



**U.S. Army Research Institute
for the Behavioral and Social Sciences**

Research Product 2005-02

**Train-the-Trainer Package for the Full Spectrum
Warrior Game**

James H. Centric
Northrop Grumman Mission Systems

Scott A. Beal, and Richard E. Christ
U.S. Army Research Institute

October 2004

Approved for public release; distribution is unlimited.

20041216 046

**U.S. Army Research Institute
for the Behavioral and Social Sciences**

A Directorate of the U.S. Army Human Resources Command

**ZITA M. SIMUTIS
Director**

Research accomplished under contract
for the Department of the Army

Northrop Grumman Mission Systems

Technical Review by

Brent Cummings, U.S. Army
Meredith Cracraft, U.S. Army Research Institute

NOTICES

DISTRIBUTION: Primary distribution of this Research Product has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, Attn: DAPE-ARI-PO, 2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926.

FINAL DISPOSITION: This Research Product may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: This Research Product is not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy) October 2004		2. REPORT TYPE FINAL		3. DATES COVERED (from... to) May 2004 – October 2004	
4. TITLE AND SUBTITLE Train-the-Trainer Package for the Full Spectrum Warrior Game				5a. CONTRACT OR GRANT NUMBER DASWO1-99-D-0013 DO#32	
				5b. PROGRAM ELEMENT NUMBER 20262785	
6. AUTHOR(S) James H. Centric (Northrop Grumman Mission Systems), Scott A. Beal, and Richard E. Christ (U.S. Army Research Institute)				5c. PROJECT NUMBER A790	
				5d. TASK NUMBER	
				5e. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Northrop Grumman Mission Systems U.S. Army Research Institute for the Behavioral and 3565 Macon Rd. Social Sciences, Columbus, GA 31907 Infantry Forces Research Unit PO Box 52086 Fort Benning, GA 31905				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U. S. Army Research Institute for the Behavioral & Social Sciences 2511 Jefferson Davis Highway Arlington, Virginia 22202-3926				10. MONITOR ACRONYM ARI	
				11. MONITOR REPORT NUMBER Research Product 2005-02	
12. DISTRIBUTION/AVAILABILITY STATEMENT					
13. SUPPLEMENTARY NOTES COR and Subject Matter POC: Richard E. Christ 706-545-2207.					
14. ABSTRACT (Maximum 200 words): The U.S. Army and its Program Executive Office - Simulations, Training & Instrumentation (PEO-STRI) tasked the Institute for Creative Technologies (ICT) at the University of Southern California to develop training games that would allow the Army to begin exploiting the expertise of the commercial games developers and the entertainment industry. Full Spectrum Warrior (FSW), built for use with Microsoft's X-Box game console system, was developed to provide Infantry squad leaders with the opportunity to practice making tactical decisions and executing the troop-leading procedures that are required for urban operations. The U.S. Army Research Institute for the Behavioral and Social Sciences, Infantry Forces Research Unit (IFRU) at Fort Benning, Georgia, was asked to help in evaluating the training effectiveness of FSW. During the process of evaluation, the IFRU teamed with Northrop Grumman Mission Systems to create this Train-the-Trainer package that would help Army trainers learn to play FSW, help them teach their Soldiers how to play and learn tactical decision-making skills while playing the game, and provide information for after-action reviews.					
15. SUBJECT TERMS Full Spectrum Warrior Training Support Package Train-the-Trainer User Manual Training Game					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT	20. NUMBER OF PAGES	21. RESPONSIBLE PERSON Ellen Kinzer Technical Publication Specialist 703-602-8047
16. REPORT	17. ABSTRACT	18. THIS PAGE			
Unclassified	Unclassified	Unclassified	Unlimited		

Standard Form 298

Research Product 2005-02

Train-the-Trainer Package for the Full Spectrum Warrior Game

James H. Centric
Northrop Grumman Mission Systems

Scott A. Beal, and Richard E. Christ
U.S. Army Research Institute

Infantry Forces Research Unit
Scott E. Graham, Chief

U.S. Army Research Institute for the Behavioral and Social Sciences
2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

October 2004

Army Project Number
20262785A790

Personnel Performance
and Training Technology

Approved for public release; distribution is unlimited.

FOREWORD

Interest in the use of relatively low-cost training games has increased along with the sophistication and capabilities of software development technologies. The U.S. Army and its Program Executive Office – Simulations, Training & Instrumentation (PEO-STRI) tasked the Institute for Creative Technologies (ICT) at the University of Southern California to create training games that would allow Army trainers to begin exploiting these technologies. One such training game, Full Spectrum Warrior (FSW), was built for use with Microsoft's X-Box game console system. FSW provides Infantry squad leaders with an opportunity to practice making tactical decisions and executing the troop-leading procedures that are required for urban operations.

The U.S. Army Research Institute for the Behavioral and Social Sciences, Infantry Forces Research Unit (IFRU) at Fort Benning, Georgia, was asked to help in evaluating the training effectiveness of FSW. During the process of evaluation, we realized that Army trainers would benefit by having a document that could (a) teach them how to play FSW, (b) help them teach their Soldiers how to play and learn tactical decision-making skills while playing the game, and (c) provide appropriate information for use during an after-action review. The IFRU teamed with Northrop Grumman Mission Systems to create this Train-the-Trainer package to meet these training needs.

This research product has received positive reviews by training game experts in the Combined Arms and Tactics Directorate at Fort Benning, Georgia, and by members of the Engineering Psychology Program at the U.S. Military Academy, West Point, New York. Plans are being developed to use it at the U.S. Military Academy in research designed to determine the effects of FSW training on the acquisition of Infantry decision-making skills and on the tactical performance of cadets during a field exercise.



PAUL A. GADE
Acting Technical Director

TRAIN-THE-TRAINER PACKAGE FOR THE FULL SPECTRUM WARRIOR GAME

CONTENTS

	Page
INTRODUCTION	1
PURPOSE	1
TACTICAL SCENARIOS	2
PLAYING FSW	3
CREATING A DEMONSTRATION TUTORIAL	4
The X-Box Controller S	5
Setting Up FSW	6
Getting Started.....	8
Front Interface Menu.....	9
Selecting Login.....	10
Selecting Controls	11
Selecting Replay.....	11
Selecting the Mission	12
Selecting the Map Editor.....	14
Selecting the Squad Editor	15
Selecting the Rules of Engagement (ROE) Editor	15
Selecting the Mission Briefing Interface.....	17
Changing the Equipment Allocation	18
CONTROLS AND FUNCTIONS	20
Main User Interface.....	20
Unit Directional Indicators.....	21
Fatality and Injury Feedback	21
Team Information Icon.....	21
Individual Order Icon	22
Waiting Time Icon.....	23
Enemy Sighted Icon	23
Game Shouts	24
Action Cursor	24
Giving Movement Orders.....	25

CONTENTS (Continued)

	Page
Hold Up Order.....	26
Action Icon Box and Formations	26
Wall Formation Icon	26
Corner Formation Icon	27
Object Formation Icon.....	28
Door Formation Icon	28
Breaching A Door	29
Breach Door/Building Icon	29
Ascend/Descend Stairs Icon	31
Secure Soldier/OPFOR Icon	32
Administer First Aid Icon.....	32
Giving Firing Orders and Accessing the Target Cursor	33
Point Fire Order.....	33
Suppression Fire Order.....	34
Individual Cover Sectors	34
Throwing Grenades/Firing the M-203 Grenade Launcher	35
Pausing the Game.....	36
Moving the Squad Leader Between Teams.....	37
Seeking Cover	37
Reporting.....	37
Reallocating Equipment During the Game	39
The X-Box Dashboard Memory Functions	39
 DEVELOPING A TRAINING PLAN	 41
General Scenario	41
Operation Orders (OPORDs)	41
Using the Demonstration Tutorial.....	41
Operational and FSW Gaming Occurrences	44
Scheduling Training	44
Training Evaluation Standards	45
Final Evaluation Score	46
Tracking Performance	47
 THE AFTER-ACTION REVIEW (AAR) PROCESS	 48
Doctrinal Overview	48
Planning the AAR	51
Preparing the AAR.....	51
Conducting the AAR.....	52

CONTENTS (continued)

	Page
Conducting the Follow-Up.....	53
Conducting an AAR With FSW.....	53
Accessing the AAR Submenu Screen.....	53
Accessing the Map Statistics Screen.....	54
Accessing the Squad Statistics Screen.....	54
Accessing the OPFOR Statistics Screen.....	55
Accessing the Reports Menu.....	55
Accessing the Mission Playback Menu Screen.....	56
Playback Controls and Functions.....	56
Playback Controls.....	57
Free Camera Function.....	58
Pause Function.....	58
X2/X5 or Increasing Playback Speed Function.....	58
Jump Time Function.....	58
Resume Game Function.....	59
Viewing Cones Function.....	59
Enemy Awareness Lines Function.....	59
REFERENCES	61
APPENDIXES	
Appendix A. Acronyms.....	A-1
Appendix B. X-Box Controller Controls Diagram	B-1
Appendix C. Sample General Scenario.....	C-1
Appendix D. Collective Task Training and Evaluation Outlines (T&EOs).....	D-1
Appendix E. Battle Drill 2: React to Contact Training and Evaluation Outline (T&EO) and Extract of Battle Drill 5: Enter Building/Clear Room (DRAFT).....	E-1
Appendix F. FSW-Specific Collective Task Training and Evaluation Outline (T&EO)....	F-1

LIST OF FIGURES

Figure 1. Player's View of a Fire Team.	1
Figure 2. Enemy Sighted Icon.	4
Figure 3. The X-Box Controller S.	5
Figure 4. Installing Power and Interface Cables.	6
Figure 5. FSW Major Component Parts.	7
Figure 6. Installing a Memory Card.	7
Figure 7. Game Launcher Menu.	8

CONTENTS (continued)

	Page
Figure 8. Initial Controls.	9
Figure 9. Logo.	9
Figure 10. Front Interface Menu.	9
Figure 11. Login Menu.	10
Figure 12. A & B Buttons.	10
Figure 13. Mission Selection Menu.	12
Figure 14. Mission Selection Submenu.	13
Figure 15. Map Editor Parameters.	14
Figure 16. Map Editor Menu.	14
Figure 17. Squad Editor Menu.	15
Figure 18. ROE Editor Menu.	16
Figure 19. Mission Briefing Screen.	17
Figure 20. Loading Screen.	18
Figure 21. Equipment Allocation Menu.	18
Figure 22. Equipment Allocation Menu.	20
Figure 23. Standard Interface Information.	21
Figure 24. Team Information Icon.	22
Figure 25. Indiv. Order Icon.	22
Figure 26. Directional Pad.	22
Figure 27. Waiting Time Icon.	23
Figure 28. Enemy Sighted Icon.	23
Figure 29. Action Cursor.	25
Figure 30. Wall Formation Icon.	27
Figure 31. Corner Formation Icon.	27
Figure 32. Object Formation Icon.	28
Figure 33. Door Formation Icon.	29
Figure 34. Breach Door/Building Icon.	29
Figure 35. Overhead Perspective.	30
Figure 36. Ascend/Descend Stairs.	31
Figure 37. Secure Soldier/OPFOR Icon.	32
Figure 38. Administer First Aid Icon.	33
Figure 39. Target Cursor.	33
Figure 40. Grenade.	36
Figure 41. White & Black Buttons.	37
Figure 42. Report Menu Screen.	38
Figure 43. Pausing the Game.	43
Figure 44. Mission Performance Chart.	48
Figure 45. AAR Key Points.	49
Figure 46. AAR Format.	52
Figure 47. AAR Main Menu Screen.	53

CONTENTS (continued)

	Page
Figure 48. Viewing Menu Screens.	54
Figure 49. Map Statistics Screen.	54
Figure 50. Squad Statistics Screen.	55
Figure 51. OPFOR Statistics Screen.	55
Figure 52. Reports Screen.	56
Figure 53. AAR Interface.	57
Figure 54. Time Scale Bar Marker.	57
Figure 55. Controller Triggers.	58
Figure 56. Y Button Location.	59

TRAIN-THE-TRAINER PACKAGE FOR THE FULL SPECTRUM WARRIOR GAME

Preface

The U.S. Army Research Institute, Infantry Forces Research Unit (IFRU) at Fort Benning, Georgia, was asked to help in evaluating the training effectiveness of a training game named Full Spectrum Warrior (FSW). The game was developed for the Army by the Institute for Creative Technologies at the University of Southern California, with resources and expertise provided by the entertainment industry, commercial games developers, and the U.S. Army Infantry School. The purpose of FSW was to provide dismounted Infantry squad leaders with opportunities to practice making tactical decisions and using other tactical skills required during urban operations without having to expend the resources required to conduct tactical field exercises.

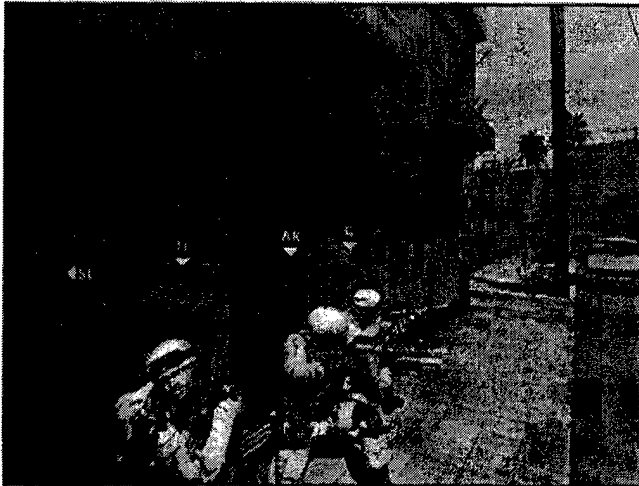
During the evaluation process, ARI researchers realized that Army instructors who used FSW would benefit from a train-the-trainer package that would facilitate the training process. The IFRU teamed with Northrop Grumman Mission Systems to create a product that would provide information to instructors that would help them learn to play FSW, teach their students to play FSW, and provide effective after-action reviews following their student's execution of an FSW mission. This effort resulted in the FSW Train-the-Trainer package that follows these introductory comments. It provides instructors and their students with a comprehensive reference for training with FSW.

TRAIN-THE-TRAINER PACKAGE FOR THE FULL SPECTRUM WARRIOR GAME

Introduction

Full Spectrum Warrior (FSW) is the result of collaboration between the U.S. Army and the Institute for Creative Technologies in an effort to develop interactive training games using cutting edge technology. It is a multiplayer-capable, live-enabled computer game built on Microsoft's X-Box. FSW is a tactical action game that replicates exercises in fire and maneuver. The military player (squad leader) uses the men, organic weapon systems, and information at hand to execute missions in an urban environment.

FSW lets a player assume the role of an Infantry squad leader controlling a 9-man squad consisting of the squad leader and two four-man fire teams. Each fire team has a fire team



leader, a grenadier armed with an M-203 Grenade Launcher, an automatic rifleman carrying the M-249 Squad Automatic Weapon (SAW), and a standard rifleman armed with an M-4 Carbine. Select Soldiers also carry the M67 High Explosive Fragmentation Grenade or the AN-M83 Smoke Hand Grenade. The game allows the squad leader to switch between fire teams and order each team within an urban environment. The squad leader can also select individual team members and have them perform specific actions such as move and throw a grenade. The player views each mission from a third-person perspective. (See Figure 1.)

Figure 1. Player's View of a Fire Team.

FSW offers realistic parameters. For example, after throwing a smoke grenade Soldiers have to wait 45 seconds for the smoke to accumulate before the team can move safely using the smoke screen as cover. This simulates reality accurately. The enemy is a thinking enemy capable of myriad actions. The squad conducts a series of six tactical missions against an enemy artificial intelligence (AI) that is capable of making life or death decisions, inflicting casualties, and moving from one position to another based on a threat to his position. The enemy has access to assault rifles and heavy machine guns. They take no interest in the lives of innocent civilians caught between combating forces.

Purpose

FSW was developed for Soldiers to play in the dayroom or in residence settings. It may also be a means of improving individual training by taking advantage of the latest in computer game technology. This training support package (TSP) augments FSW's capabilities.

The purpose of this TSP is to provide the platoon chain of command with a training plan for incorporating FSW into the platoon's individual training program. The platoon leader (PL) or platoon sergeant (PSG) does not need to adhere to all that is presented. The training plan is offered to assist the PL in using FSW as one way to augment his training. It is not designed to inhibit the hallmarks of military leadership, the initiative and the innovative imagination of the platoon leadership.

Regardless of a Soldier's experience with games, this TSP is written so he can learn FSW using a building block approach, going step-by-step through the controls, game functions, and associated training development. General information about the system is provided first. Because the game lacks a means to learn and practice using the controls, the TSP provides a demonstration tutorial. As the trainer goes through the tutorial, he is exposed to the various screens and menus that will appear. The tutorial sets a stage for the trainer to have his squad leaders practice learning FSW's controls and functions through hands-on training. The trainer is next presented with a plan to integrate FSW into the platoon's training program. Finally, the TSP outlines how the platoon leadership can use FSW's capabilities to conduct after action reviews (AARs). Several appendices provide training aids and doctrinal information relevant to the FSW playing experience.

Tactical Scenarios

There are six tactical scenarios from which to choose. Each scenario offers unique challenges and each is different from the other scenarios. All of the scenarios are based in either a heavy urban environment or an area with slightly less density, similar to a large village or small third-world town. The missions involve either conventional, security, or support operations. A synopsis of each scenario follows.

- **Scenario 1. Malnika Street:** Urban operations patrol. The squad must traverse 5-6 city blocks through hostile Kazarian forces to reach the new company objective rally point (ORP).

- **Scenario 2. The Delivery:** Security operation. As part of a larger company operation, the squad must establish a security patrol to keep the area clear of hostile Kazarian forces until an escorted convoy can arrive bringing in voting materials.

- **Scenario 3. Election Day:** Stability operation. The squad is guarding a voting site (building) when they are notified that Kazarian sympathizers are harassing civilians attempting to vote at various polling locations. The squad is ordered to prevent the harassment of civilian voters into the polling site, but still must cover all approaches to the building.

- **Scenario 4. Red Cross:** Stability operation. The squad is guarding a humanitarian aid food truck when they are notified that four hostile Kazarian forces may be in their vicinity. The squad is ordered to continue guarding the truck and attack any hostile elements that threaten their location.

- **Scenario 5. Hide and Seek:** Security operation. The squad is ordered to attack two

buildings suspected of housing potential weapon cache sites within their area.

• **Scenario 6. Invasion:** Security operation. As part of a larger company operation, the squad is ordered to move from its location at the northern perimeter of the town to attack a company-sized force of hostile Kazarian irregulars that are approaching from the southern side of the town perimeter.

The existing sequence of the scenarios is not an indication of their increasing degree of difficulty. Although each scenario is stand-alone with its own challenges, some are more difficult to master than others. Additionally, varying degrees of difficulty can also be added to each scenario by adjusting menu selections for each mission. This capability, as well as a rank ordering by degree of difficulty, will be explained in detail in the following section on Developing a Training Plan.

Playing FSW

The tactical focus of FSW was designed to test the squad leader's application of fire and maneuver. Listed below are some of FSW's capabilities:

- Fire team movement from one covered position to another covered position
- Use the two fire teams to provide mutual support
- Use of suppressive fires
- Use of smoke to cover danger areas

FSW also provides other capabilities. The graphics and artificial intelligence are state of the art. AI actions add to the realism. For example, as a fire team is positioned at the corner of a building, the lead team member can peek around the corner to see if he can observe danger areas or enemy personnel, then withdraw to the safety of the covered corner. Team members moved or ordered to perform other functions provide verbal responses to the squad leader, reinforcing his actions. If squad members see an enemy soldier, the members with direct line-of-sight will report that they have sighted an enemy.

Another benefit of using FSW is that results are immediate. The squad leader can see squad members become casualties as the result of a poor tactical decision. He can also see enemy soldiers die as a result of well placed suppressive fires. Civilians can become casualties of poor fire control, or they can be mistakenly identified as hostile forces as they move about the battlefield.

FSW offers an AAR capability with the game. The system can store the mission and replay it as part of an informal AAR. Once the teaching points are reviewed in the AAR, the squad leader can replay the game from a specific point or time. This can give the squad leader a second chance as he restarts the mission from the point where a tactical error occurred. He can continue the mission from that point.

To aid the squad leader in moving the fire teams, positional icons appear in the lower

right screen that indicate the presence of a wall, a corner location, or an open doorway, stairs that the fire team can ascend or descend. These icons help offset the absence of touch and other battlefield senses and the inability to make the minute adjustments those Soldiers would make in real life. In another example, a lock icon indicates correct positioning of Soldiers to secure wounded/dead personnel. Positional icons will be discussed in detail later in the training package.

The presence of an enemy sighted icon (Figure 2), in the form of a red arrow, indicates that the squad has detected (through direct line-of-sight) an OPFOR (opposing force) soldier or is receiving fire from the enemy. In real life, tracer fire and the sounds of rounds in close proximity aid in identifying the location of the fire. The icon provides assistance in locating distant enemy personnel firing at friendly troops in the absence of these battlefield senses and helps offset the potential for poor monitor resolution or cluttered background interference. The icon pointing to the OPFOR will stay on the screen as long as one or more of the squad members can see the threat by line-of-sight or the squad leader has positioned the camera (a third-person perspective overwatching the fire team) so that the OPFOR can be observed clearly. The enemy sighted icon will be discussed in detail later in the section on Controls and Functions.

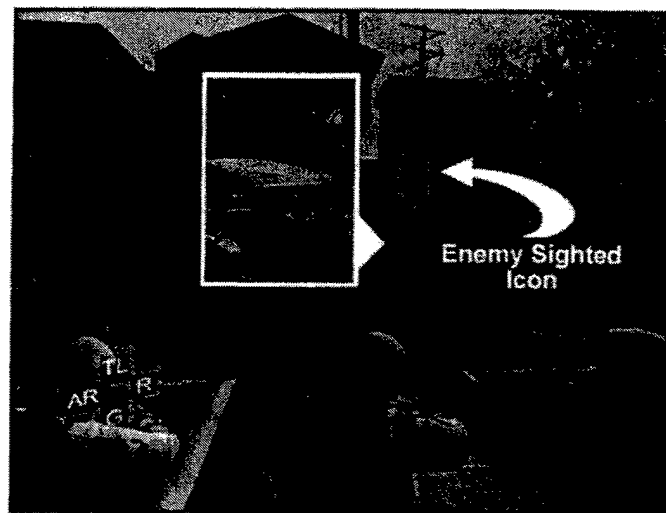


Figure 2. Enemy Sighted Icon.

There are many benefits of using FSW. However, as with any training game or simulation, there are limitations. These limitations are described in the various corresponding action and control functions. The platoon leadership must address these limitations as they emerge. It is up to the trainer to minimize their impact as much as possible by explaining their presence. They should be identified to the squad leaders while they are conducting their practice sessions and again during their AARs as both operational and gaming occurrences. By doing so, the element of surprise or frustration by a player during an actual mission will be reduced. To ignore them may invite the noncommissioned officers (NCOs) to question the overall fidelity and training value of the game.

Creating a Demonstration Tutorial

It takes time to learn the game's interfaces, menus, and action controls. Once the player initiates the scenario he is immediately "deployed" to a start point where he may be required to react immediately to the battlefield environment. Initially, the player's reaction time is adversely affected because of the time it takes to learn the controls and establish good hand-and-eye interface with the controls.

Those Soldiers with gaming experience may find the control functions less challenging. For Soldiers who are inexperienced with electronic gaming, reacting to the tactical situations may prove difficult at first. Novice players may know what to do tactically, but may not know how to accomplish the task or how to perform it in an expeditious manner. As the novice players attempt to master the control functions, unwanted events such as casualties may occur.

Initial performance may be skewed in favor of the Soldier with gaming experience rather than his ability to complete the mission or to employ effective tactical decision-making. A novice player may become frustrated because of his inability to respond to the interface quickly enough to avoid casualties.

To overcome this, it is recommended that the platoon leadership (the PL or PSG) create a demonstration tutorial by modifying and saving an existing scenario. All players, regardless of experience, would then be required to complete the tutorial. By doing so, all players will learn the capabilities of the system and the various control functions. This will narrow the performance differential between experienced and novice players and ultimately provide for a more accurate assessment of player performance.

The process of creating a demonstration tutorial is explained below. It includes a step-by-step process of what screens and computer functions are available, their sequences, and the controls used to perform these functions. These are the same screens and control functions used in all missions, so the benefit is that while setting up the tutorial, the platoon leadership will be learning how to set up the actual missions for their squad leaders. Guidance for setting up tutorial-specific settings is outlined in the text.

The X-Box Controller S

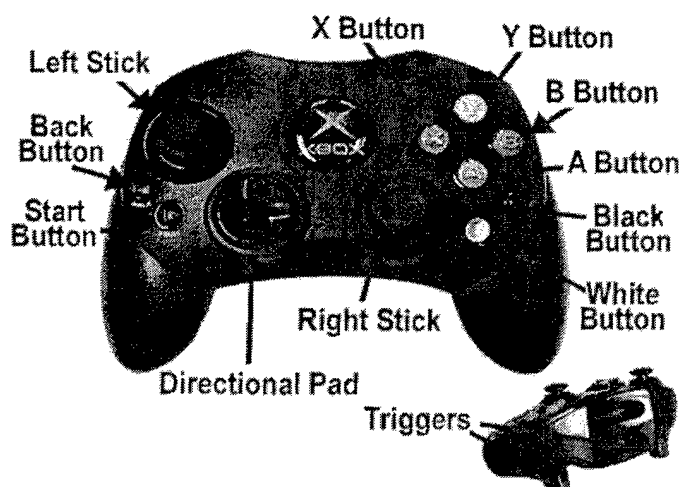


Figure 3. The X-Box Controller S.

FSW was designed to be played with Microsoft's X-Box computer entertainment system. At its heart is the Controller S (See Figure 3). The controller's simple design allows the player to browse through help menus using the directional arrows, and then confirm the action selection by pressing one of the buttons. Features include six analog buttons with 256 levels of sensitivity, two analog pressure-point triggers, one eight-way directional pad with two menu navigation buttons, two expansion slots for memory cards or other accessories, and one 9.8-foot cable with an inline release. The

eight-way digital direction pad allows for easy menu selection. The two analog joysticks can be operated with the thumbs. Likewise, the two analog triggers allow for one-finger operation. The

six color buttons are also easy to identify and access. A detailed Controller S diagram providing control feedback is provided at Appendix B. It is recommended that the diagram be reproduced, laminated, and used by the players until each player is familiar with the control settings.

Setting Up FSW

Setting up FSW is fairly straightforward (See Figure 4). On the back of the X-Box console you will see two connections. In the bottom left corner is the connection for the power cable. Insert the female end of the power cable into the male connection on the back of the console. Once the power cable is connected, you can connect the other cable, the video monitor interface. Two interface cables are provided, a standard interface cable and an RF (radio frequency) adapter cable. The choice of cables depends on the age of your monitor. If you have a more modern monitor with three connections, use the standard interface cable. You will use the RF adapter cable if you have an older monitor with only one input.

Installing Power and Interface Cables

NOTE: You will either install the standard interface cable or an RF adapter for older monitors.

