lack of information. You are unlikely to know precisely where the enemy is, what they have, or what their objectives are during setup while you are making plans. A good plan will incorporate accurate guesses as to these points, will not depend too crucially upon those guesses, and will include methods to improve your intelligence on the enemy while denying him similar intelligence. Field reconnaissance will often result in the loss of the units performing the recon, so it is best to arrange that recon is not performed inadvertently by valuable non reconnaissance units.

32.3 Mobility

Combat occurs "over the ground", not "for the ground". Despite the perils of tactical movement, units need to be constantly engaged in operational movement. Once the enemy has identified them in a particular location they can all too easily be fixed in place with suppressive fires and kept out of the battle. There are few "must have" locations to defend, so the objective is to find and defeat the enemy combat units, not seize, or hold mere ground.

32.4 Tempo

2000

Modern combat occurs around the clock. Multiple echelons are necessary to sustain the necessary level of commitment. Each in turn works its way to the front, engages, and then disengages to rest and replenish. The idea is seizing the initiative, set the tempo of combat at a level higher than the enemy can sustain, and then dislocate him with fresh units when his forces inevitably crack. In the circumstances, a fast but sloppy solution trumps a well ordered but slower solution. The other implication is that there is no time to learn on the job. All units must be fully trained in peacetime because there will be no time once the shooting starts.

32.5 Initiative

Players should not wait until they engage the enemy before exercising their command initiative, by then it will be too late. In fact, you should make most of your decisions and give many of your orders before even starting play. Things like combat doctrine and reporting structures should not usually be changed during play. This reflects reality. In Modern War combat a lot of destruction happens very quickly. This means there is no time for a battalion or brigade commander to assess the situation, decide, and chose a course of action once it the shooting has started.

32.6 Recon and Intel

This is a game in which to be located by your opponent is often fatal so you will either wish to stay well-hidden or to keep on the move. The latter will usually be necessary. In moving it is good to remember, especially for large forces on roads, that there are stacking limits. You cannot get much more than a single large, full-strength company into one location. We have had attacks break down in play testing due to traffic jams. Locating one of your traffic jams is an enemy dream. Every remote delivery weapon (and a few direct fire ones) will end up trying to clear out that traffic problem for you, so avoid creating backups. Ideally the main task for your ground units will be to do mop up on such a location, having already had the air force and artillery do all the dirty work. This is more effective and a lot safer than wading into a head on ground engagement oneself. Unfortunately, it is not always possible for events to work out so cleanly. So, you will probably have to engage the enemy with your ground forces at some point. When you do so, keep in mind that snoopers tend to get shot at. Determining opposing strength locations with your HQ or main elements is not good practice. That is what reconnaissance is for. You will often find that they merely present you with a flaming datum, better them than your staff vehicle.

32.7 Survival

Complete units should not melt away in just a couple of minutes except in catastrophically adverse circumstances. Rarely should the voluntary loss rate exceed one vehicle per minute. All combatants are assumed to have residual survival instincts and will modify their behavior once they come under fire. They will not press on suicidally but instead will suffer a mission abort once the rate of loss passes a certain threshold - which can be aggravated by the loss of HQ vehicles. They will retire to the nearest safe location and reorganize for another attempt. Exception: the less realistically trained the troops are, the more 'dash' (voluntary risk assumption) they can be expected to show. Virtually all troops in the Soviet style will fall into this category initially.

32.8 Artillery

Artillery support is crucial, but limited. Demand will far outstrip supply. A frontal attack on an unsuppressed defense no matter what the odds will likely result in ruin. Artillery must be used to prepare the way and then support the attack. The dilemma is that artillery has its own notable supply limitations and cannot be used lavishly except for the very highest priority tasks. Five minutes of moderate firing per location ought to be considered lavish. During the attack smoke will be laid and obvious danger points suppressed, but the barrage will be limited to two-minute concentrations as needed unless resupply is assured. On the modern battlefield, quality of fire support counts more than quantity, and the destruction of units through fire alone should be considered most unlikely. Counter-battery fire is an important role and a substantial fraction (1/4 - 1/3) should be assigned to it. The same rules apply to air strikes, only more so.

32.9 Lethality

2000

This is the age of the empty battlefield. If you can see it, you can probably kill it. Western-style units will stay hidden unless forced otherwise by movement orders. During movement they will seek to use all available cover and move in short high-speed dashes to minimize exposure. If adequate cover is unavailable, smoke will be used lavishly. As in times past, the best movement route is the most covered route, not the shortest route. Warsaw Pact units put a higher premium on cohesion and predictability. They will be much less likely to take advantage of available cover in most circumstances.

32.10 Ammunition

Ammunition is relatively bulky, heavy, and scarce. Most units can fire off everything they carry in 10 minutes or less and yet they need to be able to go eight hours or more. This militates against high-volume low-payoff exchanges. Assume that the intensity half-range is 500m. Units will generally shoot at 4x intensity at targets within that range, at 2x from 500 to 1000m, and at 1x beyond that. There is also a sniping / harassment level of fire that can occur at extreme ranges to keep the other side honest, but this need not be simulated at the company level. Both sides have stockpiled enormous quantities of ammunition and other supply, but experience has shown that it is used up at far higher than expected rates. Expect severe supply difficulties within 30 days for both sides, and potentially crippling shortages of critical items within 10 days. This cannot be a long war.

32.11 Dispersion

In the age of ultra-lethal weapons, dispersion is the key to survival. Historically, troop densities have dropped every time that weapon lethality increased. Concentration of units is an invitation to wholesale destruction, yet attacks must concentrate to a degree to achieve success. Move dispersed, attack concentrated!

32.12 Line of Sight and Line of Fire

Typical combat ranges may be a lot shorter than expected. Most

improvements to direct fire weapons have been to extend the range past three km, but in most cases the line of fire will not be nearly that long. At one point the Soviets calculated that 50% of all combat would occur at 500 m or less. This puts a premium on delivering the first round fast and accurately rather than at extended range. Tactical situational awareness leading to consistently getting the first shot in may well determine who lives and who dies. The best shot might not be the longest shot, or the one with the most sweeping field of view, but rather the most unexpected shot.