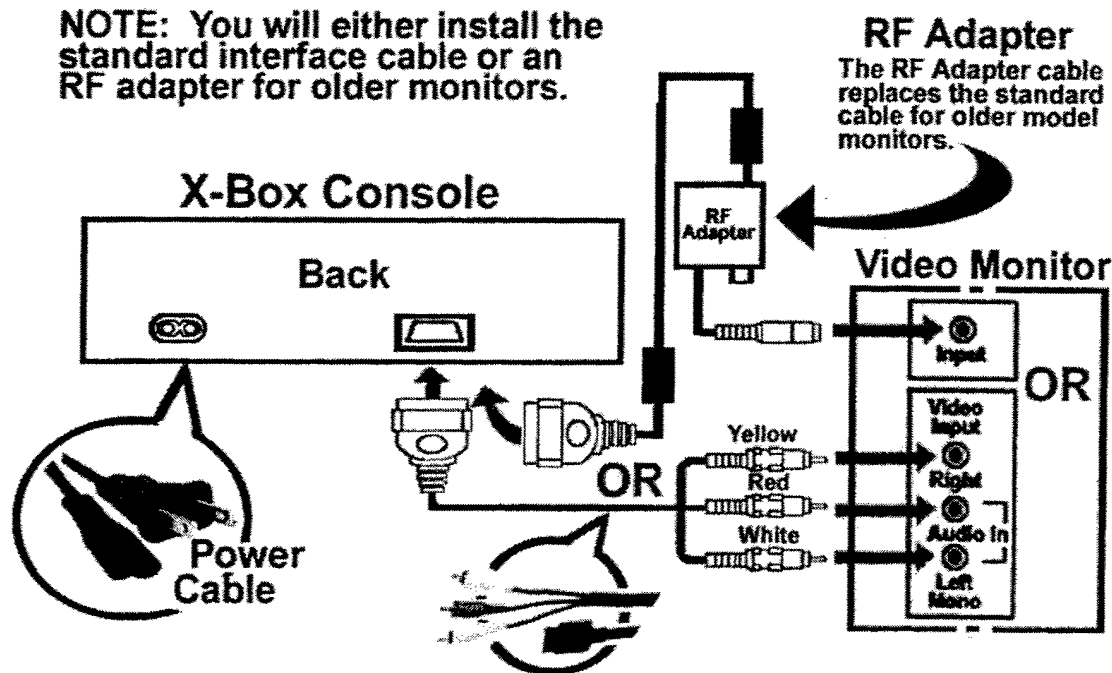


Figure 4. Installing Power and Interface Cables.

On the front of the X-Box console, you will find the power supply button, the disk tray, and the open disk tray button. You will also find four female ports numbered consecutively, one through four (See Figure 5 on next page). Place the male connection of the controller interface cable into the first controller port. The other three ports are designed for future use to integrate multiple FSW systems. These ports may or may not be issued with subsequent versions of FSW.

Microsoft X-Box Gaming Console

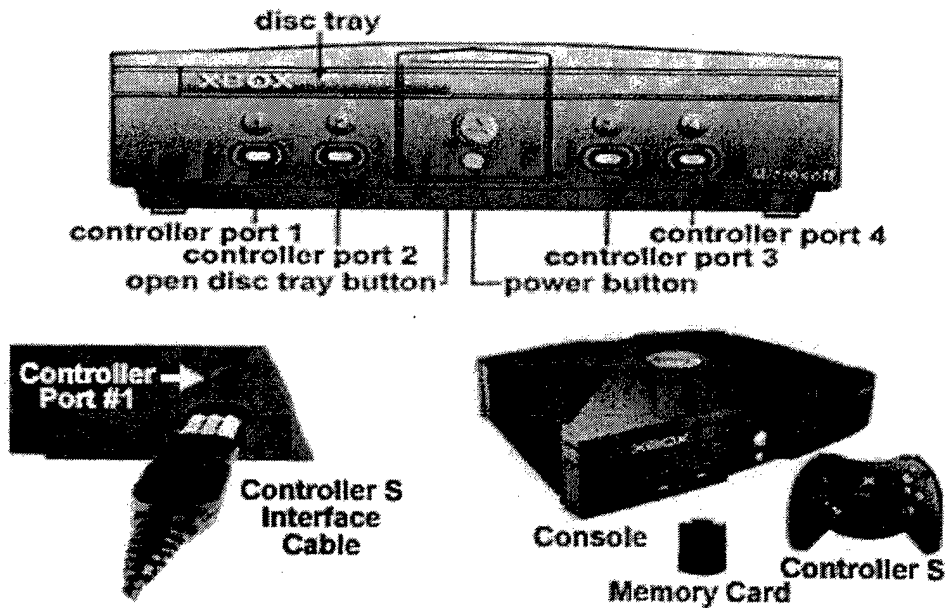


Figure 5. FSW Major Component Parts.

Installing The X-Box Memory Card

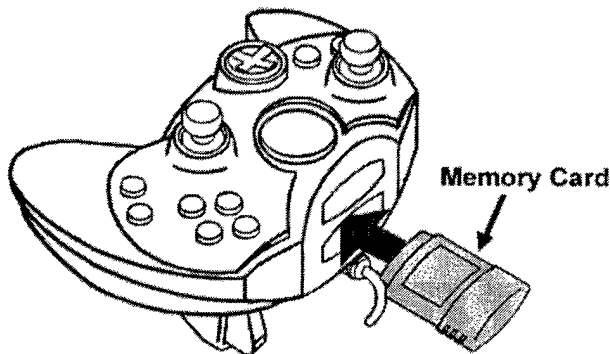


Figure 6. Installing a Memory Card.

The final connection is the installation of the *X-Box memory card* (See Figure 6). The X-Box memory card is used for temporary storage of completed games until the games can be moved to the system's hard drive. On the front of the controller are two large female ports. Although either port can be used for the memory card, the memory card should be inserted into the bottom port. The top port is to be used for a memory card attachment designed for future use to integrate FSW with an observer/controller. That attachment may or may not be issued with subsequent versions of FSW.

With the installation of the memory card, the system is ready to operate. The X-Box system is now tied to the source video monitor. Turn the power on to the video monitor. Some monitors require adjusting the channel to a specific location to operate in conjunction with other electronic devices. If that is the case, turn the monitor to the appropriate channel. Locate the power button on the front center of the X-box system. It is located just below the larger open disc tray button. Press the button to initiate power to the system.

Getting Started

Before continuing, it should be repeated that this version of FSW is a prototype. The controls and functions described in this TSP may differ from the final production version. A commercial adaptation of FSW is available now. It contains several software modifications and capability enhancements that differ from this prototype version. This training support package is specific to the U.S. Army version of FSW and does not apply to the commercial version.

With the electrical connections in place, it is now time to start the game. Corresponding power buttons for both the monitor and the console access the game. Normally, the monitor is turned on first. Refer to Figure 5 for the location of the console power button. Depending on its age, the monitor may require a specific channel setting (usually Channel 4) to operate in conjunction with other electronic components such as the FSW console. With power on to both units, the first screen to appear in the FSW prototype will be the *game launcher menu*.

The prototype FSW game launcher menu offers several selections to choose from (See Figure 7). The first two entries (AUDIO CONSOLE APP and DOLPHIN CLASSIC) were used for audio and animation technology demonstrations, respectively, and should *not* be opened. The third entry, FULL SPECTRUM WARRIOR at 235.61 MG, is the military prototype version and the selection of choice for training with FSW. The other FSW entry (777.39 MB [megabytes]) is a placeholder for the civilian version of FSW and should *not* be accessed. Two other entries, GAMEPAD and XBOX DASHBOARD, are located further down the menu and are accessed as the menu is scrolled. The GAMEPAD selection is a control test page for the X-Box Controller Tool. The X-box Dashboard is used to access the memory and several other key subsystems. Its use will be discussed later.

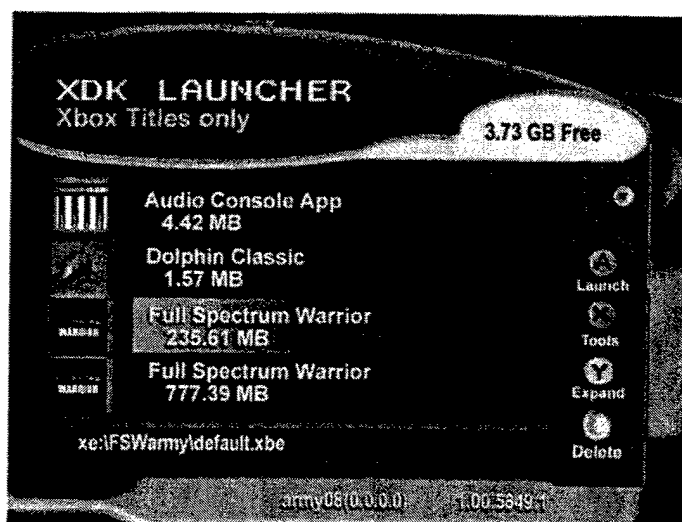


Figure 7. Game Launcher Menu.

The next step is to select the game. Remember, the third entry, FULL SPECTRUM WARRIOR at 235.61 MB, is the military prototype version and the selection of choice. To access the FULL SPECTRUM WARRIOR menu selection, use the **left stick** or **directional pad** (See Figure 8 on next page) to scroll through the menu and highlight the game. It is not necessary to enter any of the other menu selections at this time. Confirm the selection by pressing the **A button**. Should any of the other menu options be inadvertently selected, press the **open disc tray button** on the front of the X-Box console and press the **open disc tray button** again to close the tray. This will close the game out and return the player to the game launcher menu.



Figure 8. Initial Controls.

The Front Interface Menu

When FSW is accessed and the military version of FSW is activated from the game launcher menu, an animated X-Box logo screen (See Figure 9) will automatically appear. It will fade out and the *front interface menu* will appear (See Figure 10). The main user interface is how the player interacts with the game. The interface, transparent to the player, is designed around a series of menus and submenus.



Figure 10. Front Interface Menu.



Figure 9. Logo.

These menus help the player navigate through the game, provide feedback on events and pertinent information that impact the mission, aid the player's decision-making, and help compensate for the abstracted perspective of the digital simulation.

The front interface menu serves as the major branching tool to guide the player through the major functions of the main menu interface. It contains selections for logging in the game session, selecting and customizing missions, and viewing a controls diagram. Four major selections are present. These include MISSIONS, CONTROLS, LOGIN, and REPLAY. All four functions will be discussed in this section. However, a more detailed step-by-step discussion of the REPLAY function is provided in the AAR section.

To access any of the four functions, use the **left stick** or **directional pad** to highlight the appropriate selection. By default, the MISSIONS button is automatically highlighted when the front menu screen is accessed. Scroll through the selection until the desired function is highlighted. Confirm the selection by pressing the **A button**. Although the selections can be accessed in any order, it is recommended that the MISSION function be accessed first in order to establish personalized missions for each of the players by using the login field.

Selecting Login



Figure 11. Login Menu.

To operate the login menu, the **left stick** or **directional pad** is used to highlight the appropriate letters on the interface. The interface contains both letters (A-Z) and numbers (0-9). The default is set so that the letter "A" automatically comes up highlighted. Once a letter is highlighted, the **A button** is pressed to confirm the selection (Figure 12). As letters or numbers are selected from the interface and confirmed by the A button, they will appear sequentially in the large block below the interactive interface.

The *login menu* (Figure 11) creates personalized missions so that data and playback can be saved for training and AAR purposes. Naming the completed games allows for fast and easily recognition of the mission files. Once the login selection is made from the front interface menu, the login menu will appear. It consists of an interactive interface, a large block below the interface where entries are recorded, and an **ACCEPT** button. The **ACCEPT** button is used to confirm completion of the mission file name.

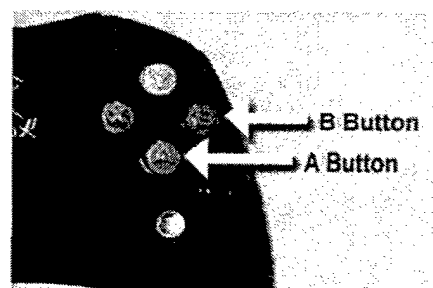


Figure 12. A & B Buttons.

A space selection, marked "SPC", allows the player to put a space between two letters. To accomplish this, type out the first segment prior to the space. Highlight the SPC selection in the interface menu and press the **A button** to confirm inserting a space. A space will be inserted to the right of the last letter entry. Complete the login title by selecting and confirming the letters of the follow-on segment.

A delete button (DEL) is also provided. If a mistake is made, such as the spelling of a player's name, highlight the DEL selection and press the **A button**. This action will delete the

right most character in the confirmation block. With the DEL selection highlighted, repeat pressing the **A button**. Each time the A button is pressed, the right most character will disappear.

Once the mission file is correctly named, use the **left stick** or **directional pad** to scroll the cursor to the accept button. Press the ACCEPT button at the bottom left hand corner of the screen. The ACCEPT button will highlight. Press the **A button** to confirm the final login name choice. Once the A button is selected, the screen will automatically return to the front interface menu. Another option is to press the **B button** to return the player to the front interface menu without confirming the login title. It is recommended that the B button option be used only for practice sessions. For mission files that are to be used in conjunction with training sessions and AARs, file names should be established.

FSW will save missions played, including the practice session tutorial, to its hard drive memory. However, it will only replay the most recently saved mission. There is no way to retrieve saved missions from the hard drive. Missions that are saved to the hard drive can be transferred to the memory chip, and then copied to another hard drive. These missions can be replayed from the hard drive so long as the hard drive does not contain any previously saved missions.

Selecting Controls

The **controls** selection of the front interface menu provides two diagrams of the X-Box Controller S and the associated control sets to help players learn the control settings. The diagrams consist of a top-down or overhead view of the Controller S surrounded by standard or default settings or nudge or individual ordering control settings. By default, the standard or default settings appear when the screen is activated. The nudge or individual ordering control settings are used when issuing commands to individual Soldiers while in the individual ordering mode. To activate the nudge control setting diagram, use the **directional pad** or **left stick** to highlight the nudge selection. Press the **A button** to confirm the selection and the nudge control settings will appear. To return to the standard or default settings, use the **directional pad** or **left stick** to highlight the nudge field. Press the **A button** to confirm the selection and the nudge control settings will appear. To return to the front interface menu press the **B button**.

Selecting Replay

After a mission ends, several report screens will appear that present information for use during FSW's internal AAR function. The non-interactive displays includes map, squad, OPFOR and statistics, and mission report summaries. Additionally, a **mission playback feature** enables the player to view a recording of each mission and use it as part of the AAR immediately following the statistical displays. Optional functions of the mission playback feature include the ability to play the battle faster, pause the action, and free fly the camera (change the visual angles of the presentation) around the environment. Moving the **left stick** or the **directional pad** to the REPLAY selection accesses the mission playback feature. Once the replay selection is highlighted, press the **A button** to execute the selection. Once selected, the replay of the most recent mission will begin. A detailed discussion of the mission playback feature is contained in

the AAR Section.

The mission playback feature is critical for AAR purposes. However, its use is *not* necessary for tutorial practice sessions. To save valuable training time, it is recommended that this function not be included as part of the tutorial practice sessions, but must be learned by the platoon leadership to aid players once the training mission begins.

Selecting the Mission

When the front interface menu is displayed (See Figure 10), the MISSION selection is highlighted by default. To begin a game or to develop a demonstration tutorial, a mission must first be selected. With the exception of selecting a mission, it is not necessary to view any or all of the remaining selections to practice or play an FSW mission. However, to build a demonstration or to customize any follow-on missions, each must be accessed and the necessary changes implemented prior to beginning the game. To access MISSION, press the **A** button.

Once the mission selection on the front interface menu is pressed, a *mission selection menu* appears (Figure 13). There are two boxes on the menu. The first is a graphic depicting a scene from the mission that includes the mission name. The second box lists the mission number. By default, Mission 1: Malnika appears already highlighted. Missions can be selected from six possible scenarios (Malnika Street, The Delivery, Election Day, Red Cross, Hide and Seek, and Invasion). Each scenario is numbered consecutively. A synopsis of each scenario was provided on pages 2-3.

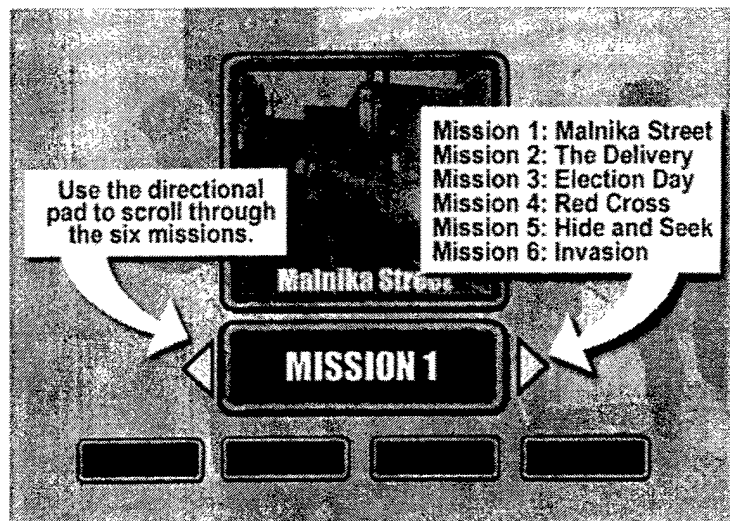


Figure 13. Mission Selection Menu.

The sequence of the scenarios does *not* imply a progressive degree of difficulty. Using the default settings and based on existing mission requirements and environmental conditions (including enemy default settings), the following sequence would roughly capture the degree of difficulty starting from the easiest mission through the most complex:

- Mission 2: The Delivery
- Mission 3: Election Day
- Mission 5: Hide and Seek
- Mission 1: Malnika Street
- Mission 4: Red Cross
- Mission 6: Invasion

Bear in mind that this analysis was based on tactical considerations using the existing default setting. Varying degrees of difficulty can be added to each scenario by adjusting menu selections for each mission. This process is discussed below.

It is recommended that Mission 5: Hide and Seek be chosen for the demonstration tutorial. The open terrain allows each player to learn how to use each of FSW's functions and controls and to practice maneuvering the fire teams. Establishing minimal mission parameters (explained in detail later in this section) will aid in the training. During the demonstration, keep the individual player limited to the courtyard where the scenario begins. Allowing the players to traverse additional terrain could corrupt the scenario for future use if the Soldier becomes too familiar with the terrain.

To choose a specific mission, use the **directional pad** or **left stick** to scroll through the six available selections until the desired mission is highlighted. Press the **A button** to confirm the selection. If an error was made in selecting the correct mission and the next menu, then the mission selection submenu appears and the **B button** can be used to return to the mission selection screen where the process can be reapplied to select the correct mission.

With the mission selection completed, the next screen that will appear is the *mission selection submenu* (See Figure 14). When the mission selection submenu screen first appears, the LAUNCH field will be highlighted by default. Additionally, a series of four submenu editors are displayed in the form of four large blocks. The four editors are the MAP, SQUAD, MISSION BRIEFING, and ROE (Rules of Engagement) Editors. To access any of the submenu editors, use the **left stick** or **directional pad** to highlight the appropriate block. In addition to the highlight, the field will change from colors to a black-and-white view to help identify the selected field.



Figure 14. Mission Selection Submenu.

Once the desired editor or submenu is highlighted, press the **A button** to enter the menu. Press left or right on the **left stick** or **directional pad** to change a parameter value, and then up or down to other selections as applicable. After the parameters within an editor are made, highlight the ACCEPT field at the bottom left hand corner of the screen and press the **A button** to return to the mission selection submenu. When all of the changes are implemented in all four editors, press the LAUNCH field on mission selection submenu to confirm the changes and continue with the mission set-up. To restore the default settings in any of the editors, highlight the DEFAULTS selection and press the **A button**. The **B button** can also be used to cycle back to the mission selection menu.

The mission selection submenu serves as the means for changing parameter settings for the Map, Squad, and ROE Editor menus and viewing the mission briefing. Parameters establish a set of physical properties whose values determine the characteristics or behavior of the OPFOR, civilians on the battlefield (COB), some environmental conditions, team member behavior, and what objective-specific data the player wants viewed. A listing of the parameters, available values, and a description of the behavioral characteristics of select settings are in the chart at Figure 15.

Parameter	Available Values	Description
OPFOR Presence	Small/Medium/Large	Adjusts number of OPFOR "random encounters". Does <i>not</i> affect mission-specific OPFOR programmed to appear every time.
OPFOR Aggression	Low/High	Changes level of initiative the OPFOR is willing to take to engage player. High causes enemy AI to engage in a high frequency of assault behavior.
Civilian Presence	Small/Medium/Large	Controls number of civilians placed on map, that increases problems player must work around during mission.
Civilian Aggression	Low/High	Likelihood of civilians "getting in the way" of an operation. Low setting has civilians going about their business and avoiding violence. High setting results in antagonistic behavior.
Wind Direction	N/S/E/W/NE/SW/SE	Direction that wind will come from during mission.
Wind Speed	None/Low/High	Wind speed during mission
Show OPFOR	No/Yes	If set to yes, displays a red enemy sighted icon during mission play.
Team Member Training Status	Untrained/Practice/Trained	Customizes experience level of Soldiers. Trained Soldiers perform correctly and follow doctrine. Untrained Soldiers exhibit unfocused behavior, poorer shot accuracy, and longer reaction times.

Figure 15. Map Editor Parameters

Selecting the Map Editor

The *map editor* is the upper left block of the mission selection submenu containing the term URBAN. The map editor is used for changing OPFOR and COB mission parameters. When the block is highlighted, the text changes to read MAP SETTINGS and the colors will change to a black-and-white view. To enter the editor menu, use the **left stick** or **directional pad** to highlight the block. With the block highlighted, press the **A button** to execute the change. When the screen appears (Figure 16), the OPFOR Presence parameter will appear highlighted by default. Press left or

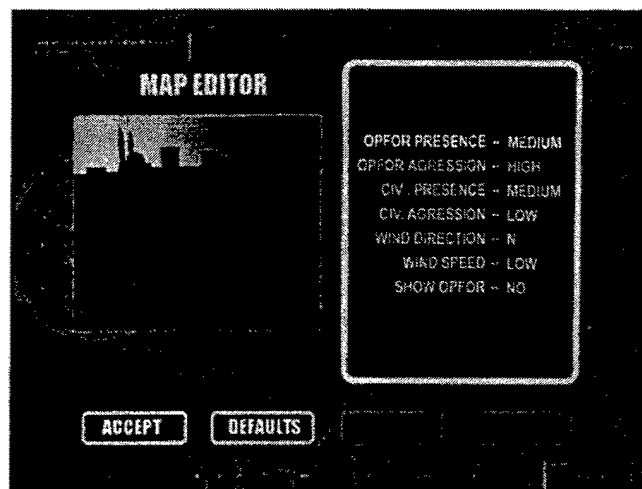


Figure 16. Map Editor Menu.

right on the **left stick** or **directional pad** to highlight and change a parameter value, and then up or down to other selections as applicable. Once the desired parameters within the editor are made, highlight ACCEPT at the bottom left hand corner of the screen and press the **A button** to return to the mission selection submenu. To restore the default settings, highlight DEFAULTS and press the **A button**. The **B button** can also be used to cycle back to the mission selection menu, retaining the default settings.

Selecting the Squad Editor

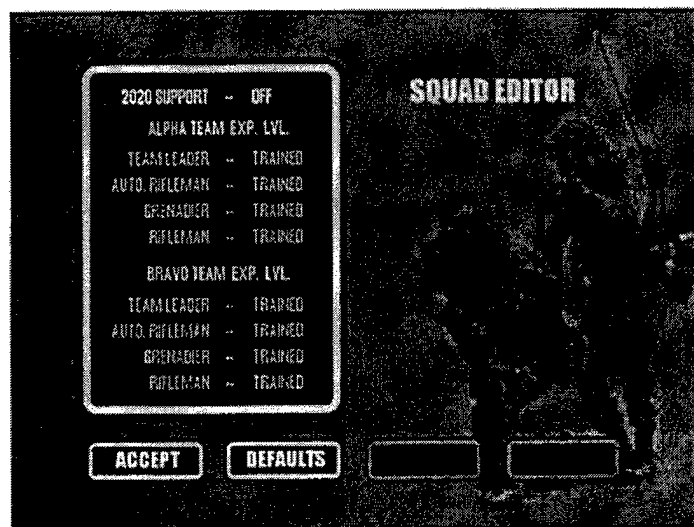


Figure 17. Squad Editor Menu.

The *squad editor* is the upper right block containing the term SQUAD. The squad editor is used to change the experience level of the squad members. When the block is highlighted, the text changes to read SQUAD SETTINGS and will change from colors to a black-and-white view. To enter the editor menu, use the **left stick** or **directional pad** to highlight the block. With the block highlighted, press the **A button** to execute the change. When the squad editor menu screen appears (See Figure 17), the phrase, "2020 Support - OFF" will appear highlighted by default.

Disregard this parameter. It is *not* used in the prototype version of FSW.

Additionally, it is *not* recommended that the training level of the fire team

members be changed from the default setting of trained. This is especially true for setting up the demonstration tutorial. However, during independent play, separate from the squad training, players can experiment with the settings if they choose.

To make changes to the experience level of the team members, press left or right on the **left stick** or **directional pad** to highlight and change a parameter value, and then up or down to other selections as applicable. Once the desired parameters within the editor are made, highlight the ACCEPT field at the bottom left hand corner of the screen and press the **A button** to return to the mission selection submenu. To restore the default settings, highlight the DEFAULTS selection and press the **A button**. The **B button** can also be used to cycle back to the mission selection menu, retaining the default settings.

Selecting the Rules of Engagement (ROE) Editor

The *ROE editor* is the bottom right block on the mission selection submenu, containing the abbreviation R.O.E. The ROE editor is used to change the rules of engagement parameters. The rules of engagement are not military rules of engagement, rules that dictate engagement and Soldier behavior given specific criteria in battle, but rules for playing the game.

When the block is highlighted, the text changes to read VIEW R.O.E. and will change from colors to a black-and-white view. To enter the editor menu, use the **left stick** or **directional pad** to highlight the block. With the block highlighted, press the **A button** to execute the change. When the ROE editor menu screen appears (See Figure 18), the phrase FRIENDLY DEATH will appear highlighted by default. ROE parameter categories include friendly (team member) death, friendly injury, civilian death, civilian injury, time limit, report interval, and weapons hot.

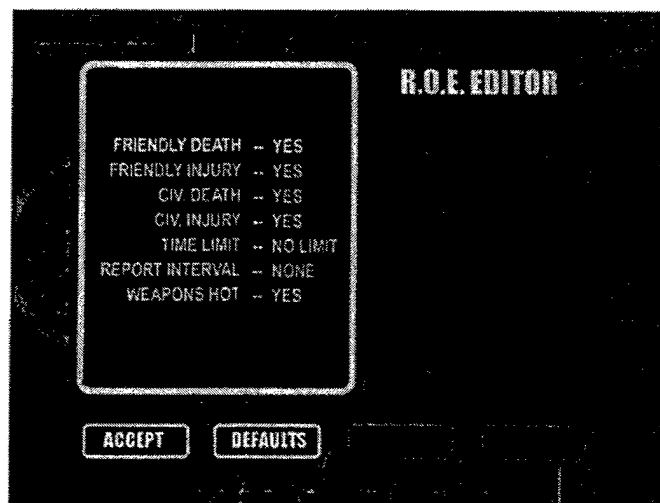


Figure 18. ROE Editor Menu.

The FRIENDLY DEATH, FRIENDLY INJURIES, CIVILIAN DEATH, and CIVILIAN INJURY parameters are critical during mission training. The "YES" or "NO" settings determine whether friendly (fire team member) and COB deaths and injuries can occur during the mission. The parameters should be set for "YES" for all training missions. For the demonstration tutorial, the parameters should be set for "NO". This will allow the player to learn the use of controller without suffering casualties.

Establishing a TIME LIMIT in which to complete a mission adds an additional degree of difficulty to the missions. The time limit can be set for each mission by changing the TIME LIMIT parameter. The parameter can be adjusted in five-minute increments up to 60 minutes. It is recommended that no time limits be set for the first few missions or until the players acquire a comfort level with their knowledge of operating the controller.

The REPORT INTERVAL establishes mandatory reports to be scheduled during the mission from the player. The REPORT INTERVAL parameter can be adjusted from no required reports to required periodic reports at five-, ten- and 15-minute intervals for the duration of the mission. It is not recommended that REPORT INTERVAL be used. Reporting should be situational dependent, not time dependant. If additional emphasis is needed in obtaining reports from the subordinate players, it is recommended that the platoon chain of command pause the mission soon after player's fire teams make contact with the enemy. The platoon leadership can then explain why there was a need for the report and the report's format and content based on Army standards.

To recap, when creating the demonstration tutorial, it is recommended that the TIME LIMIT be set for "NO LIMIT" and the REPORT INTERVAL set at "NONE". Selecting "YES" for the WEAPONS HOT parameter will ensure that the team members will always keep their individual weapons at the ready. It is recommended that this parameter *never* be changed from the "YES" selection, regardless of the training. All other parameters should be set for "NO".

Most of the parameter settings should be set for "YES" when conducting the individual training missions.

To initiate ROE parameter changes, press left or right on the **left stick** or **directional pad** to highlight and change a parameter value, and then up or down to other selections as applicable. Once the desired parameters within the editor are made, highlight the ACCEPT field at the bottom left hand corner of the screen and press the **A button** to return to the mission selection submenu. To restore the default settings, highlight the DEFAULTS selection and press the **A button**. The **B button** can also be used to cycle back to the mission selection menu, retaining the default settings.

Selecting the Mission Briefing Interface

The lower left block on the mission selection submenu containing the mission name is the selection containing the *mission briefing interface*. The mission briefing interface is the location for the mission briefing. When the block is highlighted, the text changes to read VIEW BRIEFING and the colors will change to a black-and-white view. To enter the menu, use the **left stick** or **directional pad** to highlight the block. With the block highlighted, press the **A button** to execute the change.

When the *mission briefing screen* appears (Figure 19), it will contain a top down view of a sector sketch of the operational area and a scroll-down block containing an abbreviated fragmentary order (FRAGO) of the mission.

Although the format of the FRAGO is not consistent with Army doctrine, there is enough information to complete the corresponding missions. Relevant objective-specific data will be noted on the map. These data include the start or deployment

point for of the fire teams, confirmed enemy positions, and objectives. All of the buildings on the sector sketch are numbered to allow for easy reference and reporting. The locations of specific buildings required for the success of the mission are also highlighted. The locations of the maneuvering teams are updated on the map as the mission progresses. The respective fire teams locations are identified through the use of the terms ALPHA and BRAVO.

The **left stick** or the **directional pad** can be used to scroll the text for the FRAGO. However, the **left stick** is recommended because the movement is much more fluid. When the mission briefing has been reviewed, use the **left stick** or **directional pad** to highlight

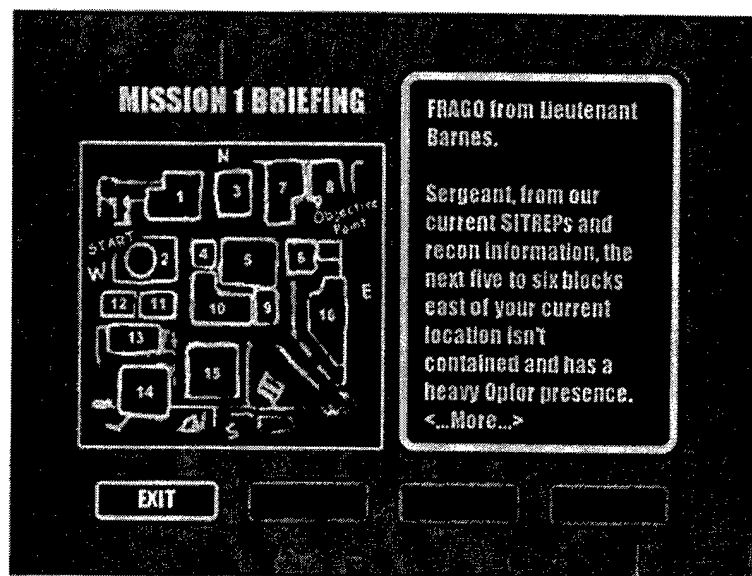


Figure 19. Mission Briefing Screen.

the EXIT field and press the **A button** to return to the mission selection submenu.

Once all of the appropriate changes have been completed in the submenu editors and the mission briefing has been viewed, press the **A button** to return to the mission selection submenu. Highlight the LAUNCH field by using the **left stick** or **directional pad**, then press the **A button** to confirm the selection. This will bring up a loading screen (Figure 20). The screen consists of the Army logo with a green-colored bar that runs laterally across the bottom of the screen. As the mission is uploaded, a highlighted bar will appear moving across the darker loading bar to indicate that the computer is loading the mission. The loading screen will automatically disappear when the mission is loaded, and the equipment allocation interface menu will appear on the screen.

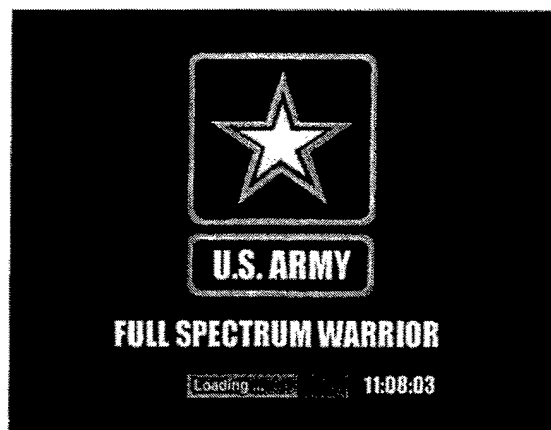


Figure 20. Loading Screen.

Changing the Equipment Allocation

The *equipment allocation interface* allows the player to cross-level or swap ammunition between individual Soldiers within the fire team, or between the two fire teams before the mission begins. The default is set for standard Army procedures, but the player may need to initiate changes to better suit a given mission. The equipment allocation menu (Figure 21) displays icons and lettered abbreviations for each member of both fire teams, as well as the circle REP, the equipment repository. The repository serves as a supply point, the means to cross level ammunition. The menu's default lists all ammunition at zero balance until the player selects team members from which to cross level ammunition. When individual Soldiers or the repository are selected, the repository listing changes. The repository will indicate that it contains 6 loaded M4 magazines, 6 SAW magazines, and 4 M406 high explosive rounds for the M-203 Grenade Launcher.

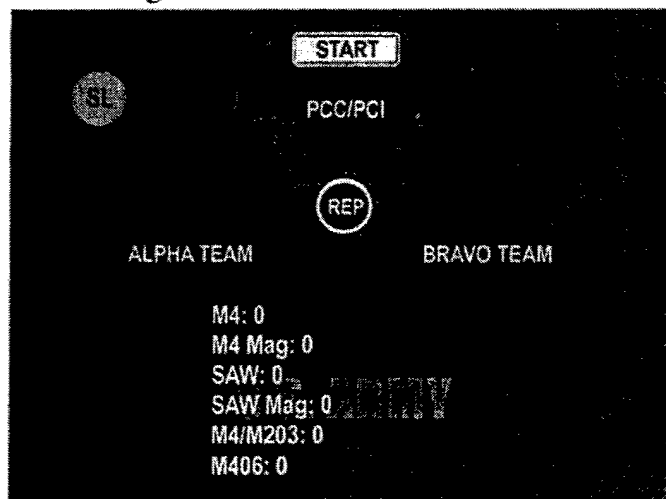


Figure 21. Equipment Allocation Menu.

When the screen appears, the **START** field is highlighted by default. The **B button** can be used to exit the menu at any time. If no ammunition changes are to be made, press the **A** or **B button** to begin the mission. If changes are to be made by cross-leveling ammunition, avoid pressing the **A** or **B button** until all changes are implemented. Selecting the **A** or **B button** with

the START field highlighted will begin the mission.

To cross-level ammunition, highlight two team members or a team member and the repository. Use the **left stick** or **directional pad** to move between and highlight the icons. As the player cycles through each individual Soldier, that individual's portrait is displayed on the screen. The Soldier's primary weapon (P), ammunition status (A), and secondary weapon and ammunition status (S) are also displayed on the screen below the portrait. For example, the entry for the grenadier may read, "Grenadier, Bravo or Alpha (team), M4/M203 – 3 mags (magazines) for the M4 Carbine, and M406 – 36". The reference to the M-203 Grenade Launcher as the "M406" is incorrect. In actuality, the M406 is the M406 High Explosive Round, one of six types of rounds available for the M-203.

The player should notice that the secondary weapon and ammunition for the team leader, the automatic rifleman, or SAW gunner, and the rifleman are the M67 High Explosive Fragmentation Grenade and the AN-M83 Smoke Hand Grenade. Because the references are simply to the "M67" and "AN-M83", Soldiers may become confused between the two grenades, a situation that may result in friendly injuries or fratricides. The problem with the nomenclatures should be brought to the players' attention during this set-up for their respective missions. A helpful hint is to associate "AN" with smoke.

Once the player highlights the first Soldier to be included in the cross leveling, press the **A button** to confirm the selection. The icon for that Soldier will remain highlighted. Use the **left stick** or **directional pad** to continue moving through the selection cycle of Soldiers or the repository. As the selection continues, each Soldier's position will highlight. That selection's portrait and information will appear to the right of the original Soldier's portrait. Once the second Soldier is identified or the repository is selected, press the **A button** to confirm the selection. Both Soldiers' portraits and information will remain highlighted to indicate that these are the two Soldiers to be included in the cross leveling. If the player makes a mistake and does not want the Soldiers or repository he selected in the cross-leveling, just press the **A button** to deselect the two highlighted icons and repeat the initial selection process.

The selections must be compatible. Ammunition cannot be traded or cross-leveled between two Soldiers and the repository if the receiving Soldier does not have the weapon to support it. For example, SAW ammunition cannot be issued to either the grenadier or the team leader. Nor can the rifleman carry M-203 ammunition. By default, the rifleman is the only team member that carries smoke grenades. The team leader and the automatic rifleman carry fragmentation grenades. If desired, the grenades can be cross-leveled with the rifleman carrying fragmentation grenades and the team leader or the automatic rifleman now assigned smoke grenades. Grenade types cannot be mixed. The grenadier will *not* carry any hand grenades.

With both the receiving and issuing icons highlighted and portraits displayed, initiate the cross level by pressing the **A button**. Immediately, an arrow will appear between the two Soldier portraits or the Soldier and the repository (Figure 22 on the next page). Use the **left stick** or **directional pad** to move the arrow up and down. As this arrow moves, the player should notice that the arrow points to compatible ammunition on either side of the portraits. Move the arrow to the desired ammunition to be cross-leveled by using the **left stick** or **directional pad** to

move the arrow to the left or right portrait. As the arrow is moved into one of the portraits, the ammunition will be cross-leveled.

For grenades, the switch is four-for-four. In other words, four smoke grenades will be given to either the team leader or the automatic rifleman, and four fragmentation grenades will be given to the rifleman, or vice versa. Cross-leveling other system ammunition is slightly different. As the **left stick** or **directional pad** is used to move the arrow to the left or right, compatible ammunition is added or subtracted from one location to the other, one M4 or SAW magazine or one M-203 round at a time. When cross leveling is complete, press the **A button** to return to the equipment allocation interface menu. With all selections completed, select the **B button** to begin the mission or the demonstration tutorial.

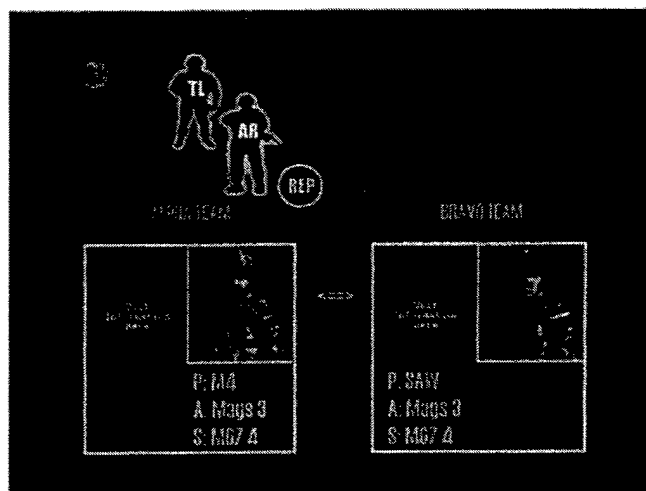


Figure 22. Equipment Allocation Menu.

Controls and Functions

This section discusses the various controls and functions of FSW, their application, and the manual processes for initiating commands. Controls are the various means of initiating FSW actions or functions through the manipulation of buttons, sticks, and pads on the X-Box Controller S. Functions are the capabilities of the system and how they operate.

This section is designed to be reviewed in conjunction with executing a practice session in the demonstration tutorial. It is recommended that the written text portion corresponding to each control or function be reviewed, then, where applicable, the controls should be physically manipulated by each player to initiate the described procedure or function. The text is written so that a novice game player will understand each control and function. Given the different experience levels of the individual Soldiers, much of what is provided in written text will be an oversimplification for the more experienced game players. For these Soldiers, there is no need to have them physically initiate each command. It is more important that the training be relevant to their experience level. The amount of time used for each practice session should be adjusted accordingly.

Main User Interface

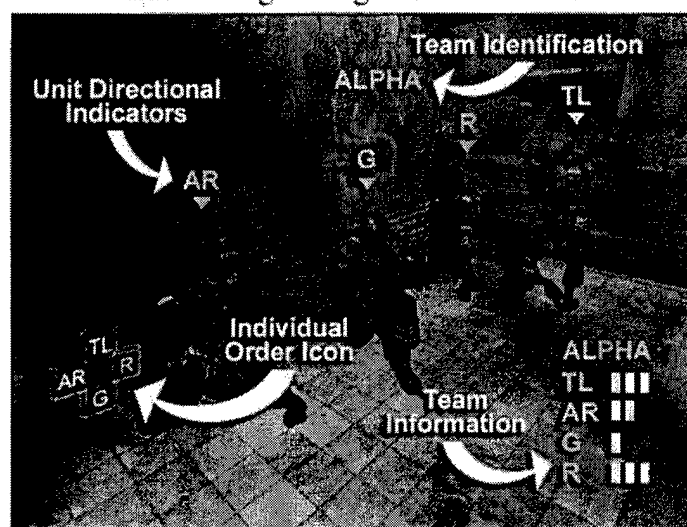
The main user interface is how the player interacts with the game. In the case of FSW, graphical control images and terms are used to help the player navigate through the game. The interface also provides feedback to the player on events and pertinent information that

impact the mission. Still other user interface functions are designed to aid the player's decision-making and to compensate for the abstracted perspective of the digital simulation.

The main user interface is transparent to the player with the exception that some standard live-action information is portrayed on the screen throughout the mission. This information includes the fire team and individual Soldier selected, the individual order control icon, and the ammunition status for each individual team member. If the squad leader is attached to the selected fire team, he is also visible, as is the pertinent identification and ammunition status.

Unit Directional Indicators

The selected fire team is identified by the corresponding terms of either "ALPHA" or "BRAVO" displayed above the team. *Unit directional indicators* identify individual Soldiers. These are small orange triangles that either float above each Soldier's location, or point around



the edge of the screen to indicate the general direction of the individual outside of the viewable screen area. Each triangle is accompanied by standard two-letter abbreviations for the individual Soldier's duty position within the fire team. "TL" indicates that the Soldier is the team leader. "AR" identifies the automatic rifleman. "G" is used to denote the grenadier. The letter "R" indicates the rifleman. The letters "SL" are used to identify the squad leader. The individual order control icon and ammunition status will be discussed later in this section. The information found in the standard interface is shown in Figure 23.

Figure 23. Standard Interface Information.

Fatality and Injury Feedback

Additional feedback information is provided throughout the operation. This includes the fatality and injury status of individual squad members, waiting time, the marking of identified enemy forces, and immediate operational success or mission failure cases. The game will immediately report *fatality and injury feedback* near the top left portion of the screen. As injuries occur, fire team members will announce, "Man down". The team position, casualty name and medical status will appear in red lettering near the top left of the screen. For example, if the Alpha Team grenadier is wounded, then the screen will indicate, "G: PFC Mendez injured (or KIA [killed in action], if applicable)." The phrase, "We've got wounded." is used to remind the player that injured Soldiers will die within a short time if not treated. The other feedback indicators such as waiting time, the marking of identified enemy forces, and immediate operational success or mission failure, will be discussed later in this section.

Team Information Icon

Fire team members will verbally state when they are out of ammunition by saying, "Out of ammo." The individual team members provide no other ammunition status. A **team information icon** (Figure 24) provides ammo status. The icon is located at the bottom right corner of the screen. Beside the lettered abbreviation of each individual team member's position is a series of yellow blocks representing the number of magazines each Soldier has left for their primary weapon. The icon also indicates which team is selected. The icon is automatically updated by removing team positions as those casualties occur and the number of magazines is reduced as ammunition is expended.

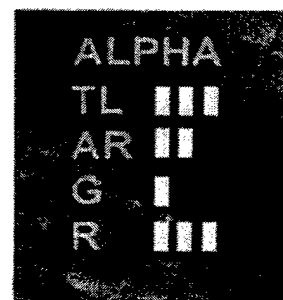


Figure 24. Team Information Icon.

The team information icon also indicates which fire team is selected. FSW allows the player to select either fire team to perform various activities. As a team is selected, the visual perspective of the game changes to provide the player a better view of the environment. To select a fire team, press the **B button**. Team information will automatically switch to display the selected team's information. Simultaneously, the camera perspective will immediately move through the environment and readjust itself behind the team leader of the selected fire team.

Individual Order Icon

The **individual order icon** (Figure 25) is located near the bottom left hand corner of the screen, opposite the team information icon. It is part of the **individual ordering interface**. The interface is the means of giving orders to individual Soldiers and a way to access a specific Soldier from the selected fire team. The icon indicates which individual Soldier has been selected. Individual order assignments include nudge (making small adjustments to the individual Soldier's position), firing the M-203 Grenade Launcher, and throwing a hand grenade. The individual order icon will only select mission-capable Soldiers. Soldiers that are wounded or dead cannot be selected. The procedures for throwing a hand grenade will be discussed later in this section.

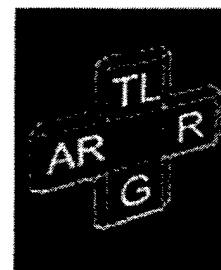


Figure 25. Individ. Order Icon.

Pressing in any direction on the X-Box controller's directional pad accesses the individual ordering interface. Team positions are located on the ends of the cross-shaped pattern on the directional pad. Standard team position abbreviations are represented on the icon (Figure 26) that matches the movements on the directional pad. To select an individual squad member, first select the desired fire team by pressing the X-Box controller's **B button**. Once the correct team is selected, press the controller's **directional pad** in the corresponding direction of the desired individual squad member. Pressing up on the directional pad will select the team leader (TL). Pressing down on the

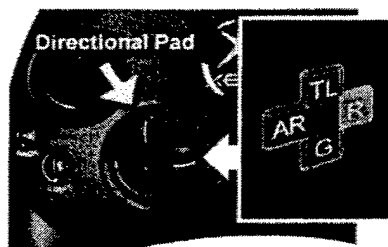


Figure 26. Directional Pad.

directional pad will select the grenadier (G). Pressing left on the directional pad will select the automatic rifleman (AR). Pressing right on the directional pad will select the rifleman (R). Once selected, the corresponding team member's position will become highlighted. On the screen, the camera perspective will immediately move through the environment and readjust itself behind the selected individual. All team-relevant icons will be replaced with specific information about the status of the individual Soldier.

There are two ways of leaving the interface and returning to control the fire team. Pressing the **X button** will cancel out of the individual ordering mode and return to the main interface with the currently selected team. Pressing the **B button** will cancel out of the individual ordering mode and return to the main interface, but with the opposite fire team.

Waiting Time Icon

The *waiting time icon* signifies that the computer needs time to process an ongoing action. The waiting time icon, in the shape of an hourglass, appears immediately after an individual or team order is given. The icon indicates that the computer is processing the order. No further action orders can be given to the fire team while the current order is being executed. While the icon is visible, the squad leader cannot direct any other actions except hold up. Figure 27 shows an example of the waiting time icon.

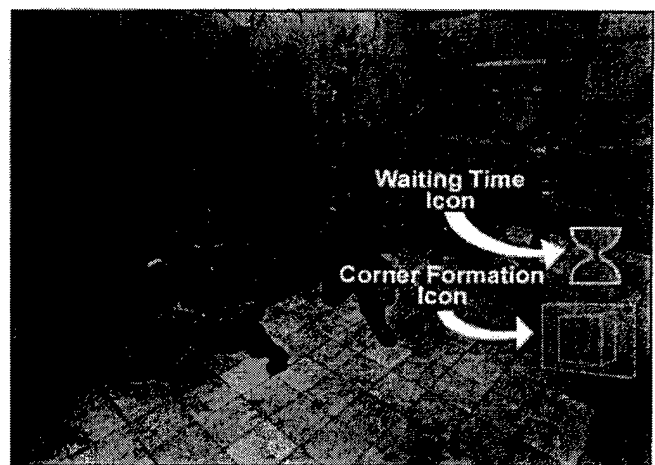


Figure 27. Waiting Time Icon.

Enemy Sighted Icon

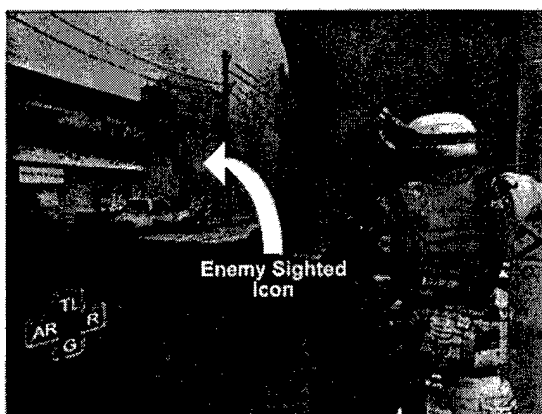


Figure 28. Enemy Sighted Icon.

The presence of an *enemy sighted icon* (Figure 28), in the form of a red arrow, indicates that the squad has detected (through direct line-of-sight) an OPFOR Soldier or is receiving fire from the enemy which has direct line-of-sight with at least one friendly team member. The icon was added because it may be difficult for the player to recognize what his fire team sees because of his removed perspective. It also helps offset the potential for poor monitor resolution or cluttered background interfering with easy recognition. The icon pointing to the OPFOR will stay on the screen as long as at least one of the squad members can see the enemy by line-of-sight or the squad leader has positioned the camera (a third-person perspective overwatching the fire team) so

that the OPFOR can be observed. If one of these conditions does not apply, then the enemy sighted icon will disappear. If a fire team member sees an enemy, he will announce either "Enemy, enemy, enemy" or "Enemy sighted" (See Game Shouts, below.). If the team is receiving fire, a team member will announce, "Incoming fire" or "Enemy fire." If a team member has killed or wounded the enemy threat, the squad member will announce, "Got one" or "Enemy down." The disappearance of the icon alone does *not* mean that the threat no longer exists. It simply means that no team member from the currently selected fire team can see the threat.

Game Shouts

One of the first things that the player will notice is the verbal communication by fire team members. This verbal communication is called *game shouts*. They should not be ignored as simply background chatter. Most game shouts are used to confirm the order given by the player. Other instances provide cues to alert the player and improve his situational awareness. There are many examples. When the action cursor is selected moving the fire team to another location, the team leader will confirm the selected movement by saying, "Bravo team, move up against the wall", or "Bravo team, move to the corner". If a team member has killed or wounded an enemy combatant, the squad member will announce, "Got one" or "Enemy down." If a fire team member sees an enemy, he will announce, "I see a bad guy," "Enemy, enemy," "Enemy, enemy, enemy," or "Enemy sighted," depending on the situation. If the team is receiving fire, a team member will announce, "Incoming fire" or "Enemy fire."

Some phrases have specific meanings and are important cues during the mission play. For example, if the phrase "heavy incoming fire" is used, then there is a high probability that friendly Soldiers have been positioned so that casualties will occur. The player must act immediately to avoid further casualties. In another example, the game shout, "We've got wounded" is used to remind the player that injured Soldiers will die within a short time if not treated. These examples should be brought to the player's attention during the AAR as prompts for either taking action or the need to perform an alternate course of action from the one chosen by the player.

Action Cursor

The *action cursor interface* allows the player to maneuver through the environment, line up in specific formations, and interact with the elements of the environment. Like the main menu interface, it is transparent to the player. Fire team movements and various other functions are accessed through corresponding controls on the X-Box controller. The primary function is the action cursor.

The *action cursor* (Figure 29) is in the shape of an orange rotating vector cone. The bottom tip of the cone marks the center of mass location that the player wants the selected team to move to. Accompanying the vector are one to five circles marking the exact placement of the fire team members (four team members plus squad leader, if moving with that team) when the projected move is completed. A yellow circle indicates the senior leader's position, either the team leader or the squad leader, accompanying that fire team. Making minute movements with

the action cursor can shift the senior leader's location in relation to the other team members. Corresponding orange circles mark the remaining team members' positions. There is an orange circle for each team member. Should the fire team suffer casualties, the number of circles is automatically reduced accordingly.

The action cursor is displayed on the screen when the **left stick** is pressed in any direction while in the main menu interface (playing the game). As the left stick is moved, the vector cone icon will move accordingly along the selected route. The player can use the action cursor to evaluate potential move to locations (culminating point of the bound) by moving the action cursor along a projected route. This movement also aids in his selection of cover and concealment. Alternate routes can be selected provided the player does not direct the move to be executed by pressing the **A button**.

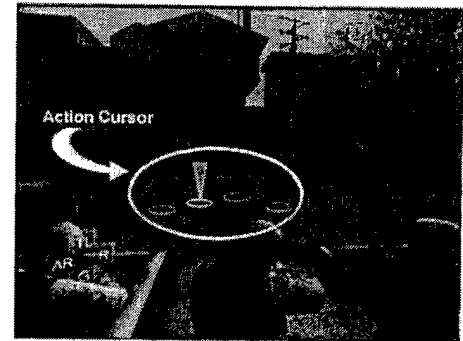


Figure 29. Action Cursor.

The player does not have to be concerned with making exact moves other than selection of the team's culminating point (move to location). For example, the player may overshoot a corner while positioning the action cursor. He can reposition the fire team by continuing to move the action cursor back to the friendly side of the corner, provided that he has not executed an interim move. Once the player instructs the game to execute the move, the AI selects a tactical route to the culminating point.

Giving Movement Orders

The tactical movement technique in the game is bounding overwatch with one fire team capable of moving at any time. The process for moving a fire team is simple. Use the **B button** on the controller to select the desired fire team. Press the **left stick** to initiate the action cursor. The action cursor is used to determine the end position and team formation. Continue using the left stick to position the cursor at the move culminating point. Plan the route by moving the action cursor (via moving the left stick) along the desired route to the culminating point. The player can use the **right stick** to rotate and pitch the camera around the team leader. This will help plan the projected move based on what can be seen. This action can be conducted in isolation or in combination with the left stick action, moving the action cursor. The **right trigger** is used to zoom the camera in the direction of the current viewing area if a close up of the viewing area is required.

Once the player has selected the location, the move is executed by pressing the **A button**. The A button is always used to execute an action. The AI will move the fire team to the culminating point. The AI will move the selected team to the position designated by the action cursor, either as a full fire team or bounding in buddy teams depending on the order given.

There may be instances where the action cursor will not allow the fire team to move to a specific location. In most cases, the inability of the bounding element to perform a particular function or action is due to the presence of software parameters. Parameters establish boundaries

within the game. In one example, at an obvious danger point, the squad leader can see an open protective patio just beyond the corner of a building. As the squad leader attempts to move the lead fire team to that location, the action cursor icon, the positional icon used to indicate where the fire team is moving, will not navigate to the patio, stopping short of the entrance. The cursor hits an invisible electronic barrier that prevents the squad leader from entering the protected area. The squad leader is forced to move the fire team to an alternate position. Warning the player of these situations beforehand will minimize their impact. It is recommended that the subject of parameters be discussed as part of the demonstration tutorial.

When meeting an obvious danger area, the lead fire team would most likely employ buddy teams to secure both the near and far side of a danger area. FSW allows the activity of the follow-on buddy team to traverse the same path as the lead team. The AI will also automatically deploy buddy teams traversing some danger areas. The player can deploy buddy teams by moving the action cursor to the desired location, and then holding down the **A button**.

Hold Up Order

The player can cancel the projected move prior to execution (pressing the **A button**) by using the **X button**. The vector cone will disappear. If the player has executed the move and for any reason decides to stop short of the move to location, he can execute a *hold up*. A hold up stops the fire team movement at that point by pressing the **X button**. The team leader will verbally confirm the selection by directing the fire team to, "Take cover" or "Hold up," depending on the situation. The team will immediately assume a prone position until the next move is directed.

Action Icon Box and Formations

When the action cursor is activated, an *action icon box* will become active. The action icon box is an invisible box that establishes a general area in the bottom right corner of the screen. This area is used to indicate team proximity to various objects in the environment such as walls, doors, stairways, or personnel. If no positional icons are present, issuing an order to move the fire team will result in the fire team moving in a standard wedge formation. However, when the fire team is moving or is in close proximity to one of these environmental conditions, a corresponding icon will appear. Positional icons include a wall formation, corner formation, object formation, door formation, breach door/building, ascend/descend stairs, secure Soldier/OPFOR, and administer first aid. These various icons will be discussed in this section.

Wall Formation Icon

Given the urban environment, the most commonly occurring formation is the *wall formation icon* (Figure 30). This icon is shaped like a solid wall viewed from a slight angle. It indicates that the player has ordered the fire team to a wall or the team is moving in close proximity to a wall. The team leader will verbally confirm the move selection by ordering, "Alpha (selected fire team), move to the wall". Although high weapon scanning is not always performed, when the fire team reaches their destination they will line up in the standard wall formation with the team covering a 360° sector of fire.

There may be instances during the game when fire team members are moving up a street adjacent to a wall. As they are moving they pass windows and open doorways without ducking. This situation is called "silhouetting". The proper tactical response is for team members to duck below windows and increase speed past open doorways while scanning a weapon through the open doorways. Silhouetting, both in real operations and during the game, should be discussed with the squad leaders as part of their AAR.

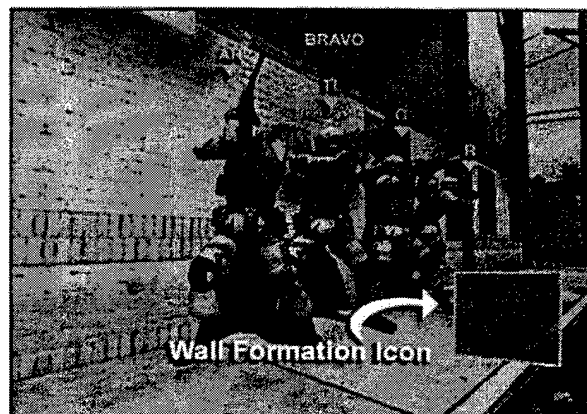


Figure 30. Wall Formation Icon.

Corner Formation Icon

When the team is ordered to the corner of a building, a *corner formation icon* (Figure 31) appears. The corner icon is a standard pictograph replicating the intersection of two adjoining walls. The team leader will verbally confirm the move selection by ordering, "Bravo (selected fire team), move to the corner". When the team reaches the corner, they will line up in a standard corner formation, and use the corner for cover and concealment. The lead team member will peek around the corner, and then withdraw using the corner for protection.

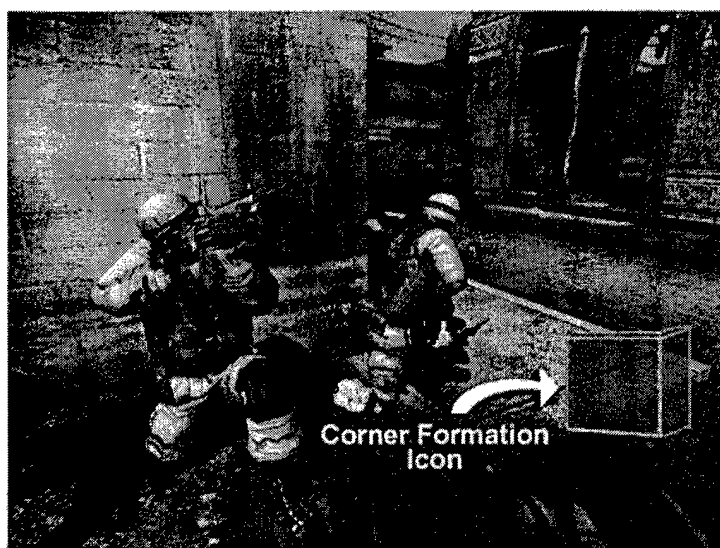


Figure 31. Corner Formation Icon.

There may be instances when the lead team member extends his weapon barrel beyond the building corner. This is called "flagging" and should be avoided. The enemy can often see the weapon barrel and anticipate the Soldier moving from cover. Incidents of flagging, both in real operations and during FSW, should be discussed with the squad leaders as part of the AAR.

Object Formation Icon

The *object formation icon* (Figure 32) indicates that the squad leader will be ordering the fire team to move to an object, such as a car or truck. The object formation icon does not reflect the true shape of the object that the fire team is moving adjacent to or around. When the action

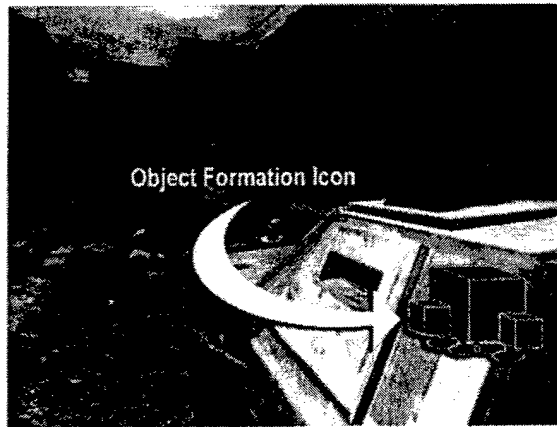


Figure 32. Object Formation Icon.

cursor is selected and moved to an object and the team reaches its destination, they will line up around the object the best they can, relative to the point of the object the squad leader has selected. During the projected move, slightly adjusting the action cursor vectoring cone may result in a better team placement around the object. The platoon leadership should encourage the player to practice using the action icon cursor to move the team to and around various objects during the demonstration tutorial. It would also be helpful to point out the various team member positions displayed on the screen by the movement of the cursor and how these positions change in relation to the team's proximity of the object.

Navigating around some objects may pose a problem for the player. Some objects such as outdoor furniture, vendor's tables, piles of trash, and abandoned vehicles may not permit the player to move the fire team along a particular route. Game parameters might force the player to move the fire team to the left or right or not permit access to some areas at all, requiring the player to move the fire team down the middle of the street. This route may not be the player's tactical preference. During the AAR, the facilitator should encourage a discussion about route selection and the limitations imposed at specific points in the game. The discussion should focus on the best tactical solution.

The ability to move around abandoned vehicles is sometimes limited. The player may be forced to move the fire team to the left or right of an abandoned or parked vehicle, with one of the routes blocked. There may also be instances where two vehicles are parked side-by-side and the game will not permit the fire team to access the space between the vehicles. In either case, the player might prefer to place the object between his fire team and potential enemy location. As part of the AAR, the discussion should include these situations, as they apply.

Door Formation Icon

The *door formation icon* (Figure 33) indicates that the player has moved the **action cursor** to position the team at or in close proximity to a door that can be breached. When the action cursor touches the area associated with a door, the door formation icon will automatically appear. The icon not only indicates that the door can be accessed, but also which way the door will open. Once the player presses the **A button** to execute the move, the team will initiate movement to the doorway. When the team reaches the open door, they will line up outside of the door along the adjacent wall or corner. This also permits the team to be in position to perform a possible breach.

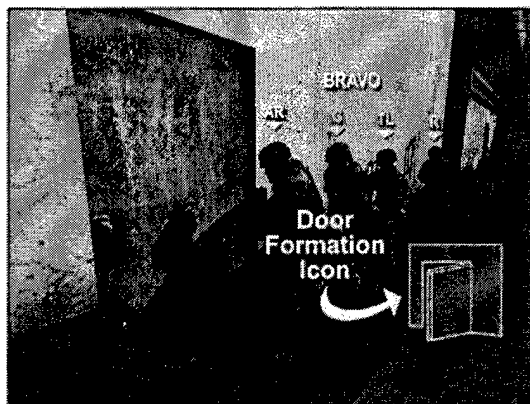


Figure 33. Door Formation Icon.

Not all doors can be accessed. For example, as the player is bounding the lead fire team and moves the action cursor to a doorway, a wall formation icon may appear. The presence of a wall formation icon is used to indicate to the player that the door is blocked. The player must find an alternate move to position for the bound. The open door formation is also used as part of conducting a breach entry into a building or room.

Breaching A Door

During the course of a mission, it may become necessary to conduct a breach entry to enter a building and secure it. FSW employs a breaching interface to accomplish this task. The interface allows the player to position the team tactically outside the door of the building to be breached, plan individual locations of the breach team members within the room in question, give the order to breach the door, and designate another room for breaching, if necessary.

Breach Door/Building Icon

To aid in conducting a breach, a **breach door/building icon** (Figure 34) is used to indicate that the fire team is in position to conduct a breach entry. Like all other formation icons, it is located in the bottom right corner of the viewing screen, superimposed over the visual display. The icon is similar to an open door formation icon with the addition of a green arrow. The open door indicates which way the door opens. The arrow indicates that a breach has been ordered.

The first step in conducting a breach entry is similar to initiating squad movement orders. The **action cursor** is moved to the door that the player will breach. When movement of the action cursor causes the door formation icon to appear, the team is in position. Pressing the **A button** will execute positioning the team outside the door. The fire team must be aligned with the door in order to conduct a breach.

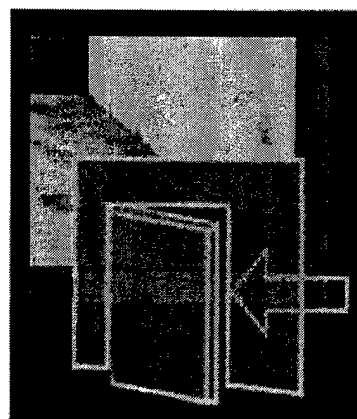


Figure 34. Breach Door/Building Icon.

Once the fire team is in position outside the door, selecting the **action cursor** and positioning the cursor in front of the same door again will initiate the breach sequence. Pressing the **A button** will cause the breach door/building icon to appear and shift the game perspective to an overhead or top-down view of the room (Figure 35). The individual order icon will also appear. Red circles with team member position abbreviations will also appear in the room, representing active team member locations. By default, the team leader circle will automatically be highlighted red, indicating that his position has been selected. The team leader position on the individual order icon will also be highlighted.

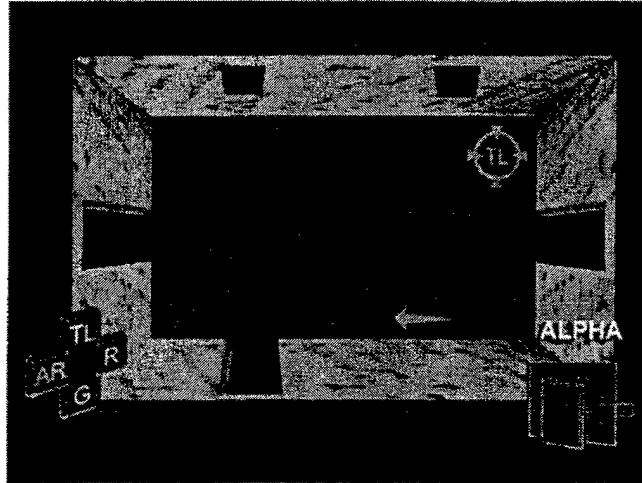


Figure 35. Overhead Perspective.

The **left stick** is used to position the team leader where he is to be located within the room when the action is executed. Once the location is decided, pressing the **A button** confirms the team leader's position. The interface will automatically move to the next team member's circle to be moved, in this case the automatic rifleman.

As each team member circle is moved, the selected circle will alternate between red and white as the player moves the circle. This indicates which positions within the room are acceptable and which are not. When the circle turns white, the player presses the **A button** to select that location as the team member's final position. If the circle remains red, the player should select an alternate location as the team member's final position. Once the final position is confirmed, the circle will turn orange. The process is repeated for all team members.

If the player decides he wants to change a member's final position, the **directional pad** can be used to select that team member by pushing the directional pad in the direction corresponding to the lettered abbreviation on the icon. This action will highlight the appropriate circle so that the player can move it to its revised position. The player can also press the **B button** at any time to cancel the breaching set-up altogether. Additionally, an automatic default is set to the current team member positioning if the player elects not to reposition the circles as they initially appear on the screen.

Once the final team member's location has been selected, the interface will automatically initiate the breach. At this point, the process becomes non-interactive. The perspective will shift to the third person as the team initiates the breach. This means that the camera will switch to an angle that allows the player to observe the entire room while the team clears the room. The team will clear the room and team members will move to the final positions that the player selected. Any enemy encountered by the team as it clears that room would be killed. A team member will mark the cleared room with a painted "X" on the floor. Appropriate game shouts will indicate enemy presence or that the room is clear.

Three options are available for the player's next move once the room has been cleared. The player can exit the building through the door used for the breach, elect to clear another room, or the player can have the team remain in the room and traverse a flight of stairs. To perform any of these functions, the player must examine the room using the **left stick** to navigate the room. While in interior rooms, no other actions are available to the player other than executing movement between rooms, doors, and stairs.

Leaving back through the breached door involves selecting the door and giving the execution order by pressing the **A button**. To breach another door, select the door with the **action cursor** and press the **A button** to execute the action. From here, the procedure is identical to the one used to enter the building. Ascending or descending stairs is discussed below.

Room clearing during the breach entry provides opportunities for tactical decisions that should be discussed with the squad leaders during the AAR. In FSW, the team sequence in entering the room is always team leader first. In combat, the entry procedure is not quite so clear. Based on the tactical situation, a high intensity or a precision breach may be required using a ballistic (shotgun), an explosive (demolition), or a mechanical entry technique. In executing a precision breach, the members of the fire team are assigned numbers 1 through 4, based on their entry sequence into the room. The team leader is normally designated number 2. The rifleman is number 1 and the grenadier is number 3. If one member of the clearing team is armed with a SAW rather than an M16 rifle or carbine, he should be designated number 4. The team leader is normally the number 2 man because he will have the most immediate decision to make as he enters the room. The AR gunner is the last man in the room. See Draft Battle Drill 5: Enter a Building/Clear a Room in Appendix E for further information.

In some instances squad members pass in front of or through each other to get to their assigned locations. Also, weapons orientation is in the direction of travel rather than employing the proper weapon scanning technique or oriented the weapon in the direction of a potential threat. Because of the pace of the game, the player may not notice these actions. The AAR process can be useful in pointing them out.

Ascend/Descend Stairs Icon

Although not all stairs or steps can be traversed, the fire team can access some stairs and stairways. As the fire team is moving, it comes in close proximity to a set of stairs. An *ascend/descend stairs icon* (Figure 36), in the form of a set of steps, will appear indicating that the fire team can ascend or descend those stairs. To ascend/descend stairs, the player moves the **action cursor** towards the stairs until the ascend/descend stairs icon appears. The player will press the **A button** to execute the order. From here, the procedure works exactly the same as breaching. When the team reaches their destination, they will form at the foot or top of the stairs.

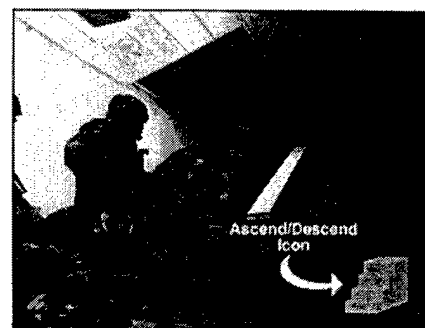


Figure 36. Ascend/Descend Stairs.

Secure Soldier/OPFOR Icon

The *secure Soldier/OPFOR icon* is in the shape of a padlock (Figure 37). The presence of the icon initiates one of two actions, depending on the person the icon is currently touching. If it is a dead U.S. Soldier, the team will secure the body for transport. If it is a dead civilian or OPFOR, the team will secure and search the body for any important information or potentially threatening items.

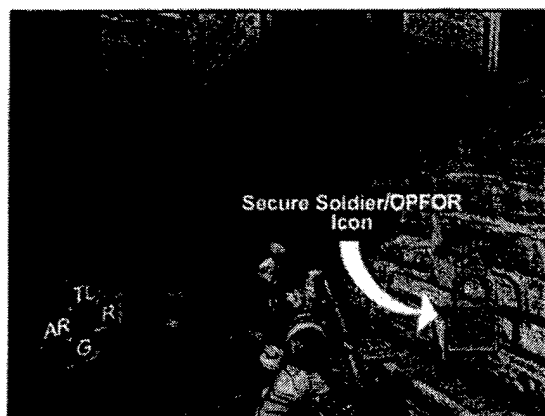


Figure 37. Secure Soldier/OPFOR Icon.

To secure Soldier/OPFOR, move the **action cursor** in a position close in proximity to the injured or dead body. When the vector and circles surround the body, the interface will present the appropriate icon. Corresponding game shouts will help confirm the status, to include cross-leveling ammunition from dead U.S. Soldiers. At this point the player has the option of either using the entire team or a buddy team to perform the task. Press the **A button** to have the entire team move and secure the body. Press and hold the **A button** to have a buddy team perform the task. When selecting the buddy team to secure the body, the buddy team will move to the body, perform the function, and then return to the fire team's position. If the entire fire team performs the function, the fire team will move to the body, perform the appropriate function, then remain in place until the next move.

Administer First Aid Icon

The *administer first aid icon* (Figure 38) indicates that the team will be administering first aid to a wounded individual. The procedure is the same as the secure Soldier/OPFOR procedure. Move the **action cursor** to move the recovery force to the body. When the vector and circles surround the body, the interface will present the secure icon. Corresponding game shouts will help confirm the status, to include cross-leveling ammunition from dead U.S. Soldiers. At this point the player has the option of either using the entire team or a buddy team to perform the task. Press the **A button** to have the entire team move over and secure the body. Press and hold the **A button** to have a buddy team perform the task.

The actions of both secure Soldier/OPFOR and administer first aid provide opportunities for discussion during the squad leader's AAR. The team appears to cluster in the immediate area

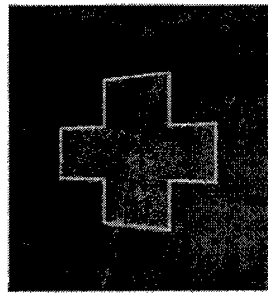


Figure 38. Administer First Aid Icon.

around the body to perform the desired function. The discussion should center on maintaining adequate dispersion, procedures for securing and searching dead OPFOR, removing injured Soldiers to a covered location (if applicable), use of buddy aid, and other pertinent actions outlined in the unit tactical standing operating procedures (TSOP).

Giving Firing Orders and Accessing the Target Cursor

FSW is not a first-person shooter game. With the exception of throwing grenades, there is no other direct control over weapons for individual Soldiers. Instead, the player must issue orders to the entire fire team. The player uses the **target cursor** to have his team create a sector of fire or use suppressive fire. The target cursor looks like a target reticle (Figure 39). This reticle is displayed when the **Y button** is pressed. The target cursor is aimed by using the **left stick**. The **right stick** is used to manipulate the camera angle. Using the left and right sticks in tandem fine tunes the reticle selection to the location the player wants the team to cover. By using the target cursor, several weapon-specific orders can be given.

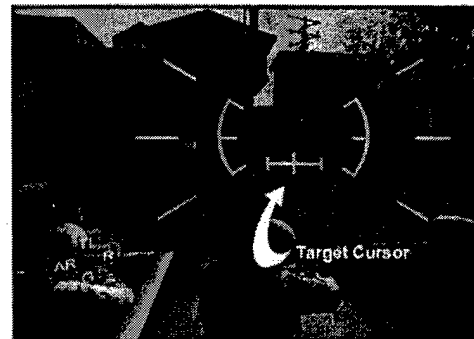


Figure 39. Target Cursor.

Point Fire Order

Weapon-specific orders include point fire, suppression fire, and individual cover sectors. Issuing a **point fire order** overrides the AI and instructs the team to focus on the area designated within the target cursor. The AI heightens the team's situational awareness over the designated area. As a result, team response time (firing) at any threat that originates from the designated area will be greatly reduced.

To execute a point fire order, use the **B button** to select the desired fire team. Then, press the **Y button** to activate the target cursor. Next, using the **left stick** to move the reticle and the **right stick** to manipulate the camera, adjust the aim of the reticle to the desired location. Press the **A button** to execute the order. Pressing the **X button** will cancel the reticle and abort the point fire process.

At the order to execute, the team members will shift into positions that will allow them to effectively cover the designated area. The selected team will cover that area until either another order is given or a threat is detected. If the team engages a threat outside of the designated reticle area, they will not automatically return to the cover area. The cover sector order must be given again.

Suppression Fire Order

Issuing a *suppression fire order* overrides the AI behavior and instructs the team to immediately open fire within the area designated by the cursor. Suppression fire is extremely useful in pinning down enemy forces while the alternate fire team maneuvers to another location.

To issue a suppression fire order, use the **B button** to select the desired fire team. Press the **Y button** to activate the target cursor. Next, using the **left stick** to move the reticle and the **right stick** to manipulate the camera, adjust the aim of the reticle to the desired location. To execute the order, press and hold down the **A button**. To cancel the suppression fires, press the **B button** to select the team conducting the suppression fires and then press the **X button** to cancel the firing order.

When ordered to execute, the team members will shift into positions that will allow them to effectively fire into the designated area. The selected team will remain firing until either another order is given or they run out of ammunition. The player can maneuver the alternate team through the fires of the team conducting suppression fires without suffering casualties from friendly fires. The AI is set to allow danger-close covering fires. However, should the target cursor be set directly on friendly Soldiers and a suppression fire order given, casualties due to friendly fires will occur.

Individual Cover Sectors

The player can elect to assign *individual cover sectors* instead of all team members covering one mass sector. This allows the team to cover more than just one specific area. Issuing individual cover sectors overrides the currently selected Soldier's autonomous behavior and fixates them on protecting a designated area, giving them heightened situational awareness and faster responses to threats that originate within the designated sector. Ordering individual cover sectors also requires the use of FSW's nudge system, which is the ability to have an individual Soldier make small incremental adjustments to his location.

To order an individual Soldier to cover a particular sector, the player must select the team to which the individual belongs by pressing the **B button**. Once the individual's team is selected, the player will use the **directional pad** to select the individual Soldier. By doing so, the individual order icon will appear in the bottom left corner of the screen. The player will select the individual by moving the directional pad in the direction that matches the individual team member's positions on the icon.

As the player selects an individual Soldier, three things will occur. The camera angle will automatically move to right over the shoulder of the selected Soldier. Next, the

corresponding team member position on the individual order icon will highlight. Finally, information pertaining to the status of the individual Soldier will appear in the lower right hand side of the screen. This information includes the Soldier's duty position, his fire team, his current primary weapon and ammunition status, and his secondary weapon and ammunition status. For example, the entry for the Bravo Team grenadier may read, "Grenadier, Bravo (team), M4/M203 – 3 mags (magazines) for M4 Carbine, and M406 – 36". This last entry in the individual's information indicates that the grenadier has 36 rounds remaining for his M-203 Grenade Launcher.

The secondary weapon and ammunition for the remaining team members are the M67 High Explosive Fragmentation Grenade and the AN-M83 Smoke Hand Grenade. Because the references are simply to the "M67" and "AN-M83", Soldiers may become confused between the two grenades, a situation that may result in friendly injuries or fratricides. The problem with the nomenclatures should be brought to the players' attention during the Allocation of Equipment Menu set-up for their respective missions. A helpful hint is to associate "AN" with smoke.

To continue with assigning individual sectors of fire, use the **left stick** to alter, or nudge, the individual's position. There are no individual sight reticles to help align the sectors. The **right stick** is used to adjust the individual Soldier's aim. Through these mutual incremental moves, the player can face the individual Soldier in the desired direction for the sector of fire. If the Soldier's position is correct, the player can execute the order by pressing the **A button**. The Soldier will continue to guard his sector even if the other team members detect and respond to threats outside of his sector. Only an order given to the entire fire team will override individual covering orders. Pressing the **X button** at any time will cancel the individual sector order and establish team control and viewing.

Throwing Grenades/Firing the M-203 Grenade Launcher

In addition to the primary small arms weapons, team members have the capability to throw grenades and fire the M-203 Grenade Launcher. Hand grenades include the M67 High Explosive Fragmentation Grenade and the AN-M83 Smoke Hand Grenade. The grenadier can only fire the M406 High Explosive Round in his M-203. No other rounds are available.

The process for firing the M-203 and throwing hand grenades are handled by an identical aiming system built into the individual control interface. The only difference is the selection of the individual to perform the task. Obviously, the grenadier would be selected to fire the M-203. Selection of the type of hand grenade to be thrown is slightly more entailed. The rifleman is the only team member that carries smoke grenades. The team leader and the automatic rifleman carry only fragmentation grenades. The grenadier does *not* carry hand grenades.

To throw a grenade (or fire the M-203), the **B button** is used to select the desired fire team. Once the desired fire team is selected, the **directional pad** is used to select the Soldier to perform the task. The **left stick** is used to alter, or nudge, the individual's position so that he can perform the task. The **right stick** is used to adjust the individual Soldier's aim or view. The **Y**

button is selected to activate the grenade or M-203 round. On pressing the Y button, an aiming arc immediately appears (Figure 40). The arc originates from the Soldier and ends at a detonation point. Use the **left stick** to adjust the firing depth, either nearer or farther away from the Soldier. The **right stick** is used to control directional firing to the left or right. Through the mutual incremental moves of the **left** and **right sticks**, the player moves the grenade or M-203 round arc of the to the desired location. If the Soldier's position and arc are correct, the player can confirm and execute the order by pressing the **A button**.

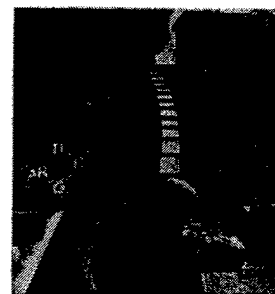


Figure 40. Grenade

Once the order is confirmed, the camera will immediately focus back above the team leader, and the individual Soldier will throw the grenade or launch the M-203. Pressing the **X button** at any time prior to selecting the **A button** will cancel the weapon selection. Unlike the other firing orders, once the **A button** is pressed the throw grenade/fire M203 order cannot be cancelled. The player should see the visible arc of the thrown grenade/fired M-203 round. After a brief delay, the round/grenade will detonate.

There is a high risk for incidents of fratricide when throwing hand grenades and firing the M-203. As with real operations, caution must be exercised or the team will suffer casualties because of the blast radius of the fragmentation grenade or M406 round. To aid the player, the positional arc is color-coded. If the arc is orange, the player can confirm and execute the order to fire without concern for causing friendly injuries. However, if the arc is red, friendly Soldiers will become injured because they are within the blast radius. The potential for possible fratricides should be discussed with the squad leader during the demonstration tutorial. Incidents of fratricide occurring during the mission should be highlighted during the AAR.

Each time the grenadier is selected to fire a round, an individual status box will appear. During his practice sessions, the player should be cautioned to review the grenadier's ammunition status when that box appears. Unlike the other weapon systems, FSW allows the player to aim and go through the firing sequence for the M-203, including the grenadier announcing, "Round out," when there are no rounds available. Reaction time may be lost and friendly casualties may occur as the player initiates the firing sequence with no rounds fired.

Pausing the Game

There may be a time when either the player or the observer might want to *pause* the mission. The pause may be for the player to submit a report or to reorient the map or for the observer to conduct an administrative halt. For whatever reason, to pause the game, press the **white button**. (Figure 41.) The screen action will freeze and three blocks will appear across the bottom of the screen. The blocks include RESUME, REALLOCATE, and REPORT. Each is self-explanatory. Reporting is discussed below. Reallocating ammunition was discussed earlier. To resume play, press the **A button**. Once the **A button** is pressed, the action on the screen will resume.

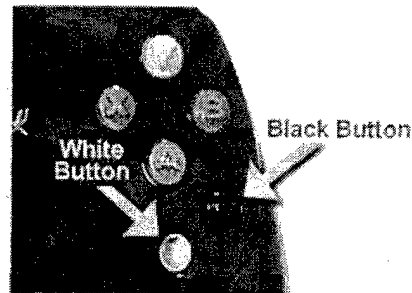


Figure 41. White & Black Buttons.

Moving the Squad Leader Between Teams

During the mission, it may become necessary to move the squad leader between fire teams. This is particularly true when a team needs access to important information that only the squad leader can provide. To accomplish this, press the **black button**. Regardless of either team's current location, the squad leader will move to the alternate team. This process can be conducted innumerable times during the mission.

Seeking Cover

When under threat, the player must move his fire teams to cover. The AI does *not* allow the fire team members to automatically seek cover when receiving enemy fire. The fire team will automatically return fire. In many situations the team members will assume a prone position to reduce the risk of being shot. However, the AI limits the actions of the fire team members in the prone position. They can only shoot and become casualties. The squad leader must move the entire fire team in order to regain full control of the individual team members. The AAR is the perfect opportunity to discuss this action.

Reporting

FSW offers the capability for the squad leader to report the squad's current situation. To access the reporting interface, use the **B button** to select the team that the squad leader is currently moving with. If the squad leader is moving with the team currently selected, pressing the B button is unnecessary. Once the correct team is selected, press the **white button** to provide a menu that will allow access to the reporting system. With the menu on the screen, use the **left stick** to move the cursor over to the REPORT field. Press the **A button** to execute the order and open the interface.

Once the menu is activated, a strip map of the current mission situation will appear below five selections (Figure 42). The strip map will show the current location of the two fire teams in relation to the surrounding environment. The teams are marked by the letters "A" and "B". The five selections, or categories, appearing across the top of the screen include color, building, situation, action, and send. COLOR refers to the direction the squad is moving. Colors are associated with the four primary directions with north (red), south (blue), east (green), and west (yellow). The BUILDING category allows selecting the building number to add to the report.

All of the buildings have a corresponding number on the strip map. The building number is selected by scrolling down through the menu selection. The SITUATION menu offers two choices, "All clear" and "Under fire". The ACTION selection provides a drop down list that informs the PL of the squad leader's next course of action given the current situation. For example, if the team is receiving fire, then the selection "Returning Fire" or "Taking cover" might be used. The SEND selection does just that; it sends the current listed report to the PL.

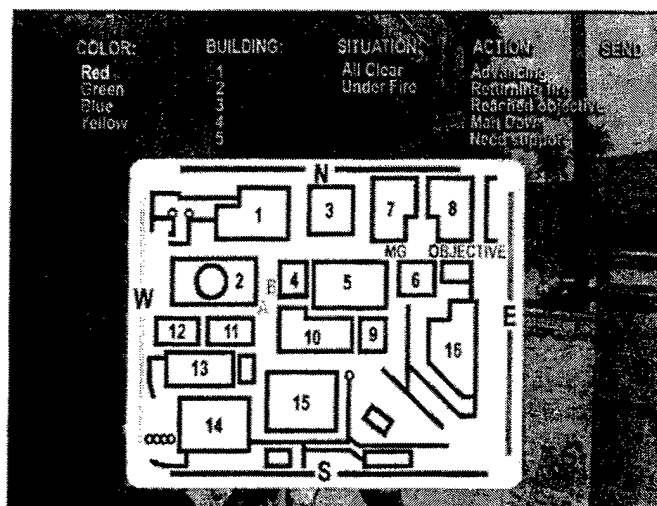


Figure 42. Report Menu Screen.

When the map appears, red will be highlighted under the colors category. Use the **left stick** to scroll through the four colors. Once the correct entry is highlighted, press the **A button** to confirm the selection. The process is the same for each of the next three lines of the report (building, situation, and action). Use the **left stick** to scroll and the **A button** to confirm the selection. To submit the report, go to the SEND category and use the **A button** to confirm the message content and send the message. The AI will return to the mission screen where the mission can be resumed. Once the report is sent, the message will appear in the green text along the top left side of the screen.

The report is compiled by selecting options within each of the menus or categories. This is accomplished using the **left stick** to move left and right between the categories and move up and down to highlight selections under each menu. Pressing the **A button** confirms the selection for each menu. Highlighting the SEND selection and pressing the **A button** submits the report to the PL. Once the report is sent, press the **B button** to return to the main report menu.

Reporting procedures for FSW are different from the Army standard. The Army uses the standardized SALUTE (size, activity, location, unit, time, and equipment) format to report enemy activity. Regardless of the differences, getting junior NCOs to report their tactical situation is a real-world problem. This problem can only be overcome through practice. Because FSW requires reporting incidents that occur during the mission, junior NCOs are afforded the opportunity to improve their reporting skills. However, during the AAR, the discussion should include the use of the standard SALUTE format and what should have been reported according to mission conditions.

Reallocating Equipment During the Game

During the course of a mission, it may be necessary to cross level or *reallocate equipment* between Soldiers. Reallocation works exactly like the equipment reallocation menu in the main menu. To access the reallocation menu, press the **white button** to pause the game. Three selections will appear, RESUME, REALLOCATE, and REPORT. Use the **left stick** or **directional pad** to highlight REALLOCATE and press the **A button**. Once the reallocation menu appears, make the necessary changes as were explained in the Reallocating Equipment section. A rucksack, or pack, has been substituted for the equipment repository. However, it serves the same function. When completed, highlight the RETURN field and press the **A button** to return to the game.

The X-Box Dashboard Memory Functions

The dashboard is an electronic interface that contains several menu selections that are not normally accessed on the hard drive. To access the dashboard, turn off FSW by using the **power button** on the front of the X-Box console. Restart by again pressing the **power button**. The system will reboot and open to the X-Box Logo screen (See Figure 9 on page 9). Once this screen fades, the Game Launcher Menu will automatically appear (See Figure 7 on page 8). You will recall that the Game Launcher Menu lists the various FSW games and functions. The X-Box dashboard is the last menu selection. To access the dashboard, scroll down through the selections until X-BOX DASHBOARD is highlighted and select using the **A button**.

The X-Box dashboard contains four selections including MEMORY, MUSIC, X-BOX LIVE, and SETTINGS. Use the **left stick** to select the MEMORY header and press the **A button** on the controller to enter the system. A screen will appear that highlights the X-BOX HARD DRIVE. Your next step will depend on whether you want to save the game to another system or delete the game from either the memory card or the hard drive. With the HARD DRIVE selection highlighted, press the **A button** to access the hard drive. If you wish to access the memory card use the **left stick** to highlight CONTROLLER and press the **A button** to select the memory card.

To *copy saved games from the hard drive to a memory card*. If there are any saved games on the hard drive, they will be listed descending one-by-one on the right side of the FSW circle listed by date and time. Additionally, each game will list the login name used to play the mission, the mission played, and the amount of total memory (in blocks) that the mission used. Use the **left stick** to highlight the desired game and press the **A button** to confirm the order to copy the game.

Once the **A button** is pressed, another submenu screen will appear. This screen allows for two available options, copy the saved game (COPY) or delete the saved game (DELETE). To copy the saved mission, use the **left stick** to highlight the copy selection and press the **A button** to execute the order. Once selected, the screen will display the target memory card menu selection. It will be listed as the MEMORY and lists the available memory blocks. Press the **A button** to copy the mission onto the memory card.

If a message appears that says, "Saved game exists. Do you wish to override?" this means that the mission has already been copied to the memory card. If a message is received that indicates that there is insufficient memory available to copy the mission, games will have to be deleted. The process for deleting games is listed below. If no warning messages are received (Overwriting or Low Memory), press the **B button** to step back through the various menus to the Dashboard Access Screen. More saved games can be managed at that point.

The process used to *copy saved games from a memory card to the hard drive* is similar to the reverse process discussed earlier. Ensure the memory card is properly inserted into the controller. Use the **left stick** to highlight the graphical controller icon and press the **A button** to execute. Under the subsystem header MEMORY, use the **left stick** to highlight the Full Spectrum Warrior circle. If there are any games presently saved on the memory card, they will be listed descending one-by-one on the right side of the FSW circle listed by date and time. Additionally, each game will list the login name used to play the mission, the mission played, and the amount of total memory (in blocks) that the mission used. Use the **left stick** to highlight the desired game to be copied and press the **A button** to confirm the order.

As with the earlier process, once the **A button** is pressed, the option submenu screen will appear, allowing for two available options, copy the saved game (COPY) or delete the saved game (DELETE). To copy the mission, use the **left stick** to highlight the copy selection and press the **A button** to execute the order. Once selected, the screen will display the target hard drive menu selection and the available memory blocks. Press the **A button** to copy the mission onto the hard drive. If warning messages appear, follow the process outlined earlier. If no warning messages are received (Overwriting or Low Memory), press the **B button** to step back through the various menus to manage more saved games and repeat the process as needed.

To *delete saved games from the memory card or hard drive*, from the unit selection screen use the **left stick** to highlight the memory card or hard drive where the game is saved. Press the **A button** to confirm the execution order. Under the subsystem header that indicates the currently selected memory card or hard drive, use the **left stick** to move down to and highlight the FSW circle. The games will be listed as described earlier in the saving a mission process. Use the **left stick** to highlight the copy selection and press the **A button** to confirm the execution order. The option submenu screen will appear, allowing for two available options, copy the saved game (COPY) or delete the saved game (DELETE). To delete, use the **left stick** to highlight the delete selection and press the **A button** to confirm the execution order. A screen message will appear asking to confirm permanently deleting the saved game. Use the **left stick** to highlight "YES" and press the **A button** to confirm the execution order. Selecting "YES" will delete the game. Select "NO" if the saved game is to remain stored on either the memory card or the original hard drive. Once the game is deleted, use the **B button** to back through the menus to the Dashboard Access screen.

To exit the X-Box dashboard, use the **B button** to back through all of the menus until the Dashboard Access Screen is obtained. To exit the dashboard from the Dashboard Access Screen, repeat the process of turn off, then turning on FSW by using the **power button** on the front of the X-Box console. This procedure will return you to the X-Box Logo screen followed by the Game Launcher Menu. From there you can proceed with whatever action you desire.

Developing a Training Plan

In order to maximize the benefits from FSW, the platoon leadership should be actively involved. The platoon leadership can develop the training plan, conduct scheduling to facilitate both practice and mission training sessions, provide supervision throughout the training, and conduct the training assessment. Finally, either the PL or PSG must perform the role of AAR facilitator evaluating each player's mission performance.

General Scenario

The Army has long known that Soldiers perform better when they understand the tactical situation and act within the commander's intent. Situational understanding lessens the "fog of war" for Soldiers, increasing their understanding of the common operational picture and improving their application of initiative in the absence of orders. In FSW, there is a void in the general knowledge of the situation at the platoon level and above because the squad operates in isolation.

To increase the flow of information, a *general scenario* has been developed to aid the players in visualizing the overall tactical situation (Appendix C). It is designed as a one-time reading, to be read after the individual practice session, but prior to the squad leader beginning his first mission. It provides the Soldiers with a "big picture" in the form of a historical summary. The summary explains why the Soldiers are conducting tactical missions in an urban environment in the notional foreign country of Kazar. It resembles an Associated Press news release. It captures information that would normally be provided in a JTF (joint task force) command news release if the missions were real. It is the first step in mentally preparing the Soldiers for their tactical missions.

Operation Orders (OPORDs)

The mission statement, accessed from the mission selection menu (See Figure 12), includes enough information for the player to physically conduct the mission. It is not in the standard five-paragraph format that Soldiers have become accustomed to seeing such as an operation order (OPORD), a FRAGO for a change of mission, or a warning order (WARNO) containing information about a new mission.

It is recommended that the platoon leadership develop some sort of OPORD or WARNO to tie the general scenario and the mission statement together. It does not need to be a formal, detailed, type-written OPORD. It is important that it contains the information normally considered SOP at the unit level. This will lend a further sense of legitimacy to the mission. Notional information can be improvised as long as it relates to the mission statement.

Using the Demonstration Tutorial

The demonstration tutorial is written to allow the Soldier to practice. It also helps the Soldier learn how to use the FSW controls. By following the step-by-step building process, it is hoped that the platoon leadership learns how to use the controls while simultaneously building

the tutorial to train their subordinates. The key to success in using the tutorial, as well as conducting the mission training, is that Soldier performance be uniform and supervised.

Using the FSW editors (map, squad, and ROE), mission conditions can be adjusted to meet the “crawl-walk-run” training methodology. For example, a change in the OPFOR presence can reduce or increase the number of random encounters with OPFOR without changing the numbers of mission-specific OPFOR soldiers programmed for that mission. Other changes can include changes in OPFOR and civilian aggression, or establishing a mission time limit.

Adjusting the editor menu parameters to minimal activity during the tutorial practice sessions provides the “crawl” training level. The mission default settings can be used during the first iterations of the five follow-on missions as the “walk” training level. Changing parameters to increase the mission’s difficulty will bring the players to the “run” level of training. Here is some additional guidance on changing mission parameters:

- Recommend that the training level of the fire team members is *not* changed from the default setting of “trained.” This is especially important for setting up the demonstration tutorial. Changing the setting could provide a distorted picture of the current level of Army training.
- The friendly death, friendly injuries, civilian death, and civilian injury parameters should be set for “NO” during the demonstration tutorial and “YES” for all training missions.
- No time limit parameters should be set for the first few missions or until the players acquire a comfort level with their knowledge of operating the controller. However, once set for one player, time limits must be uniformly applied to the comparable mission for all players.
- It is *not* recommended that report interval be used. Reporting should be situational dependent, not based on time. If additional emphasis is needed to obtain reports from the subordinate players, then it is recommended that the platoon chain of command pause the mission soon after player’s fire teams make contact with enemy. The platoon leadership can explain to the player why there was a need for a report, the report’s format, and report content based on Army standards.

A demonstration tutorial should be set up for each Soldier, and then deleted from the hard drive after the Soldier completes that practice session so that it will not interfere with the actual mission AAR. The platoon leadership sets the parameters or defaults for the actual mission after logging in the Soldier. The Soldier should then play his first mission, followed by an AAR. Once the AAR is completed, his completed mission must be deleted from the hard drive or moved to the memory card.

Training during the practice tutorial should be standardized. All players should be taught tasks sequentially, starting from an overview of the X-Box Controller controls and the standard interface information (see Figure 23 on page 21). To aid in this training, the X-Box Controller Controls Diagram, found in Appendix B, should be photocopied, laminated, and used to assist in helping players become familiar with the controls.

Training should then progress through the use of the action cursor, moving fire teams, moving the squad leader between fire teams, identification of the various icon formations, executing individual Soldier orders and what those individual orders are, initiating firing orders including firing the M-203 and throwing hand grenades, to more specialized tasks such as how to execute room clearing and ascending and descending stairs. Functions such as pausing the game, reporting, reallocating equipment, and the intent and operation of the mission playback feature should also be taught. The platoon leadership should use the TSP Table of Contents as a checklist to ensure that training is uniform.

Soldiers with more gaming experience may want to use the game independently. Time should be set-aside for experienced Soldiers to use FSW and the TSP to learn more about the system on their own. However, that training should *not* come at the expense of the platoon individual training program.

During the tutorial, caution must be exercised to keep the individual player limited to the courtyard where the scenario begins. Almost all of what the players need to learn can be completed within that area. Allowing the players to traverse additional terrain could corrupt the scenario for future use as a training scenario.

There may be instances where a squad leader may get disoriented during a game and not know where his squad is located in relation to an objective or threat. Normally, the squad leader would use terrain analysis or a global satellite positioning (GPS) source to determine a grid location and refer to his map to determine his exact location. In an urban setting and within FSW, this is not practical. The demonstration tutorial offers an excellent opportunity to explain to the squad leader how to bring up the map to determine the squad's location.

To access the map, you must pause the game by pressing the **white button**. The screen action will freeze and three blocks will appear across the bottom of the screen, RESUME, REALLOCATE, and REPORT. The RESUME block will be highlighted. Instruct the squad leader to use the **left stick** to scroll to the REPORT screen selection and press the **A button** to execute the selection. Included in the REPORT screen is a map (See Figure 43). The map is constantly updated with the locations of both fire teams. Once the squad leader gets his bearings, he can back out of the REPORT screen by using the **back button**. The back button will take the squad leader to the initial freeze frame with the RESUME block highlighted. Press the **A button** to resume the game.



Figure 43. Pausing the Game.

Operational and FSW Gaming Occurrences

There are “real-world” operational and FSW gaming occurrences or incidents that should be identified and discussed with the squad leaders. Each was addressed earlier in the TSP. These shortfalls should be stressed to the squad leaders while they are conducting their demonstration tutorial practice sessions and again during their AARs. Warning the player of these situations beforehand will minimize their impact. To ignore them may invite the perception of negative training. Operational and gaming occurrences include the following:

- During the practice sessions and the AAR, the facilitator should encourage a frank discussion about route selection and the limitations imposed by some parameters at specific points in the game. The discussion should focus on the best tactical solution rather than on any limitation imposed by the game.
- Practice sessions should include discussions about the AI action not automatically deploying buddy teams to traverse danger areas. The player must activate buddy teams by first selecting the action cursor to move the fire team, the press and hold the **A** button to have a buddy team perform the task. The other buddy team automatically follows the lead buddy team.
- The potential for possible fratricides should be discussed with the squad leader during the demonstration tutorial. Incidents of fratricide occurring during the mission should be highlighted during the AAR.
- During the AAR, the platoon leadership should discuss the squad leader’s attempts or failure to attempt to use covered areas that were denied by game parameters such as objects like barrels or cars and some close-in wall sections.
- The proper procedures to avoid “silhouetting” and “flagging” should be discussed.
- To avoid confusion, the games’ references to hand grenades as the “M67” and “AN-M83” need to be clarified during the practice sessions.

Scheduling Training

Training time is always a major consideration. To save time, the platoon leadership should immediately have each squad leader begin his first mission as soon as he completes the tutorial. This procedure will also reinforce the new skills learned during the tutorial. Although the amount of time each individual needs to complete the tutorial and the first mission will vary, two hours is a good planning time for the first iteration. Most missions will be completed long before that time. The time includes an AAR of the first mission. The next player is then led through the entire process until all squad leaders have completed the first mission and received an AAR.

Time permitting, and after the AAR is completed, the platoon leadership can allow the player to use the FSW mission playback capability to continue the original mission to

completion. As players become more proficient at the controls, less time will be required to complete missions. Once all players have completed their initial mission, the cycle can be repeated until all players have completed all six missions. Beyond that point, the platoon leadership can start changing mission parameters to add difficulty to each mission.

Training Evaluation Standards

Seven collective tasks from Army Training and Evaluation Program (ARTEP) 7-8 MTP *Mission Training Plan for the Infantry Rifle Platoon and Squad* (DA, 3 March 2000) were selected from the automated systems approach to training (ASAT) data base. ASAT is a training information and doctrine management system that provides task creation, task management, and training product and doctrine creation capabilities for the TRADOC proponent schools. Essentially, ASAT is the foundation tool for all task-based information utilized by the unit. It is fully integrated within the Standard Army Training System (SATS).

A collective module allows training developers to develop collective and drill tasks, mission training plans (MTP) and drill books. An individual module allows for development of individual tasks, soldier training publications (STP or Soldier's Manuals), training support packages (TSP), and lesson plans. A course module allows training developers to develop courses and generate program of instruction/course administrative data (POI/CAD) reports. The CATS module produces combined arms training strategies to include resourcing information. ASAT includes an import/export capability that allows proponent schools to download information to the General Dennis J Reimer Digital Library (RDL) data repository for download by other ASAT and SATS users and use by the RDL.

All seven collective tasks contain performance measures that support the basic missions in the FSW scenarios. The performance measures provide most of the doctrinal references needed by the platoon leadership to evaluate FSW missions. These collective tasks are provided at Appendix D. It is recommended that these T&EOs be photocopied and used as checklists in evaluating each player's performance. The selected tasks are:

- Task # 07-3-1000: Assault a Building
- Task # 07-3-1117: Conduct a Presence Patrol
- Task # 07-3-1279: Conduct Tactical Movement in a Built-up Area
- Task # 07-3-1396: React to a Civil Disturbance
- Task # 07-3-1406: React to Snipers
- Task # 07-3-1414: Search a Building
- Task # 07-3-1432: Take Action on Contact

The doctrinal sources also include two battle drills, Battle Drill 2: React to Contact, taken directly from the ASAT data base, and, Battle Drill 5: Enter Building/Clear Room, a revised draft version of a drill in ARTEP 7-8-Drill *Battle Drills for the Infantry Platoon and Squad* (DA, 2002). The later drill was selected because it contains the latest doctrinal information. However,

the drill is a draft and subject to change. When published, a review of the final ARTEP 7-8-Drill should be conducted to determine if the content was changed.

Several options are available to evaluate FSW training. The first option is for the platoon leadership to use the existing collective task and drill training and evaluation outlines (T&EOs) in Appendix D and E to conduct their own internal assessment. The collective tasks and the drills provide actions and standards reflecting the general tactical principles that allow changes based on conditions during execution. Individual, leader, and collective subtasks required to perform each task are also identified. However, because the focus of FSW is narrowed specifically to replicating exercises in fire and maneuver, most of the subtasks, actions, and performance measures found in the corresponding collective tasks and the drill do not apply.

The T&EOs should be modified to highlight FSW-specific task steps and performance measures. The applicable steps and subtasks from the T&EOs must first be reviewed. These are then compared with the mission briefing narratives for each mission accessed from the main menu interface. The scenario synopsis (see p.2) may also be used as the basis for the analysis. Once the T&EOs are reviewed, a colored marker can be used to highlight FSW-specific steps and subtasks. The highlighted actions and performance measures become the checklist for mission performance for that mission. Each player's performance must then be compared against that checklist.

A second option is to use the modified T&EOs provided at Appendix F. Several of the collective tasks and Battle Drill 5 were combined to highlight FSW-specific actions and performance measures in order to assess each mission. For example, two collective tasks, React to Snipers and Conduct Tactical Movement in a Built-Up Area and Battle Drill 5, were combined to conduct an evaluation of three of the missions. Other combinations were used for the remaining missions. Performance measures that could not be evaluated were deleted. Some performance measures were modified to reflect a change from a platoon-level task to that at the squad-level or to apply the measure specifically to the FSW mission. The changed portions of these measures were underlined to indicate that the performance measure was modified. FSW AI-controlled activities were identified using red text accompanied by the symbol "➔."

Final Evaluation Score

Using the modified T&EOs as a base, the platoon leadership will have to make an assessment as to how well each Soldier performed each mission. Do not attempt to provide a percentage score. The final evaluation score for each Soldier's mission performance should be rated either a "GO" or "NO GO" in accordance with Army training philosophy. Additionally, there are too many variables in each scenario to provide blanket performance measures such as, "To receive a GO, you must successfully engage enemy forces or snipers in 4 out of 5 engagements." Also, if mission-specific performance measures are provided to the player before the mission is conducted, the measures may alert the Soldier as to the number of engagements within the scenario.

It is best to analyze each mission in terms of specific questions to determine individual success or failure. The questions, applied to all players across all missions, provide a sound

basis for a "GO" or "NO GO" evaluation. Listed below are a few questions the platoon leadership might consider in conducting their assessment:

- At the beginning of the exercise, did the squad leader clearly understand his mission?
- Did the squad complete the mission?
- Did the squad suffer casualties? If so, was the squad still combat effective at the end of the exercise?
- Did the squad cause civilian casualties or did the squad leader's decisions/actions needlessly endanger COBs? If so, did civilian casualties negatively impact mission completion?
- Did the addition of new parameters make the scenario too easy or too difficult to complete?
- Did the squad leader's overall plan and execution, regardless of mission outcome, indicate that he understood doctrinal concepts such as route selection, use of covered positions, etc.?
- Based on the squad leader's performance, what tasks need additional emphasis or to be retrained?
- What doctrinal or FSW-related tasks or incidents need to be addressed in the AAR?

Tracking Performance

A means of tracking Soldier performance must be developed. Each player's performance must be recorded. Additional advanced scenarios that have had parameters adjusted to increase difficulty (e.g. increasing OPFOR presence or aggression, reducing or establishing a mission time limit, etc.) must also be identified and tracked as well.

The easiest way to track Soldier performance is through the use of a butcher board or wall chart (See Figure 44). Squad leader names are posted vertically along the right side of the chart. Time permitting, additional players wishing to train with FSW may also be included. It is recommended that if time is available, selected team leaders be included because the training is beneficial to them as well. On the chart, the missions are listed by degree of difficulty across the top from left to right. Within each mission is a series of smaller blocks that identify the number of mission iterations to be conducted. The exact number of iterations is academic and driven more by the available training time than any other factor. Finally, the player's score for that iteration is posted in the corresponding block.

If parameters were changed to add a degree of difficulty to later iterations, some sort of note should be added to the block. For example, in the fourth through sixth iterations, a number of parameters were changed to make the mission progressively more difficult. In this example, a sample note was added to indicate the number of parameter changes that were made to that iteration. Caution must be exercised to ensure that the parameter changes are consistent for each

player. The best parameter changes are increasing OPFOR presence (#1), followed by increasing OPFOR aggression (#2), followed by adding time limits to the mission (#3), etc.

FSW MISSION RESULTS						
	MSN 2	MSN 3	MSN 5	MSN 1	MSN 4	MSN 6
SSG KITTY						
SSG CHESTER						
SSG DILLON						
SGT(P) DOC						
SGT FESTUS						
SGT QUINT						
SGT THAD						
SP(P) NEWLY						

Mission 2		
1st	2d	3d
NO GO	NO GO	GO
4th +1	5th +2	6th +3
GO	GO	GO

Figure 44. Mission Performance Chart.

The After-Action Review (AAR) Process

At the completion of each player's mission, the platoon leadership should conduct an AAR so that training value can be obtained from the exercise. The following section on AARs is provided as a reminder of how to conduct an AAR. It documents selected excerpts from several doctrinal sources including TRADOC Circular (TC) 25-20 *A Leader's Guide To After-Action Reviews* (30 September 1993), Chapter 6 of FM 7-0 *Training The Force* (22 October 2002), and Chapter 6 and Appendix C of FM 7-1 *Battle Focused Training* (15 Sep 2003). FM 7-1 has superseded FM 25-101 *Battle Focused Training* (30 September, 1990), specifically, Appendix G, "After-Action Reviews." These sources, notably TC 25-20, should be reviewed for more detailed information on conducting AARs.

Doctrinal Overview

The US Army has used the AAR review process for more than three decades as an assessment tool to identify training strengths and areas in need of improvement. It is a critical evaluation tool. Evaluation is the basis for any leader's unit-training assessment. Simply stated, "training without evaluation is a waste of time and resources."¹

By definition, "An AAR is a professional discussion of an event, focused on performance standards, that enables Soldiers to discover for themselves what happened, why it happened, and how to sustain strengths and improve on weaknesses."² The AAR is a tool leaders and units can use to get maximum benefit from every mission or task. It provides candid insights into specific soldier, leader, and unit strengths and weaknesses from various perspectives, feedback and insight critical to battle-focused training; and details often lacking in evaluation reports alone. Figure 45 lists the key points found in all AARs.

¹ FM 7-0 *Training The Force* (22 October 2002) supersedes FM 25-100 *Training the Force* (15 November 1988).

² TC 25-20 *A Leader's Guide To After-Action Reviews* (30 September 1993)

After-Action Reviews

- Are conducted during/immediately after each event.
- Focus on intended training objectives.
- Focus on soldier, leader, and unit performance.
- Involve all participants in the discussion.
- Use open-ended questions.
- Are related to specific standards.
- Determine strengths and weaknesses.
- Link performance to subsequent training.

Figure 45. AAR Key Points.

The AAR is not just a compilation of statistics. Statistics alone do not provide an accurate assessment of Soldier performance. An AAR is a review of training that allows Soldiers, leaders, and units to discover for themselves what happened during the training and why. It is a structured review process that allows participating Soldiers, leaders, and units to discover for themselves what happened during the training, why it happened, and how it can be done better.

AARs are not critiques. A critique gives only one viewpoint and frequently provides little opportunity for discussion of events. Because Soldiers and leaders participating in an AAR actively discover what happened and why, they learn and remember more than they would from a critique alone. The climate of the critique – focusing on what went wrong – prevents candid discussion of training events by participants. For that reason, leaders and evaluators avoid lecturing participants on what went wrong. They use AARs to tell a story about what was planned, what happened during the training, why it happened, and what could have been done differently to improve performance.

An AAR should be planned at the completion of each mission or phase to provide immediate feedback to the Soldiers being trained. Feedback is a critical component of an AAR. Feedback compares the actual output of a process with the intended outcome. By focusing on the task's standards and by describing specific observations, leaders and Soldiers identify strengths and weaknesses and together decide how to improve their performances. This shared learning improves task proficiency as well as promotes unit bonding and esprit.

The AAR facilitator's (unit leaders, evaluators, or observer/controllers [O/C]) notes serve as the basis for standards performance. The AAR should be structured in accordance with guidance found in TC 25-20 *A Leader's Guide to After-Action Reviews* (DA, 1993). It provides techniques for conducting AARs, including formats and suggestions for improving elicited feedback.

Leaders understand that not all tasks will be performed to standard. In their initial planning, leaders should allocate time and other resources for retraining. Retraining allows the

participants to apply the lessons learned during the AAR and implement corrective action. Retraining should then be conducted at the earliest opportunity to translate observation and evaluation into training to standard. Commanders must ensure that units understand that training is incomplete until the Army standard is achieved.

Leaders guide discussions to bring out important learning points, preferably by the Soldiers and subordinate leaders themselves. Soldiers learn much more when they identify for themselves what went right and wrong than when lessons learned are dictated. AARs always:

- Reinforce/increase learning that took place as a result of the training exercise.
- Increase Soldier and leader interest and motivation (thereby enhancing learning)
- Identify and analyze both strengths and weaknesses
- Involve all participants
- Guide toward achieving learning objectives
- Link lessons learned to subsequent training.

During the AAR, the facilitator provides an exercise overview and leads a discussion of events and activities that focus on the training objectives. The discussion with leaders and Soldiers should orient to the use of terrain integration of key battlefield operating systems (BOS)³, and leader actions. The discussion should also examine the weapons systems and doctrine used by the enemy during the exercise or event. At the close, the AAR leader summarizes comments from the observers, covering strengths and weaknesses discussed during the AAR and what the unit needs to do to fix the weaknesses.

There are basically two types of AARs - formal and informal. The amount and level of detail leaders need during the planning and preparation process depends on the type of AAR they will conduct and on available resources. Formal AARs require more detailed planning, preparation, and resources. Formal AARs are normally conducted at company level and above. However, when a training event is focused at squad or platoon level, and resources are available, a formal AAR may be conducted to gain maximum training benefit. Externally evaluated lane training, small-unit ARTEPs⁴, and tank and combat vehicle gunnery tables are prime examples.

Informal AARs are usually conducted for Soldier and crew-, squad-, and platoon-level training or when resources are not available to conduct a formal review. Informal AARs require less planning and preparation than formal AARs and are often on-the-spot reviews of individual and collective training performance at crew, squad, or platoon level. Informal AARs are usually held prior to company and higher-echelon AARs.

The AAR process has four steps:

³ Battlefield operating systems (BOS) are the critical tactical activities assessed by the command during the planning, preparation, and execution of an operation. The seven BOS include: intelligence, maneuver, fire support, air defense, mobility/countermobility/survivability, combat service support, and command and control.

⁴ The ARTEP is the cornerstone of Army unit training. It is the umbrella program used by trainers in the training evaluation of units. The performance of collective and individual skills within a unit are measured by T&EOs contained in MOS- and unit-specific ARTEP-MTPs, mission training plans.

- Planning the AAR.
- Preparing the AAR.
- Conducting the AAR.
- Conducting follow-up (using the AAR results).

Planning the AAR

Planning the AAR entails developing an AAR plan of action. The plan provides the foundation for successful AARs. The AAR plan contains:

- Who will observe the training and who will conduct the AAR.
- What trainers should evaluate.
- Who is to attend the AAR.
- When and where the AAR will occur.
- What training aids will be used.

The AAR plan is used to identify critical places and events to be observed. Training objectives are the basis for observations and the focus of the AAR. The planning step includes a doctrinal review of applicable sources to identify what training is to be accomplished and what is to be evaluated. For example, T&EOs extracted from appropriate ARTEP MTPs and Soldier training publications (STPs) provide tasks, conditions, and standards by which leaders can measure unit and Soldier performance. It also includes who will observe and control a particular event, including the AAR itself.

Stopping points must be scheduled during the planning step if the mission is complicated or has a series of defined phases. AARs should be scheduled at the completion of a single mission, major task, or an appropriate phase of the operation. For example, a leader may plan a stopping point to conduct an AAR after issuing an OPORD, when the unit arrives at a new position, or after consolidation on an objective.

Time to conduct the AAR must also be identified during the planning step. The larger the unit, the more time is needed for an AAR. A rule of thumb is 30-45 minutes for platoon-level AARs, 1 hour for company-level AARs, and about 2 hours for battalion-level and above AARs.

Preparing the AAR

Preparation for an AAR begins before the training and continues until the actual event. The AAR facilitator must review the training objectives before training, and again immediately before the AAR. The facilitator must also review current doctrine and applicable unit SOPs to ensure there are adequate tools to observe unit and individual performance. Key events scheduled to occur during the training must be identified. The AAR facilitator or O/C must also determine how information is to be captured. Recording systems can include notebooks, 3-inch by-5-inch index cards, prepared checklists, extracts from MPT tasks, and video. The AAR site must be pre-selected. Finally, the facilitator must review the AAR format, conduct his rehearses, and notify unit leaders of the start time and location. Figure 46 shows the standard AAR format.

AAR Format

- ▶ Introduction and rules.
- ▶ Review of training objectives.
- ▶ Commander's mission and intent (what was supposed to happen).
- ▶ Opposing force (OPFOR) commander's mission and intent (when appropriate).
- ▶ Relevant doctrine and tactics, techniques, and procedures (TTPs).
- ▶ Summary of recent events (what happened).
- ▶ Discussion of key issues (why it happened and how to improve).
- ▶ Discussion of optional issues.
- ▶ Discussion of force protection issues (discussed throughout).
- ▶ Closing comments (summary).

Figure 46. AAR Format.

The AAR facilitator must gather all the information and select and sequence key events. He must also identify critical discussion and teaching points. The AAR is organized using one of the following three techniques:

- Chronological order of events.
- By BOS.
- Key events/themes/issues.

Conducting the AAR

The AAR has a specific introduction. The introduction includes the purpose and sequence of the AAR to ensure that everyone present understands why an AAR is conducted. The unit training objectives are presented as are the tasks being reviewed, including their conditions and standards. The mission and (commander's) intent are restated. These address what was supposed to happen. In a formal AAR, if OPFOR were involved, the OPFOR explains his plan for defeating the friendly force.

The AAR must include a summary of events, or what happened. The evaluator and the participants determine what actually happened during performance of the training task. A factual and indisputable account is vital to the effectiveness of the discussion that follows. For force-on-force training, OPFOR members assist in describing the flow of the training event and discuss training outcomes from their points of view.

The focus of the AAR next shifts to determining what was right or wrong with what happened. The participants establish the strong and weak points of their performance. The facilitator plays a critical role in guiding the discussions so conclusions reached by participants are doctrinally sound, consistent with Army standards, and relevant to the wartime mission.

During the summary, the facilitator reviews and summarizes the key points identified during the discussion. The evaluator assists the chain of command undergoing the training to

lead the group in determining exactly how participants will perform differently the next time the task is performed. This results in organizational and individual motivation to conduct future sustainment training to standard.

Conducting Follow-Up (Using the AAR Results).

Leaders use the information from the AAR to assess performance and to plan future training. Task performance failing to meet Army standards is scheduled for training. Deficient supporting tasks are also scheduled and retrained. Finally, the AAR may reveal problems with unit SOPs. If so, leaders must revise the SOP and ensure that units implement the changes during future training.

Conducting the AAR With FSW

The AAR capability of FSW has two parts. First, at the completion of a mission, a menu automatically appears entitled AFTER ACTION REVIEW (See Figure 47). This screen allows the player to view data gathered from the mission he just completed. Its purpose is to assist the player in determining mission performance. The menu allows access to several key selections. These selections provide various statistics concerning the completed mission. Viewable data include: map statistics, squad statistics, OPFOR statistics, and mission report summaries. The process for selecting the various submenus and what is contained in each is explained in detail below. It is recommended that the facilitator assist the player through these selections.

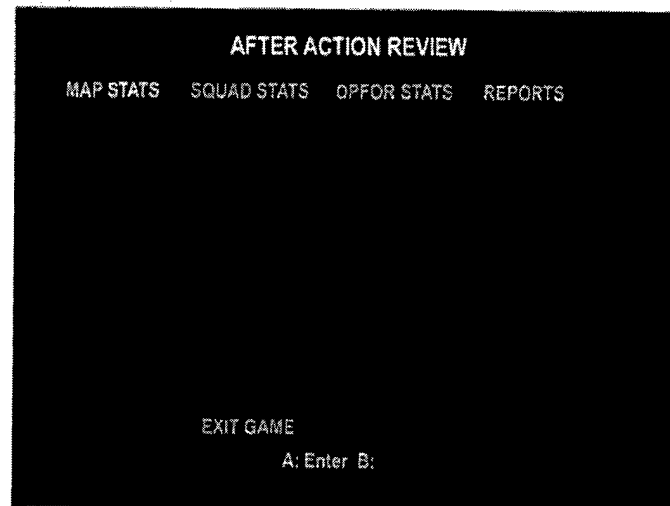


Figure 47. AAR Main Menu Screen.

The AAR menu and the accompanying statistics can be viewed again during the mission replay as part of the FSW *mission playback feature*. In addition to statistics, the mission playback feature provides a recording of each mission. Optional functions of the Mission Playback Feature include the ability to play the battle at varying speeds, pause the action, and view the scenario environment from multiple angles and heights. The FSW mission playback feature does *not* replace the AAR. It is a training aid for conducting an AAR. It also provides a training management tool to augment the teaching points of an AAR by providing a visual display of the mission and some reinforcing statistics.

Accessing the AAR Submenu Screen

The AAR menu screen allows the player to choose from several screens containing viewable data. The first screen is set automatically at the *map statistics screen*, or MAP STATS. Pressing the **A button** allows the player to view the data contained on that screen. To traverse the subsequent screens, move the **left stick** to the right. Each movement will bring up a new screen. To view the data on each screen, press the **A button**. Pressing the **B button** cycles the player back through the selections (See Figure 48.). The player can exit the game from either the main menu or any of the submenu screens by choosing the *EXIT GAME* option.

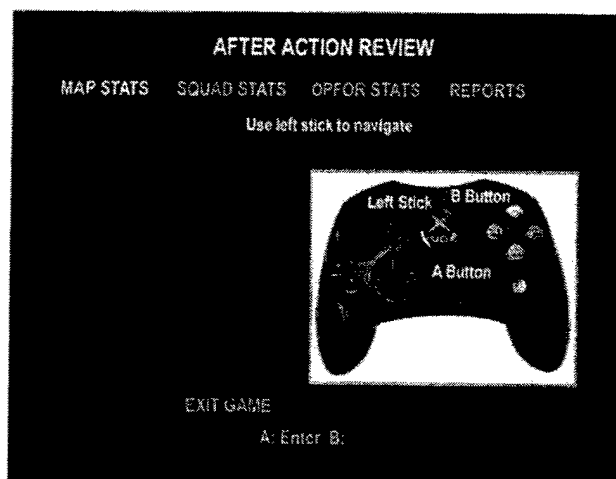


Figure 48. Viewing Menu Screens.

Accessing the Map Statistics Screen



Figure 49. Map Statistics Screen.

The MAP STATS screen automatically appears at the end of the mission. Pressing the **A button** will display the corresponding data. MAP STATS includes statistics pertaining to the previous mission played. These statistics include elapsed time of mission and information about civilian casualties, which include the number of civilians killed, wounded and immobile (seriously wounded or ambulatory), wounded, and wounded and secured. Figure 49 shows a screen capture of a set of MAP STATS. To move to the next screen selection use the **left stick** to highlight the selection and press the **A button** to access the information.

Accessing the Squad Statistics Screen

The next screen selection is *squad statistics*, or SQUAD STATS. Squad STATS (Figure 50) includes the status of all squad members at the end of the previous mission. It includes information on squad members killed, wounded and immobile (again, seriously wounded or ambulatory), wounded, and wounded and secured. It also contains data on ammunition expenditures by weapon system. The weapon systems include the M-4 Carbine, M-249 SAW,

M67 High Explosive Fragmentation Grenades, AN-M83 Smoke Hand Grenades, and M-203 Grenade Launcher.

AFTER ACTION REVIEW			
MAP STATS	SQUAD STATS	OPFOR STATS	REPORTS
KILLED	1	M4 EXPENDED	37
IMMOBILE	1	SAW EXPENDED	233
WOUNDED	0	M67 USED	2
SECURED	0	AN-M83 USED	2
		M406 USED	3
EXIT GAME			
A: Enter B:			

Figure 50. Squad Statistics Screen.

As with the earlier Allocation of Equipment Menu, this screen refers to the M67 High Explosive Fragmentation Grenade and the AN-M83 Smoke Hand Grenade simply as the "M67" and "AN-M83." Soldiers may become confused between the two hand grenades and may have to be reminded which grenade is which.

This slide also contains the same technical error located in the earlier Allocation of Equipment Menu. It should again be pointed out to the Soldier in order to minimize its distraction. The screen refers to the M-203 Grenade Launcher as the "M406." In reality, the M406 is a high explosive round, one of six types of rounds available for the M-203 Grenade Launcher.

Accessing the OPFOR Statistics Screen

The next screen is the *OPFOR statistics screen*, or OPFOR STATS. The OPFOR STATS screen provides complete information on the status of enemy casualties at the end of the mission. The information is similar to the MAP STATS and SQUAD STATS, minus the ammunition expenditures. The information includes enemy killed, wounded and immobile (seriously wounded or ambulatory), wounded, and wounded and secured (captured). Figure 51 shows a screen capture of the OPFOR STATS screen.

AFTER ACTION REVIEW			
MAP STATS	SQUAD STATS	OPFOR STATS	REPORTS
KILLED	3		
IMMOBILE	1		
WOUNDED	2		
SECURED	0		
EXIT GAME			
A: Enter B:			

Figure 51. OPFOR Statistics Screen.

Accessing the Reports Menu

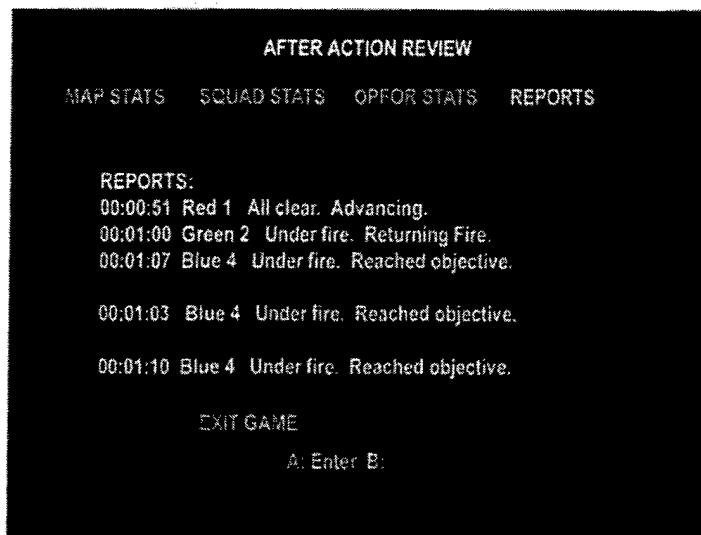


Figure 52. Reports Screen.

The final screen is the *reports menu* (Figure 52). REPORTS is a log of the reports transmitted during the previous mission. The REPORTS menu tracks reports submitted by the player. Captured information includes time, sending squad leader's call sign, and an abbreviated text highlighting the content of the message. The menu attempts to address a common tactical occurrence, subordinates failing to submit status reports such as phase line crossings, arrival at a coordination point, enemy observations, enemy contact, etc. This situation requires emphasis during training to correct the deficiency.

Once the player has reviewed the report selection, he exits the game. This is accomplished via the EXIT GAME selection at the bottom of the screen. To exit the game, select the EXIT GAME option and press the **A button** on the controller.

Accessing the Mission Playback Menu Screen

The *Mission Playback Feature Menu* is accessed from the main interface menu like the AAR statistics screens. Playback is selected by moving the **left stick** to the right from the MISSIONS selection to the REPLAY field. Each movement will bring up a new screen. Once the REPLAY field is highlighted, press the **A button**. Once selected, the replay will begin immediately.

Playback Controls and Functions

Once the Mission Playback Feature is selected from the Main Menu, a US Army icon screen will appear while the mission is being loaded (See Figure 19). A green-colored indicator bar will appear on the screen with the term "Loading" to indicate that the mission is being uploaded. As the mission is being uploaded, the green bar will change colors indicating the amount of the mission that is uploaded. Once the green bar is fully highlighted, the screen will fade out and the replayed mission will begin.

As the mission starts to replay, a translucent gray interface appears on the bottom one-third of the screen. The interface contains a non-interactive legend. The legend serves as a reminder as to which controls perform which functions. It is recommended that the AAR facilitator manage this function during the AAR. This is important because the playback can be

erased should the player select the wrong controls. (e.g. The player may inadvertently activate a capability that allows him to re-enter the mission. This will overwrite the saved mission.)

The interface contains several key elements (See Figure 53). A time-scale bar measures the total elapsed time of the mission. The time scale bar is graduated with scaled increments. A time-scale bar marker provides the playback mission time relative to the visual display on the monitor. The time-scale bar marker moves from left to right above the time-scale bar, indicating the current position in the playback. By default, the playback speed is identical to the normal speed of the mission. Playback speeds can be adjusted from normal

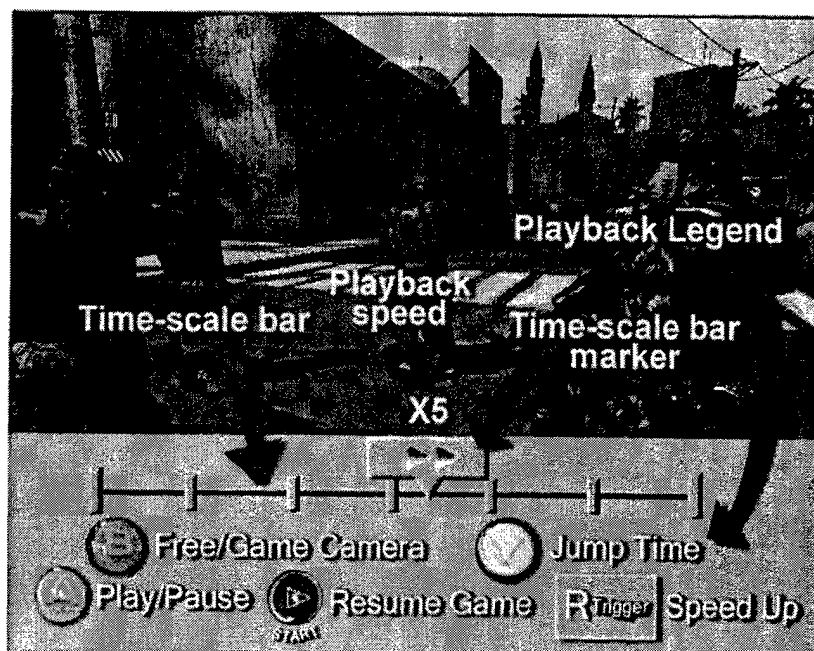


Figure 53. AAR Interface.

speed to five times the actual speed of the mission (5X) by increasing or decreasing the pressure on the **right trigger**. When the playback is sped up from 2X through 5X, playback speed is indicated by the terms "X2, X3, X4, or X5" above the time-scale bar marker. Note that these indicators deviate from the commonly accepted speed indicators of "2X, 3X, 4X, or 5X," but the meaning is the same.

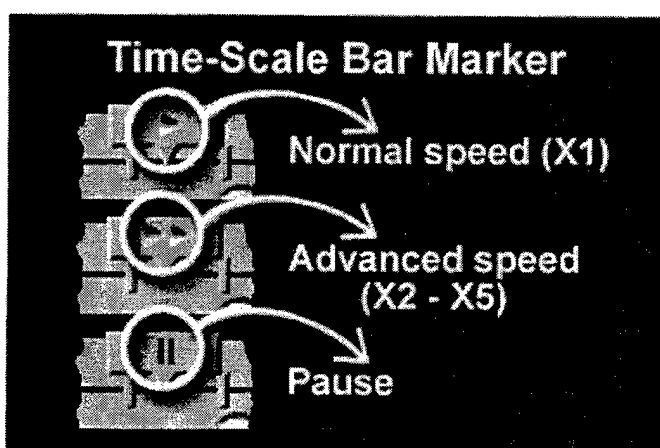


Figure 54. Time Scale Bar Marker.

As the playback speed is changed, several visual changes appear on the time bar marker to help the player determine the actions on the monitor screen. Three symbols are added to the bar marker to indicate various speeds. All three symbols are universal electronics markings. A single triangle appears in the center of the time bar marker as the playback is run in normal speed. For speeds X2 through X5, double triangles appear in the center of the marker. Should PAUSE be selected, two vertical bars appear in the center of the time bar marker. These marker speeds are shown in Figure 54.

Playback Controls

There are some unique options to the playback system. These options can aid the platoon leadership in tailoring the mission playback. These functions include the free camera, pause, replay speed, viewing cones, and enemy awareness lines.

Free Camera Function

The *free camera function* allows the camera to traverse the environment and change the visual angle of the view. To use the free camera function, press the **B button** at any time during the playback. Pressing the B button will unlock the camera from its fixed perspective and allow unobstructed movement around the battlefield using the **left stick** and **right stick** in tandem. Pressing the **B button** again will result in the camera returning to a fixed view behind the team that is currently selected in the playback.

Pause Function

There may be instances where the AAR facilitator may want to take a few minutes to stress a point. It is helpful to stop the playback so that no mission activity is lost. This task is accomplished by using the *pause function*. To pause the playback, press the **A button**. The button can be selected at any time during the playback. The PAUSE function will freeze the playback at that point. To restart the mission playback, press the **A button** again. The playback will resume from where it left off.

X2/X5 or Increasing Playback Speed Function

The normal playback speed equals the actual speed of the mission. To save valuable training time between important training events, FSW allows the player or AAR facilitator to increase the playback speed. This is called *X2/X5 or increasing playback speed function*. To increase the playback speed, squeeze the **right trigger** on the controller. As pressure is increased on the trigger, the rate of playback increases from normal speed to 5X, or five times normal speed. The controller trigger locations are shown in Figure 55.



Figure 55. Controller Triggers.

Jump Time Function

Another function, the *jump time function*, allows the AAR facilitator to skip portions of the playback. The Jump Time function is particularly useful when the AAR facilitator wants to go directly to the next teaching point without reviewing the entire playback. The function will skip from the present time increment to the next time increment on the time scale bar.

To use the jump time function, press and briefly hold the **Y button** on the controller (See Figure 56). The time-scale bar marker will move to the next time increment on the time-scale bar. The process can be repeated until the desired time increment is reached. Since the timescale bar marker will only move to one time increment at a time, there is no other action required once the desired time increment is reached.

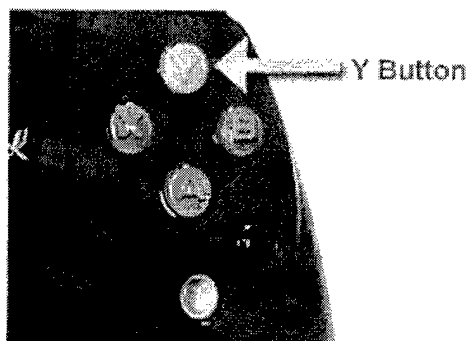


Figure 56. Y Button Location.

Resume Game Function

The *resume game function* of the FSW playback feature is a critical tool for the AAR process. The function allows the player to resume play from any point in the playback. This function allows the Soldier to pick up the mission from any point, by restarting the battle. Used in conjunction with teaching points by the AAR facilitator, the player can learn from any previous mistakes by rewinding the battle and starting again from the point of error. The revised mission can be saved and analyzed as a new mission. To access the resume game function, select the **start button** on the controller. However, once the start button is used, the new mission overwrites the previous one, making it impossible to return to the previous mission.

Viewing Cones Function

The *viewing cones function* indicates what each fire team member can see in front of him. Once selected, the screen transfers to an overhead perspective of the selected fire team. Opaque green cones, or sectors, emanate from each Soldier and angle out along the sector boundaries of each individual's line-of-sight. When these sectors overlap, the darker green areas indicate that more than one Soldier can see the area ahead. Where the sectors intersect building walls, interfering with normal line-of-sight, the cones or sectors cease along the building wall. Select the **black button** on the controller to access the Viewing Cones function. To remove the cones, select the **black button** again and the cones will disappear. The **left stick** controls the movement of the overhead view.

Enemy Awareness Lines

The *enemy awareness lines* function is useful to determine whether an enemy can engage a friendly Soldier, or vice versa. Selecting the **white button** on the controller activates the function. Once selected, the screen transfers to an overhead view of the immediate area around

Accessing the AAR Submenu Screen

The AAR menu screen allows the player to choose from several screens containing viewable data. The first screen is set automatically at the *map statistics screen*, or MAP STATS. Pressing the **A button** allows the player to view the data contained on that screen. To traverse the subsequent screens, move the **left stick** to the right. Each movement will bring up a new screen. To view the data on each screen, press the **A button**. Pressing the **B button** cycles the player back through the selections (See Figure 48.). The player can exit the game from either the main menu or any of the submenu screens by choosing the *EXIT GAME* option.

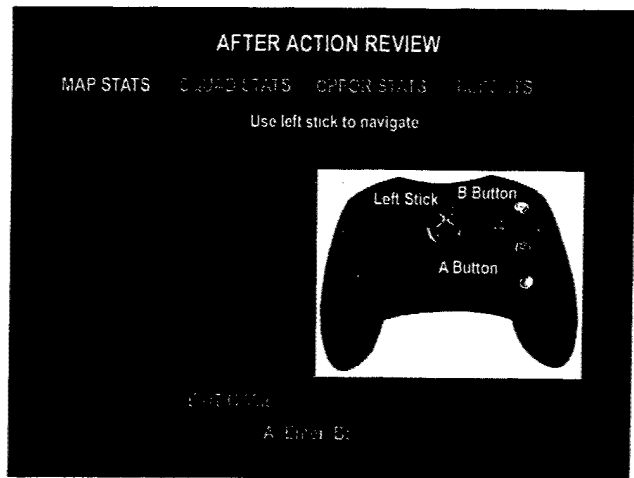


Figure 48. Viewing Menu Screens.

Accessing the Map Statistics Screen



Figure 49. Map Statistics Screen.

The MAP STATS screen automatically appears at the end of the mission. Pressing the **A button** will display the corresponding data. MAP STATS includes statistics pertaining to the previous mission played. These statistics include elapsed time of mission and information about civilian casualties, which include the number of civilians killed, wounded and immobile (seriously wounded or ambulatory), wounded, and wounded and secured. Figure 49 shows a screen capture of a set of MAP STATS. To move to the next screen selection use the **left stick** to highlight the selection and press the **A button** to access the information.

Accessing the Squad Statistics Screen

The next screen selection is *squad statistics*, or SQUAD STATS. Squad STATS (Figure 50) includes the status of all squad members at the end of the previous mission. It includes information on squad members killed, wounded and immobile (again, seriously wounded or ambulatory), wounded, and wounded and secured. It also contains data on ammunition expenditures by weapon system. The weapon systems include the M-4 Carbine, M-249 SAW,

M67 High Explosive Fragmentation Grenades, AN-M83 Smoke Hand Grenades, and M-203 Grenade Launcher.

AFTER ACTION REVIEW			
MAP STATS	SQUAD STATS	OPFOR STATS	REPORTS
KILLED	1	M67 EXPENDED	37
IMMOBILE	1	SAW EXPENDED	233
WOUNDED	0	M67 USED	2
SECURED	0	AN-M83 USED	2
		M406 USED	3
EXIT GAME			
A: Enter B:			

Figure 50. Squad Statistics Screen.

As with the earlier Allocation of Equipment Menu, this screen refers to the M67 High Explosive Fragmentation Grenade and the AN-M83 Smoke Hand Grenade simply as the "M67" and "AN-M83." Soldiers may become confused between the two hand grenades and may have to be reminded which grenade is which.

This slide also contains the same technical error located in the earlier Allocation of Equipment Menu. It should again be pointed out to the Soldier in order to minimize its distraction. The screen refers to the M-203 Grenade Launcher as the "M406." In reality, the M406 is a high explosive round, one of six types of rounds available for the M-203 Grenade Launcher.

Accessing the OPFOR Statistics Screen

The next screen is the *OPFOR statistics screen*, or OPFOR STATS. The OPFOR STATS screen provides complete information on the status of enemy casualties at the end of the mission. The information is similar to the MAP STATS and SQUAD STATS, minus the ammunition expenditures. The information includes enemy killed, wounded and immobile (seriously wounded or ambulatory), wounded, and wounded and secured (captured). Figure 51 shows a screen capture of the OPFOR STATS screen.

AFTER ACTION REVIEW			
MAP STATS	SQUAD STATS	OPFOR STATS	REPORTS
KILLED	3		
IMMOBILE	1		
WOUNDED	2		
SECURED	0		
EXIT GAME			
A: Enter B:			

Figure 51. OPFOR Statistics Screen.

Accessing the Reports Menu

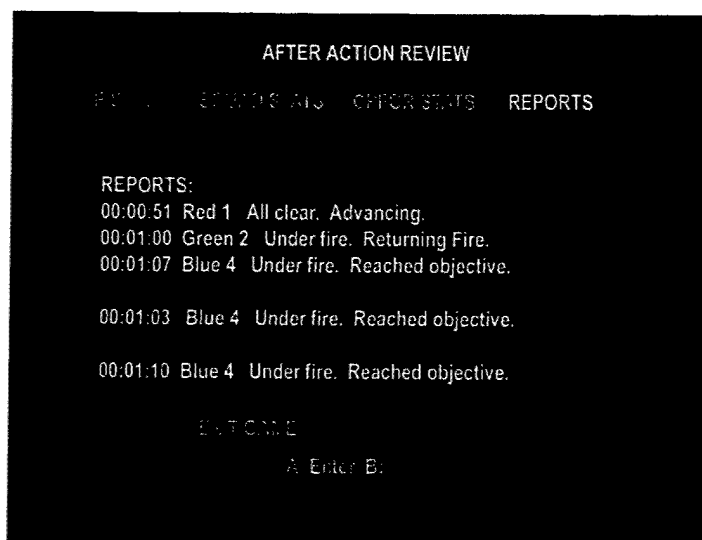


Figure 52. Reports Screen.

The final screen is the *reports menu* (Figure 52). REPORTS is a log of the reports transmitted during the previous mission. The REPORTS menu tracks reports submitted by the player. Captured information includes time, sending squad leader's call sign, and an abbreviated text highlighting the content of the message. The menu attempts to address a common tactical occurrence, subordinates failing to submit status reports such as phase line crossings, arrival at a coordination point, enemy observations, enemy contact, etc. This situation requires emphasis during training to correct the deficiency.

Once the player has reviewed the report selection, he exits the game. This is accomplished via the EXIT GAME selection at the bottom of the screen. To exit the game, select the EXIT GAME option and press the **A button** on the controller.

Accessing the Mission Playback Menu Screen

The *Mission Playback Feature Menu* is accessed from the main interface menu like the AAR statistics screens. Playback is selected by moving the **left stick** to the right from the MISSIONS selection to the REPLAY field. Each movement will bring up a new screen. Once the REPLAY field is highlighted, press the **A button**. Once selected, the replay will begin immediately.

Playback Controls and Functions

Once the Mission Playback Feature is selected from the Main Menu, a US Army icon screen will appear while the mission is being loaded (See Figure 19). A green-colored indicator bar will appear on the screen with the term "Loading" to indicate that the mission is being uploaded. As the mission is being uploaded, the green bar will change colors indicating the amount of the mission that is uploaded. Once the green bar is fully highlighted, the screen will fade out and the replayed mission will begin.

As the mission starts to replay, a translucent gray interface appears on the bottom one-third of the screen. The interface contains a non-interactive legend. The legend serves as a reminder as to which controls perform which functions. It is recommended that the AAR facilitator manage this function during the AAR. This is important because the playback can be

erased should the player select the wrong controls. (e.g. The player may inadvertently activate a capability that allows him to re-enter the mission. This will overwrite the saved mission.)

The interface contains several key elements (See Figure 53). A time-scale bar measures the total elapsed time of the mission. The time scale bar is graduated with scaled increments. A time-scale bar marker provides the playback mission time relative to the visual display on the monitor. The time-scale bar marker moves from left to right above the time-scale bar, indicating the current position in the playback. By default, the playback speed is identical to the normal speed of the mission. Playback speeds can be adjusted from normal speed to five times the actual

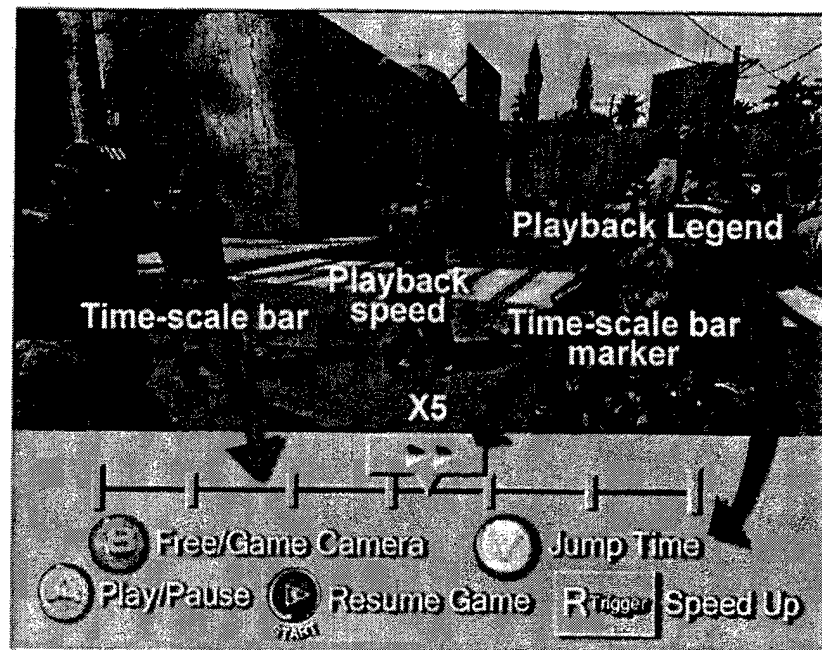


Figure 53. AAR Interface.

speed of the mission (5X) by increasing or decreasing the pressure on the **right trigger**. When the playback is sped up from 2X through 5X, playback speed is indicated by the terms "X2, X3, X4, or X5" above the time-scale bar marker. Note that these indicators deviate from the commonly accepted speed indicators of "2X, 3X, 4X, or 5X," but the meaning is the same.

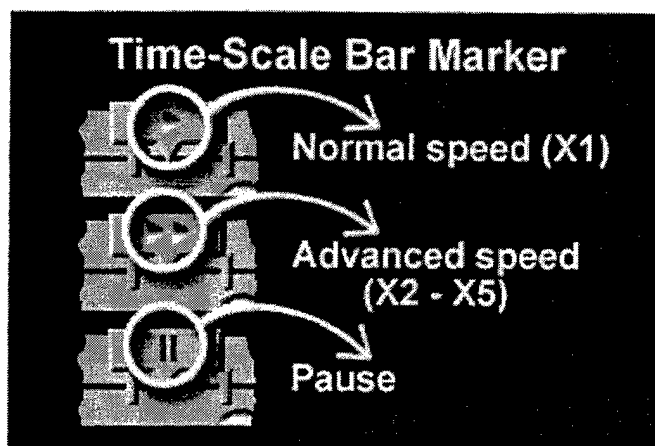


Figure 54. Time Scale Bar Marker.

As the playback speed is changed, several visual changes appear on the time bar marker to help the player determine the actions on the monitor screen. Three symbols are added to the bar marker to indicate various speeds. All three symbols are universal electronics markings. A single triangle appears in the center of the time bar marker as the playback is run in normal speed. For speeds X2 through X5, double triangles appear in the center of the marker. Should PAUSE be selected, two vertical bars appear in the center of the time bar marker. These marker speeds are shown in Figure 54.

Playback Controls

There are some unique options to the playback system. These options can aid the platoon leadership in tailoring the mission playback. These functions include the free camera, pause, replay speed, viewing cones, and enemy awareness lines.

Free Camera Function

The *free camera function* allows the camera to traverse the environment and change the visual angle of the view. To use the free camera function, press the **B button** at any time during the playback. Pressing the B button will unlock the camera from its fixed perspective and allow unobstructed movement around the battlefield using the **left stick** and **right stick** in tandem. Pressing the **B button** again will result in the camera returning to a fixed view behind the team that is currently selected in the playback.

Pause Function

There may be instances where the AAR facilitator may want to take a few minutes to stress a point. It is helpful to stop the playback so that no mission activity is lost. This task is accomplished by using the *pause function*. To pause the playback, press the **A button**. The button can be selected at any time during the playback. The PAUSE function will freeze the playback at that point. To restart the mission playback, press the **A button** again. The playback will resume from where it left off.

X2/X5 or Increasing Playback Speed Function

The normal playback speed equals the actual speed of the mission. To save valuable training time between important training events, FSW allows the player or AAR facilitator to increase the playback speed. This is called *X2/X5 or increasing playback speed function*. To increase the playback speed, squeeze the **right trigger** on the controller. As pressure is increased on the trigger, the rate of playback increases from normal speed to 5X, or five times normal speed. The controller trigger locations are shown in Figure 55.

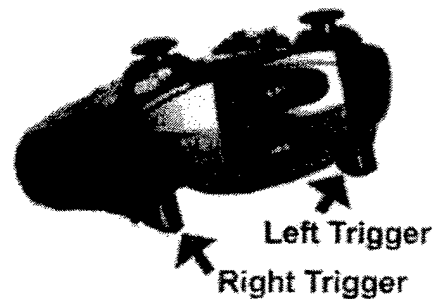


Figure 55. Controller Triggers.

Jump Time Function

Another function, the *jump time function*, allows the AAR facilitator to skip portions of the playback. The Jump Time function is particularly useful when the AAR facilitator wants to go directly to the next teaching point without reviewing the entire playback. The function will skip from the present time increment to the next time increment on the time scale bar.

To use the jump time function, press and briefly hold the **Y button** on the controller (See Figure 56). The time-scale bar marker will move to the next time increment on the time-scale bar. The process can be repeated until the desired time increment is reached. Since the timescale bar marker will only move to one time increment at a time, there is no other action required once the desired time increment is reached.

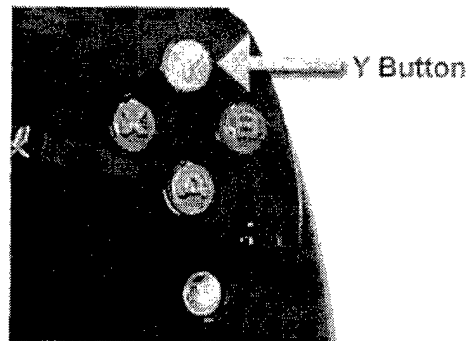


Figure 56. Y Button Location.

Resume Game Function

The *resume game function* of the FSW playback feature is a critical tool for the AAR process. The function allows the player to resume play from any point in the playback. This function allows the Soldier to pick up the mission from any point, by restarting the battle. Used in conjunction with teaching points by the AAR facilitator, the player can learn from any previous mistakes by rewinding the battle and starting again from the point of error. The revised mission can be saved and analyzed as a new mission. To access the resume game function, select the **start button** on the controller. However, once the start button is used, the new mission overwrites the previous one, making it impossible to return to the previous mission.

Viewing Cones Function

The *viewing cones function* indicates what each fire team member can see in front of him. Once selected, the screen transfers to an overhead perspective of the selected fire team. Opaque green cones, or sectors, emanate from each Soldier and angle out along the sector boundaries of each individual's line-of-sight. When these sectors overlap, the darker green areas indicate that more than one Soldier can see the area ahead. Where the sectors intersect building walls, interfering with normal line-of-sight, the cones or sectors cease along the building wall. Select the **black button** on the controller to access the Viewing Cones function. To remove the cones, select the **black button** again and the cones will disappear. The **left stick** controls the movement of the overhead view.

Enemy Awareness Lines

The *enemy awareness lines* function is useful to determine whether an enemy can engage a friendly Soldier, or vice versa. Selecting the **white button** on the controller activates the function. Once selected, the screen transfers to an overhead view of the immediate area around

the selected fire team. The player can control the movement of the overhead view by moving the **left stick**. One of four colored lines originate, direct line-of-sight, from the weapon barrels of enemy and fire team members. The colored lines indicate the following:

- *Green Lines*: These lines indicate that an enemy soldier is currently visible to a squad member. A thick green line indicates that a squad member is currently targeting the enemy soldier.

- *Yellow Lines*: These lines indicate that the enemy soldier was recently visible to a squad member, and that the squad member is still watching the area in case the enemy reappears.

- *Red Lines*: The red lines indicate that a squad member is visible to an enemy soldier. A thick red line indicates that an enemy soldier is currently targeting the squad member.

- *Blue Lines*: These lines indicate that a squad member is aware of the enemy soldier because he was told about them by another squad member via a game shout. However, the enemy is not in the Soldier's direct line-of-sight.

The playback system will only allow the player or AAR facilitator to activate either the Viewing Cones or the Enemy Awareness Lines. Both functions cannot be selected simultaneously. Pressing the corresponding button in the selected function will return the camera perspective back to the existing playback mode. Selecting the alternate function button will switch the playback to that function, either the **white button** for Enemy Awareness Lines or the **black button** for Viewing Cones.

References

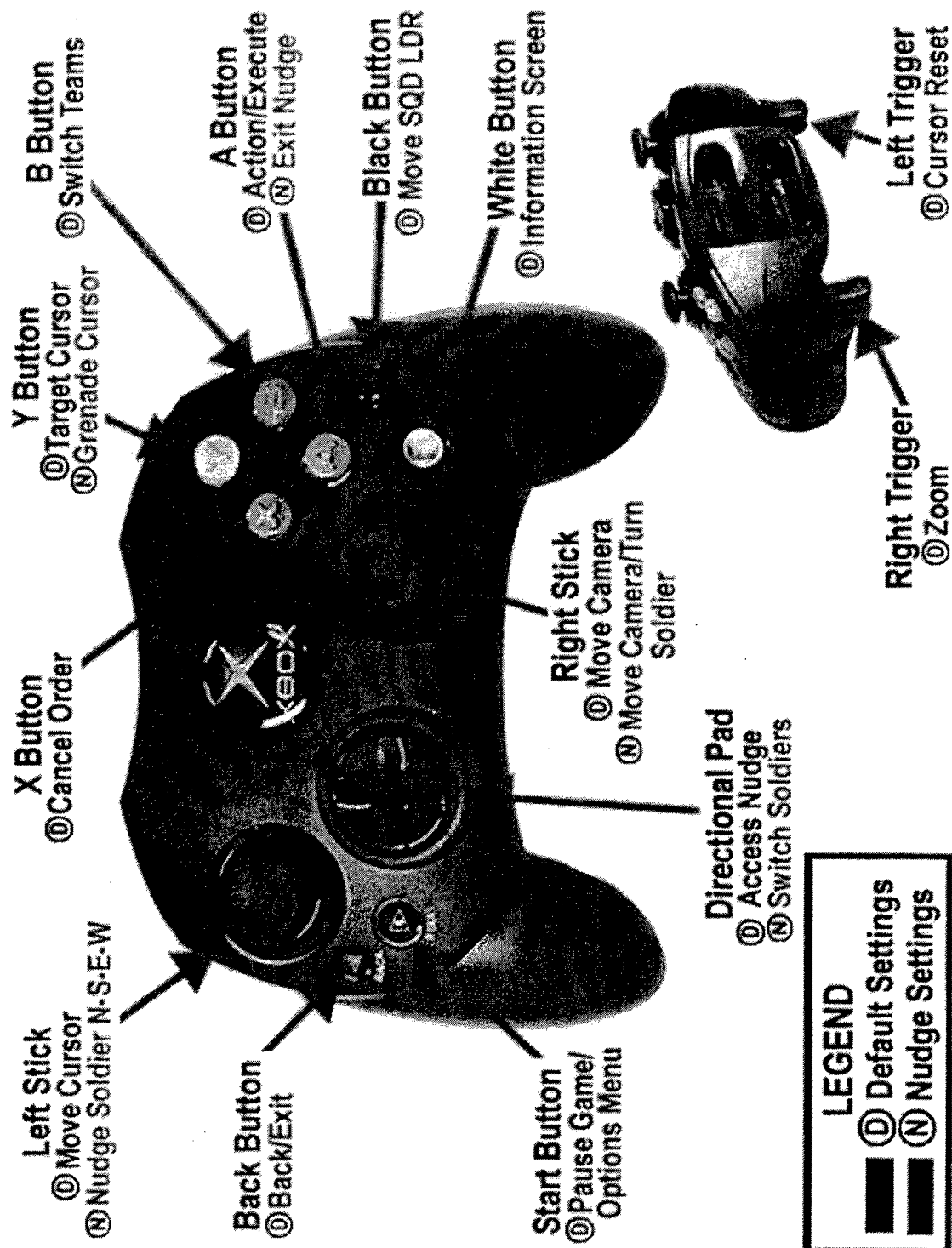
- Institute of Creative Technology Pandemic Studios/Sony Imageworks (15 June 2003). *Simulation Manual for Full Spectrum Warrior* Version 1.1. Marina Del Rey, CA: Pandemic Studios, LLC.
- U.S. Department of the Army. (15 Sep 2003). Field Manual (FM) FM 7-1 *Battle Focused Training*. Washington DC: Headquarters, Department of the Army.
- U.S. Department of the Army. (22 Oct 2002). Field Manual (FM) 7-0 *Training The Force*. Washington DC: Headquarters, Department of the Army.
- U.S. Department of the Army. (25 June 2002). Army Training and Evaluation Program (ARTEP) 7-8-Drill *Battle Drills for the Infantry Rifle Platoon and Squad*. Washington DC: Headquarters, Department of the Army.
- U.S. Department of the Army. (28 Feb 2002). Field Manual (FM) 3-06.11 *Combined Arms Operations in Urban Terrain*. Washington DC: Headquarters, Department of the Army.
- U.S. Department of the Army. (3 Mar 2000). Army Training and Evaluation Program (ARTEP) 7-8-MTP *Mission Training Plan for the Infantry Rifle Platoon and Squad*. Washington DC: Headquarters, Department of the Army.
- U.S. Army Training and Doctrine Command. (30 Sep 1993). TRADOC Circular (TC) 25-20 *A Leader's Guide To After-Action Reviews*. Fort Monroe, VA: Headquarters, U.S. Army Training and Doctrine Command.

Appendix A: Acronyms

AAR	after action review
AI	artificial intelligence
AR	automatic rifleman
ARTEP	Army Training and Evaluation Program
ASLT	assault
ASLT PSN	assault position
BFV	M2-series Bradley Fighting Vehicle
BLDG	building
BOS	battlefield operating system
CA	Civil Affairs
CASEVAC	casualty evacuation
CCIR	commander's critical information requirement
COB	civilians on the battlefield
CP	command post
DEL	delete selection
EOD	explosive ordinance disposal
EPW	enemy prisoner of war
FBCB2	Force XXI Battle Command - Brigade and Below
FM	field manual
FO	forward observer
FPF	final protective fire
frag	fragmentary grenade
FRAGO	fragmentary order
FSW	Full Spectrum Warrior
G	grenadier
IAW	in accordance with
ICV	infantry carrier vehicle
ID	identification
JTF	joint task force
KIA	killed in action
mags	magazines
MB	megabytes
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civilian considerations
MOPP	mission-oriented protective posture
MP	military police
MTP	mission training plan
MWD	military with dog
NCO	noncommissioned officer
NFA	no fire areas
NVD	night vision devices
O/C	observer/controller
OP	observation post

OPFOR	opposing force
OPORD	operation order
ORP	objective rally point
PAO	Public Affairs Operations
PL	platoon leader
POSNAV	position navigation
PSG	platoon sergeant
PSYOP	psychological operations
QRF	quick reaction force
R	rifleman
RATELO	radio telephone operator
RF	radio frequency
REP	equipment repository
ROE	rules of engagement
ROI	rules of interaction
RTO	radio telephone operator
SALUTE	report format (size, activity, location, unit, time, and equipment)
SAW	M-249 Squad Automatic Weapon
SBF	support by fire
SITREP	situation report
SL	squad leader
SOP	standing operating procedures
SPC	space selection
SPOTREP	spot report
STP	soldier training publication
SU	situational understanding
T&EO	training and evaluation outline
TL	team leader
TSOP	tactical standing operating procedures
TSP	training support package
VIP	very important person
WARNO	warning order

Appendix B: X-Box Controller Diagram



Appendix C: Sample General Scenario

**CLEARED FOR PUBLIC RELEASE
JTF Eagle Talon Public Affairs Office
15 Jul XX**

-Original Signed-
Mortimer Snodgrass
MAJ, USMC
JTF Eagle Talon Public Affairs Officer

Associated Press Release
Agular, Kazar

Mission Statement

In the months since the President announced his war on terrorism, the United States has been actively seeking out and destroying terrorist groups worldwide. The US is currently conducting operations in the nation of Kazar. Terrorists from the radical terrorist group the National Association of Anti-American Thugs and Goons have aligned themselves with other various anti-government insurgency groups with the aim of overthrowing the elected government of Kazar and establishing a fundamentalist regime. The U.S.-led Joint Task Force (JTF) Eagle Talon is conducting various missions within the nation of Kazar under the auspices of *Operation World Freedom*. U.S. forces in support of that operation are conducting various military operations.

-----End of Press Release-----

Appendix D: Collective Task Training and Evaluation Outlines (T&EOs)

Report Date: 18 Feb 2003

Synopsis Report for Collective Task

07-3-1000

Assault a Building (Infantry Platoon/Squad)

Status: Active

Last Changed 11 Dec 2002

Condition: The platoon is conducting operations as part of a larger force in an urban environment and has received an operation order (OPORD) or fragmentary order (FRAGO) to assault and clear a building. The building has two levels and contains a squad-sized enemy element. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the Rules of Engagement (ROE) and Rules of Interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon assaults and clears the building in accordance with (IAW) tactical standing operating procedures (TSOP), the order, and or commander's guidance. The platoon kills, captures, or forces the withdrawal of all enemy in the building. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
1. Platoon leader (PL) gains and or maintains situational understanding (SU) using information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. * 2. PL receives an OPORD or FRAGO and issues warning order (WARNO) to the platoon in enough time for squad leaders to have maximum planning time. * 3. PL plans using troop-leading procedures. a. Conducts a digital and or conventional map reconnaissance. (1) Identifies tentative rally points as required. (2) Identifies objective rally point (ORP). (3) Identifies tentative support by fire and assault positions. (4) Identifies likely avenues of approach for enemy reinforcing elements. (5) Identifies routes to and from the objective. (6) Marks tentative dismount points on digital and conventional maps as appropriate. b. Evaluates the situation, including the following factors: (1) Building types (including layout and construction materials). (2) Subterranean entry and exit points and avenues of approach. (3) Requirements for special equipment and or materials. c. Plans and coordinates indirect fire support and or close air support, if available. d. Identifies direct fire responsibilities.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
e. Organizes the platoon as necessary to accomplish the mission and or compensate for combat losses. (1) Designates the support element. (May include Bradley Fighting Vehicles [BFVs] or Infantry Carrier Vehicles [ICVs]). (2) Designates the breach element. (3) Designates the assault element. f. Addresses actions on chance contact with the enemy. * 4. PL disseminates reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. * 5. PL issues orders and instructions to include rules of engagement (ROE) and or rules of interaction (ROI). 6. Platoon conducts a rehearsal. * 7. PL issues FRAGOs, as necessary, to address changes to the plan identified during the rehearsal. 8. Platoon moves tactically to ORP, if used. a. Secure and occupy ORP. * 9. PL and reconnaissance element conducts the reconnaissance based on mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC). a. Enters waypoints into position navigation (POSNAV) equipment to aid navigation, if necessary. b. Verifies routes to assault, support, and security positions. c. Observes the target, and verifies and updates intelligence information. d. Selects assault, support, and security positions. e. Leaves security element to observe building/objective. f. Returns to ORP or other platoon position. *10. PL adjust the plan based on updated intelligence and reconnaissance effort. *11. PL updates the enemy situation. *12. PL disseminates updated digital reports (if applicable), overlays, and other pertinent information. 13. Platoon enters way points into POSNAV equipment to aid navigation, if necessary. *14. Platoon sergeant (PSG) and or squad leader employs the support element and indirect fires to isolate the building and overwatch the breach and assault elements during movement to the objective. a. Employs available weapons in support by fire (SBF) positions to destroy or suppress any known enemy positions. b. Employs indirect fires and or smoke to suppress, obscure, or destroy enemy elements. c. Employs available weapons to observe identified subterranean entry and exit points. d. Employs available assets to breach walls and or obstacles. 15. Breach element conducts tactical movement from dismount point to the objective. a. Initiates movement after enemy defensive positions are suppressed, obscured, or destroyed. b. Uses covered and concealed routes that do not mask friendly suppressive fires. c. Crosses open areas rapidly using concealment of smoke and suppression of enemy targets by the support element. 16. Assault element conducts tactical movement from the dismount point to the objective.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
a. Trails the breach element IAW mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC). b. Provides additional security and or support (if needed) to the breach element. c. Engages enemy forces with appropriate weapon systems to destroy or force withdrawal of sniper teams, antiarmor teams, and armor vehicles within sector. d. Maintains 360 degree security. e. Monitors and controls the flow of battle to prevent potential fratricide situations. *17. PSG or weapons squad leader employs direct and indirect fires to overwatch and protect the breach and assault elements during the clearance of the building. 18. Breach element enters the building. a. Enters the building at the designated entry point. b. Secures and maintains a foothold for the assault element. c. Provides additional support for the assault element. 19. Assault element enters and clears the building. a. Clears the building and or rooms IAW TSOP. (1) Clearing team(s) clears the building room by room. (a) Takes up positions inside the room that allows the element to completely dominate the room and eliminate the threat. (b) Engages targets as they move to their designated points of domination. (c) Ensures points of domination are not in front of doors and windows. (d) Observes the ceiling, the floor, and the walls for mouse holes and loopholes. (e) Exercises fire control and discriminate direct fires. (f) Marks the building IAW unit TSOP to designate a cleared building. (2) Clearing team(s) or designated personnel from the assault element clear a staircase, if required. (a) Ensures 360 degree and three-dimensional security is maintained in the immediate vicinity of the staircase. (b) Locates, marks, bypass, and or clears obstacles and or booby traps blocking access to the staircase. (c) Moves up the stairs using the fire team or buddy team flow. (d) Secures each landing before continuing up or down additional flights. b. Reports clearance to the PL. c. Continues operations IAW PL's intent. *20. PL keeps the company commander informed throughout the operation. a. Sends updated SITREPs as necessary during the operation. b. Positions personnel to cover enemy routes of counterattack and infiltration into the building. c. Reports the completion of clearance of the building. d. Redistributes ammunition and requests resupply, as required. 21. Platoon consolidates and reorganizes as necessary. 22. Platoon secures and evacuates enemy prisoners of war (EPWs) and noncombatants as necessary. 23. Platoon treats and evacuates casualties. 24. Platoon processes any captured documents and or equipment. 25. PL reports platoon status to the higher headquarters.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
26. Platoon continues operations as directed.		

Synopsis Report for Collective Task

07-3-1117

Conduct a Presence Patrol (Antiarmor/Infantry/Reconnaissance Platoon/Squad)

Status: Active

Last Changed 3 Dec 2002

Condition: The platoon is conducting operations as part of a higher headquarters and has received an operation order (OPORD) or fragmentary order (FRAGO) to conduct a presence patrol to gather information, monitor an agreement, or demonstrate a United States (US) force presence at the location and time specified. The platoon is occupying an assembly area or base camp. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. This task should not be trained in mission-oriented protective posture (MOPP) 4.

Standard: The platoon conducts the presence patrol in accordance with (IAW) tactical standing operating procedures (TSOP), the order, and or commander's guidance. The platoon reacts as necessary to hostile contact. The platoon reports as required. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Platoon leader (PL) gains and or maintains situational understanding using (SU) information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. * 2. PL receives an OPORD or FRAGO and issues warning order (WARNO) to the platoon using FBCB2, frequency modulated or other tactical means. * 3. PL plans the presence patrol using troop leading procedures with special emphasis on the following: a. Conducts a digital and or conventional map reconnaissance, if applicable b. Complies with requirements specified and implied in OPORD. c. Develops necessary security measures. d. Provides for overwatch element (for example, a sniper team or a squad) if appropriate. e. Identifies higher headquarters Commander's Critical Information Requirements (CCIR) and Information Requirements (IR). f. Obtains sufficient information about persons who are to be apprehended if encountered so as to be able to identify them. g. Requests liaison officers, local guides, and interpreters as needed. h. Coordinates check points and reporting procedures with higher headquarters. i. Identifies requirements for overt recognition methods IAW TSOP and OPORD (flag or guidon, placard, lights, vests, etc.). j. Identifies special equipment requirements to accomplish task(s). k. Selects tactical movement techniques and formation options.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
l. Establishes casualty evacuation (CASEVAC) procedures. * 4. PL coordinates with the quick reaction force (QRF) leader/commander, if required. a. Confirms QRF radio frequency(ies), call sign(s), and recognition signals. b. Identifies probable linkup points. c. Confirms linkup procedures. d. Confirms battle hand off procedures. e. Confirms procedures for transfer of information. * 5. PL disseminates digital reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. * 6. PL briefs the patrol plan. 7. Platoon prepares. a. Ensures all equipment is present and operational. b. Requires each soldier to demonstrate his understanding of the ROI and mission instructions as pertains to use of force. c. Requires each soldier to demonstrate his knowledge of the patrol mission, route, radio frequencies, and call signs. * 8. PL issues orders and instructions to include ROE and ROI. * 9. PL conducts rehearsal. a. Establishes contact with a group/element from a faction, or a group, or a person whose status is unknown. b. Reacts to hostile action (e.g. sniper). c. Apprehends a wanted person. d. Reacts to special situations as identified in the OPORD or TSOP. e. Implements CASEVAC as necessary. *10. PL issues FRAGOs, as necessary, to address changes to the plan identified during the rehearsal. 11. Platoon conducts the patrol. a. Enters waypoints into position navigation (POSNAV) equipment to aid navigation. b. Implements the patrol plan. c. Does not deviate from specified route. d. Maintains radio contact, using code words and reporting at intervals specified in the patrol plan. e. Collects information IAW the OPORD. f. Collects incidental information. g. Reports information as required in TSOP and OPORD. h. Maintains possession of all sensitive items (e.g., weapons, identification (ID) papers, communications equipment, maps and journals). i. Determines when the unit is in danger of being overwhelmed by a group of belligerents in terms of the size, ferocity, or the weapons being used. j. Employs the QRF as part of the patrol or, responds to orders of QRF commander, depending on decision of the higher commander. k. Calls for reinforcements, as necessary. l. Processes detainee(s) using search, segregate, safeguard, silence, speed, and tag.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
Note: Use Stand up Search when detainee is cooperative, two individuals are available to conduct the search and the search is to detect weapons or contraband. Use Frisk (Pat down) Search for protection of the searcher when a detainee is suspected of being armed. Use Prone Search when detainee is armed, dangerous and or uncooperative or when searcher is alone and a wall search can not be preformed (wall not available). Use Wall Search when two individuals must search multiple detainees, detainees are uncooperative, or detainees are suspected of having committed a crime. Use Strip Search only when detainee is suspected of having drugs or contraband, an area with controlled access where the detainee can be shielded from the general public is available, and when the detainee has already been searched by another method. (1) Explains procedures that the individual will undergo. (2) Explains actions as they are taking place. (3) Documents detained equipment, weapons, and other articles taken from detained person. (4) Tags detainee at the place and time of detention, if possible. (5) Treats detained person(s) with respect. (6) Reports detention of an individual and requests disposition instructions (e.g. evacuate individual by helicopter, have him accompany the patrol). (7) Prepares witness statements for submission to higher headquarters, as required. 12. Patrol returns to base of operations. a. Participates in debrief. 13. Platoon continues operations as directed.		

Report Date: 18 Feb 2003

Synopsis Report for Collective Task

07-3-1279

Conduct Tactical Movement in a Built-up Area (Antiarmor/Infantry/Reconnaissance Platoon/Squad)

Status: Active

Last Changed 5 Dec 2002

Condition: The platoon is conducting operations as part of a higher headquarters and has received an operation order (OPORD) or fragmentary order (FRAGO) to conduct a mission in a built-up area at the location and time specified. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon conducts tactical movement on in a built-up area in accordance with (IAW) tactical standing operating procedures (TSOP), the order, commander's guidance, and or platoon leader's (PL) direction. The platoon moves on the specified route using the appropriate formation and technique and arrives at the specified destination. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. PL gains and or maintains situational understanding using (SU) information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. * 2. PL receives an OPORD or FRAGO and issues warning order (WARNO) to the platoon using FBCB2, frequency modulated radio, or other tactical means. * 3. PL plans using troop-leading procedures. a. Conducts a digital and or conventional map reconnaissance. (1) Considers routes for dismounted elements that: (a) Provides cover and concealment from ground and air observation and fires. (b) Avoids sky lining. (c) Avoids moving directly forward from firing positions. (d) Avoids open areas and potential kill zones. (e) Avoids obvious avenues of approach. (f) Do not mask friendly suppressive fires. (g) Allows infiltration as a maneuver to place small teams into position. (2) Consider routes for mounted elements that. (a) Provides cover and concealment from ground and air observation and fires. (b) Avoids sky lining. (c) Avoids moving directly forward from firing positions.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(d) Avoids open areas and potential kill zones. (e) Avoids obvious avenues of approach (AA). (f) Do not mask friendly suppressive fires. b. Plans and coordinates indirect fire support and or close air support, if available. c. Identifies direct fire responsibilities. d. Organizes the platoon as necessary to accomplish the mission and or compensate for combat losses. * 4. PL addresses actions on chance contact with the enemy. * 5. PL disseminates digital reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. * 6. PL issues orders and instructions to include ROE and ROI. 7. Platoon conducts a rehearsal. * 8. PL issues FRAGOs, as necessary, to address changes to the plan identified during the rehearsal. 9. Platoon enters waypoints into position navigation (POSNAV) equipment to aid navigation. 10. Platoon moves only after defenders' fires have been suppressed or obscured, if applicable. 11. Platoon moves at night or during other periods of reduced visibility using night vision devices (NVDs). 12. Platoon moves using concealment of smoke provided by supporting vehicles or assets. *13. PL prepares DISMOUNTED elements for tactical movement in a built-up area. a. Reduces the overall load of dismounted elements, if possible, due to the extreme physical requirements of the urban battlefield. b. Designates the movement element and the overwatch element. c. Designates the movement technique to be used based on mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC). (1) Uses traveling when enemy contact is not likely. (2) Uses traveling overwatch when enemy contact is likely. (3) Uses bounding overwatch when enemy contact is expected. Note: Normally, movement in a built-up area will be conducted dismounted or with dismounted elements in the lead. 14. Platoon moves DISMOUNTED in a built-up area. a. Moves on rooftops not covered by enemy direct fires. b. Moves on covered and concealed route(s), whenever possible. c. Moves along underground passages, through or behind buildings, along walls, and over rooftops. d. Moves in the streets, alleys, and other danger areas only when required by the situation. (1) Elements move in single file along the side of the street, staying close to the buildings without "hugging" walls. (2) Elements move quickly and members remain dispersed. (3) Each soldier is assigned an area to observe so there is 360 degrees security. Note: When moving with two squads or teams abreast, a technique is to have each squad or team overwatch the buildings across the street, observing the stories above the opposite moving element. (4) Elements use smoke, rubble, and debris for cover and concealment. f. Rotates elements, during movement, as necessary.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
g. Moves as two elements: Note: Normally this includes a movement element and an overwatch element. When necessary, these elements or parts of them exchange roles. If moving in small elements, there may not be designated overwatch elements. (1) Moves forward; reconnoiters danger areas; and closes with the enemy. (The movement element [one or two squads/teams, if terrain is open as in a wide street].) (2) Moves behind the lead element and secures the flanks and rear. (The overwatch element [the rest of the platoon/squad and supporting weapons].) Note: Elements moving by themselves or infiltrating may not have support elements. h. Crosses urban danger areas using cover, concealment, speed, and overwatch. Note: An element normally crosses as a dispersed group at the same time, but METT-TC conditions may cause the element leader to decide to cross in buddy teams or individually. i. Maintains security. (1) Clears buildings as necessary to continue movement. (2) Identifies, reports, marks, and bypasses enemy obstacles, mines, and booby traps. 15. Platoon moves MOUNTED in a built-up area. a. Maintain close and continuous communications/coordination with dismounted element leaders. b. Follow dismounted elements that: (1) Act as guides during limited visibility. (2) Find, mark, breach, or find a bypass around antiarmor obstacles. (3) Detect, suppress, or destroy enemy antiarmor positions. (4) Designate targets for armored vehicles. (5) Protect armored vehicles in close terrain. c. Provide overwatch and fire support to dismounted elements. 16. Platoon consolidates and reorganizes as necessary. 17. Platoon secures enemy prisoners of war (EPW) as required. 18. Platoon treats and evacuates casualties as necessary. 19. Platoon processes captured documents and or equipment as required. 20. PL reports to higher headquarters as required using FBCB2, frequency modulated radio, or other tactical means. 21. Platoon arrives at the specified location at the specified time. 22. Platoon continues operations as directed.		

Report Date: 18 Feb 2003

Synopsis Report for Collective Task

07-3-1396

React to a Civil Disturbance (Antiarmor/Infantry/Reconnaissance Platoon/Squad)

Status: Active

Last Changed 5 Dec 2002

Condition: The platoon is conducting operations as part of a higher headquarters and has received an operation order (OPORD) or fragmentary order (FRAGO) to react to a civil disturbance in the area of operations. The platoon has been designated as the reserve force. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon reacts to the civil disturbance in accordance with (IAW) tactical standing operating procedures (TSOP), the order, and or commander's guidance. The platoon disperses, contains, or blocks the crowd using the minimum level of force necessary to control the situation. The platoon apprehends and detains leaders of the civil disturbance and other law violators, as the situation dictates. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Platoon leader (PL) gains and or maintains situational understanding (SU) using information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. * 2. PL receives an OPORD or FRAGO and issues warning order (WARNO) to the platoon using FBCB2, frequency modulated radio, or other tactical means. Note: Mission planning, coordination, and training for the reserve force must be accomplished prior to conducting civil disturbance operations. * 3. PL disseminates digital reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. * 4. PL issues orders and instructions to include ROE and ROI. Note: Training and rehearsals should be conducted prior to receiving the order to respond to a civil disturbance. 5. Platoon moves to location of disturbance as specified in the OPORD or guidance. a. Enters waypoints into position navigation (POSNAV) equipment to aid navigation. * 6. Platoon conducts civil disturbance operations. a. Isolates the people creating the disturbance from those who have not yet become actively involved. b. Seals off the disturbance area using barricades, roadblocks, patrols, etc. (1) Moves uninvolved people from the area quickly.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(2) Prevents disorder from spreading to unaffected areas. (3) Prevents unauthorized people from entering the affected area. (4) Prevents the escape of people who are bent on expanding the disturbance. c. Directs crowd control formations to include: (1) Line. (2) Wedge. (3) Echelon. (4) Diamond. d. Protects likely targets. (1) Key buildings (2) Utilities and services critical to the functioning of a community. (3) Key people and very important persons (VIPs). e. Controls the crowd. Note: The selection and use of crowd control measures depends on the crowd's size, temperament, cooperativeness, and degree of organization and uniformity. f. Determines when the platoon is in danger of being overmatched by the crowd. (1) Overcome by the size of the disturbance element. (2) Overmatched by the disturbance elements. Note: A platoon is overmatched when it can no longer maintain control over the situation due to the size or ferocity of the crowd or the weapons being used. g. Apprehends leaders or instigators of the disturbance as the situation permits. h. Reacts to special threats (such as bombings, snipers, or hostage situations). i. Controls actions of special teams: psychological operations (PSYOP) teams, public affairs operation (PAO) teams, Civil Affairs (CA) teams, military with dog (MWD) teams, combat camera teams, and host nation support, if applicable. j. Reports to higher headquarters IAW TSOP, order, and Mission Instructions as required. k. Monitors the situation to include indications of whether or not the confrontation is escalating in terms of size or violence. l. Maintains platoon discipline and or cohesion. m. Requests reinforcements, if necessary. (1) Employs reinforcements as part of the platoon or responds to orders of the reinforcing unit commander. n. Disperses the crowd (situation dependent). Note: The intent of dispersal is to fragment a crowd. This option is most useful for small crowd situations in congested urban sites. But dispersal may increase and spread lawlessness rather than reduce it. * 7. Platoon consolidates and reorganizes. a. Accounts for personnel and equipment. b. Reports in accordance with order and or TSOP. 8. Platoon secures enemy prisoners of war (EPW) as required. 9. Transfers detained persons and confiscated equipment or weapons IAW TSOP, order, and or guidance from higher headquarters. 10. Platoon treats and evacuates casualties. 11. Platoon processes captured documents and or equipment as required. 12. Platoon continues operations as directed.		

Report Date: 18 Feb 2003

Synopsis Report for Collective Task

07-3-1406

React to Snipers (Infantry/Reconnaissance Platoon/Squad)

Status: Active

Last Changed 5 Dec 2002

Condition: The platoon is conducting operations as part of a higher headquarters and receives fire from an enemy sniper. The platoon must react immediately for their protection. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon reacts to the sniper in accordance with (IAW) tactical standing operating procedures (TSOP), the order, and or commander's guidance. The platoon correctly locates and then bypasses, eliminates, or forces the withdrawal of the enemy sniper while disengaging the element in the kill zone. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
1. Platoon conducts actions on contact (sniper fire). a. Returns fire immediately to destroy or suppress the enemy. b. Deploys to covered and concealed positions, if available. c. Utilizes indirect fire assets, if available. d. Activates on board self-protection measures as appropriate. e. Conducts battle drills, as necessary. f. Maintains visual contact with the enemy while continuing to develop the situation through reconnaissance or surveillance. g. Maintains cross talk with all platoon elements using Force XXI Battle Command - Brigade and Below (FBCB2), frequency modulated radio, or other tactical means. 2. Platoon reacts to enemy sniper fire. a. Reports contact to higher headquarters using FBCB2, frequency modulated radio, or other tactical means. b. Bypasses the sniper. (1) The platoon uses smoke to obscure the enemy snipers view. (2) The platoon uses available fires to suppress the sniper. (3) The platoon maneuvers to break contact with the sniper. Note: The platoon leader (PL) may choose to call for indirect fire on the sniper position. c. Eliminates the sniper. (1) Complies with ROE and ROI. (2) The platoon uses smoke to obscure the enemy snipers view. (3) The platoon uses available firepower to suppress and fix the sniper.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(4) The platoon maneuvers to close with the sniper and eliminate or force him to withdraw. 3. Platoon maintains rear security. 4. Platoon consolidates and reorganizes as necessary. 5. Platoon treats and evacuates casualties as necessary. 6. Platoon secures enemy prisoners of war (EPW), if applicable. 7. Platoon processes captured documents and or equipment, if applicable. * 8. PL reports to higher headquarters as required using FBCB2, frequency modulated radio, or other tactical means. 9. Platoon continues operations as directed.		

Report Date: 18 Feb 2003

Synopsis Report for Collective Task

07-3-1414

Search a Building (Infantry Platoon/Squad)

Status: Active

Last Changed 5 Dec 2002

Condition: The platoon is conducting operations as part of a larger force and has received an operation order (OPORD) or fragmentary order (FRAGO) to search a building at the location and time specified. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The area around the building is secure. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon searches the building in accordance with (IAW) tactical standing operating procedures (TSOP), the order, and or commander's guidance. The platoon enters, searches, and exits the building while maintaining all around security. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Platoon leader (PL) gains and or maintains situational understanding (SU) using information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. * 2. PL receives an OPORD or FRAGO and issues warning order (WARNO) to the platoon using FBCB2, frequency modulated radio, or other tactical means. * 3. PL plans using troop-leading procedures. a. Identifies routes to the building. b. Identifies obstacles to movement. c. Identifies choke points. d. Coordinates for required assistance. (military police [MP], explosive ordnance disposal [EOD], civil affairs [CA], local authorities, and so forth). e. Identifies potential danger areas. f. Develops contingency plans for obstacles and danger areas. g. Determines the building entry point and search technique. h. Organizes the platoon as necessary to accomplish the mission and or compensate for combat losses. i. Addresses actions on chance contact with the belligerents. j. Selects one of the following methods to control occupants. (1) Assembles inhabitants in a central location. Note: This method provides the most control and simplifies the search and interrogation, if conducted; however, causing inhabitants to vacate their dwellings will likely result in ill feelings. Also, there is increased risk of claims that property has been damaged or stolen.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(2) Directs people located in a building that is not a residence such as an office building or factory to return to their homes. Note: This method simplifies search, but makes control and interrogation difficult. (3) Identifies and controls the heads of households. Note: This is the best method of controlling occupants since it is the least disruptive. * 4. PL disseminates digital reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. 5. PL conducts a leader's reconnaissance as required based on the factors of mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC). * 6. PL issues orders and instructions to include ROE and ROI. 7. Platoon conducts rehearsal. * 8. PL issues FRAGOs, as necessary, to address changes to the plan identified during the rehearsal. 9. Platoon moves to building. a. Enters waypoints into position navigation (POSNAV) equipment to aid navigation, if necessary. b. Moves tactically if necessary. c. Breaches any obstacles that it cannot bypass. *10. PL determines that no hostile forces occupy the building. a. Knocks on door and requests entry into the building. Note: PL should initially approach building with a representative of the civil authority and interpreter, if required, who should notify the occupants of the actions expected of them. b. Announces the purpose of the search. c. Instructs occupants on whether or not they must vacate the building. d. Informs occupants what they must do or not do during the search. e. Informs occupants where they must assemble if required. f. Questions occupants to determine information about the building. (1) Determines identity of building occupants. (2) Determines whereabouts of building occupants if they are not present. (3) Determines locations of storerooms. (4) Determines whether there are any dogs in the building. 11. Search team enters the building. a. Uses an overwatch technique. b. Forces entry if necessary. (1) Limits damage in forcing entry to the minimum necessary to accomplish the task. (2) Selects an entry point that reduces vulnerability of soldiers making initial entry. j. Redistributes into two teams to enter and search floor above and below simultaneously, if required. k. Holds detained items in a secure location until disposition is determined. l. Takes appropriate security measures if search element finds hidden persons or prohibited items. (1) Requires persons to identify themselves. (2) Secures individuals awaiting transfer of responsibility to civil police, military police, military intelligence, or civil affairs personnel. (3) Prepares detainee tags or details of circumstances for delivery to designated detention authority. (4) Inspects weapons and clear them or otherwise make them safe for transportation. (5) Documents circumstances of discovery IAW TSOP.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
Note: When contraband, equipment, or weapons are found, records of descriptions, serial numbers, or quantities of items found and seized should be kept for inclusion in reports. Chain of custody accounting may be required for equipment or material IAW ROE, unit orders, or TSOP. A receipt should be provided to each owner for detained items. *12. PL reports completion of search to higher headquarters as required. 12. Search team conducts floor and or room search. a. Secures entry point(s). b. Announces the intent to search. c. Announces the purpose of the search. (1) Team members scan their assigned areas during movement. (scan area is in three dimensions). (2) Point man checks for trip wires. (3) Point man opens doors and pauses behind wall before entry. (4) Team enters room using a high-man, low-man technique with weapon muzzles tracking where they look. (a) Searches in three dimensions. (Checks for false ceilings, in closets, under furniture, carpets, in wardrobes). (b) Searches for specific items. (Therefore, the team does not waste time on objects that will not accommodate the dimensions of items searched for.) (For example, search for a person does not require opening drawers in a dresser, search for automatic rifles does not require opening shoe boxes). d. Emplaces signal device visible to security and support elements to indicate the floor on which search team is working. e. Controls occupants in accordance with the method designated by the PL. f. Questions inhabitants to determine information about the building. (1) Determines identify of building occupants. (2) Determines whereabouts of occupants if they are not present. (3) Determines locations of storerooms. (4) Determines whether there are any dogs in the building. g. Identifies access to upper or lower floors. h. Continues search pattern until floor plan is completed. i. Monitors entry and exit points to the floor it has cleared. 13. Platoon consolidates and reorganizes as necessary. 14. Platoon processes captured documents and or equipment as required. 15. Platoon continues operations as directed.		

Synopsis Report for **Collective Task**

07-3-1432

Take Action on Contact (Infantry/Mortar/Reconnaissance Platoon/Squad)

Status: Active

Last Changed 5 Dec 2002

Condition: The platoon is conducting operations as part of a higher headquarters and has received an operation order (OPORD) or fragmentary order (FRAGO) to conduct a mission at the location and time specified. The platoon makes unexpected contact with the enemy. The platoon receives fires from enemy weapons, visually acquires the enemy, or makes contact with an enemy obstacle. All necessary personnel and equipment are available. The platoon has communications with higher, adjacent, and subordinate elements. The platoon has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Coalition forces and noncombatants may be present in the operational environment. Some iterations of this task should be conducted during limited visibility conditions. Some iterations of this task should be performed in mission-oriented protective posture (MOPP) 4.

Standard: The platoon takes action on contact in accordance with (IAW) tactical standing operating procedures (TSOP), the order, commander's guidance, and or the tactical situation. The platoon complies with the ROE and ROI.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
* 1. Platoon leader (PL) gains and or maintains situational understanding (SU) using information that is gathered from Force XXI Battle Command - Brigade and Below (FBCB2) (if applicable), frequency modulated communications, maps, intelligence summaries, situation reports (SITREPs), and or other available information sources. 2. Platoon deploys and reports. a. Reacts when contact entails direct fire. (1) Returns fire immediately to destroy or suppress the enemy. (2) Deploys to covered and concealed positions, if available. (3) Closes hatches, if applicable. (4) Utilizes indirect fire assets, as necessary. (5) Activates on board self-protection measures as appropriate. (6) Conducts battle drills, as necessary. (7) Maintains visual contact with the enemy while continuing to develop the situation through reconnaissance or surveillance. (8) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. b. Reacts to visual contact. (element is in immediate danger.) (1) Initiates fires to destroy or suppress the enemy. (2) Deploys to covered and concealed positions. (3) Closes hatches, if applicable. (4) Activates on board self-protection measures as appropriate.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
(5) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (6) Conducts further actions as directed by the PL. c. Reacts to visual contact. (element is NOT in immediate danger.) (1) Deploys. (2) Maintains visual contact. (3) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (4) Conducts further actions as directed by the PL. d. Reacts when contact is indirect fires (observed or receiving). (1) Uses evasive actions to avoid impact area. (2) Moves quickly to clear impact area. (3) Closes hatches, if applicable. (4) Reacts to chemical and or biological attack if necessary. (a) Immediately conducts nuclear, biological, and chemical (NBC) reconnaissance as required. (5) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (6) Conducts further actions as directed by the PL. e. Reacts when contact is with an obstacle. (1) Deploys to covered and concealed positions. (2) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (3) Calls for immediate smoke on the far side of the obstacle to conceal deployment of the platoon, if required. (4) Makes a recommendation to higher headquarters. (bypass or breach). (a) Bypasses, if possible. (b) Breaches, if required. f. Reacts to visual contact of enemy or unknown aircraft. (element is in immediate danger). (1) Initiates fires to destroy or cause aircraft to depart area. (2) Deploys to covered and concealed positions. (3) Closes hatches, if applicable. (4) Activates on board self-protection measures as appropriate. (5) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (6) Conducts further actions as directed by the PL. g. Reacts to visual contact of enemy or unknown aircraft. (element is NOT in immediate danger). (1) Deploys to covered and concealed positions. (2) Maintains visual contact. (3) Maintains cross talk with all platoon elements using FBCB2, frequency modulated radio, or other tactical means. (4) Conducts further actions as directed by the PL. 3. Platoon complies with ROE and ROI. * 4. PL evaluates the situation. a. Confirms friendly and enemy situations. (1) Requests updated intelligence information. b. Conducts reconnaissance to fully develop the situation. c. Determines enemy size, composition, activity, orientation, and location of weapon systems. d. Searches for antitank ditches, minefields, wire, or other obstacles that could define an engagement area.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
e. Searches for the flanks of the enemy and any elements that could mutually support enemy position(s). f. Analyzes squad spot reports (SPOTREPs) and other tactical information as required to make an assessment of the situation. g. Sends updated SPOTREPs to higher headquarters based on a fully developed situation using FBCB2, frequency modulated radio, or other tactical means. h. Directs the actions of elements not in contact in a manner that supports the elements in contact. i. Directs elements not in contact to continue the mission IAW the OPORD and or FRAGO. * 5. PL disseminates digital reports (if applicable), overlays, and other pertinent information to each squad to keep them abreast of the situation. * 6. PL selects an appropriate course of action (COA) based on the commander's intent, the factors of mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC), his analysis of the situation, and input from elements in contact. a. Selects the original course of action (as previously addressed in the OPORD) if it is consistent with the commander's intent and or concept and is within the platoon's capability. OR b. Issues FRAGO to refine the plan based on the situation, ensuring it supports the commander's intent. c. Recommends an alternative COA based on evaluation and development of the situation. (1) Sends recommendation to the commander using FBCB2, frequency modulated radio, or other tactical means. (2) Directs the platoon to execute tactical movement (employing bounding overwatch and support by fire within the platoon) and reconnaissance by fire to further develop the situation. OR (3) Directs the platoon to establish a hasty defense or support by fire (SBF) position and requests further guidance from commander. * 7. PL uses cross talk with other platoons as necessary to obtain support (himself or platoon sergeant [PSG]) using FBCB2, frequency modulated radio, or other tactical means. * 8. PL directs the platoon to execute the COA based on the situation or commander's order. a. Directs the platoon to destroy an inferior force. OR b. Directs platoon to conduct overwatch and or SBF. OR c. Directs platoon to conduct an attack by fire. OR d. Directs platoon to assault an enemy position. OR e. Directs platoon to break contact and conduct bypass operations. OR f. Directs platoon to conduct reconnaissance by fire. OR g. Directs platoon to conduct defense of a battle position. OR h. Directs platoon to breach an obstacle. * 9. PL or PSG keeps the commander informed throughout the operation.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
a. Sends updated SITREPs and or SPOTREPs as necessary. b. Reports completion of the operation. 10. Platoon consolidates and reorganizes as necessary. 11. Platoon handles enemy prisoners of war (EPW) if applicable. 12. Platoon treats and evacuates casualties if applicable. 13. Platoon processes captured documents and or equipment if applicable. 14. Platoon continues operations as directed.		

**Appendix E: Battle Drill 2: React to Contact Training and Evaluation Outline (T&EO)
and Extract of Battle Drill #5: Enter Building/Clear Room (DRAFT)**

Report Date: 18 Feb 2003

Synopsis Report for Battle Drill #2

Task # 07-3-D9103

React to Contact (Platoon/Squad) Revised

Status: Active

Last Changed: 6 AUG 03

Condition: The platoon/squad is halted or moving. The enemy initiates fires on the platoon/squad with an individual or crew-served weapon.

Standard: The unit returns fire immediately. The unit locates and engages the enemy with well-aimed fire and causes at least one enemy casualty. The leader can point out at least one-half of the enemy positions and identify the types of weapons (such as small-arms, light machine gun).

TASK STEPS AND PERFORMANCE MEASURES:

1. Soldiers immediately assume the nearest covered positions.
2. Soldiers return fire immediately on reaching the covered positions.
3. Squad/team leaders locate and engage known or suspected enemy positions with well-aimed fire, and pass information to the platoon/squad leader.
4. Fire team leaders control the fire of their soldiers by using standard fire commands (initial and supplemental) containing the following elements:
 - a. Alert.
 - b. Direction.
 - c. Description.
 - d. Range.
 - e. Method of fire (manipulation and rate of fire).
 - f. Command to commence firing.
5. Soldiers maintain contact (visual or oral) with the soldiers on their left or right.
6. Soldiers maintain contact with the team leader and indicate the location of the enemy positions.
7. The leaders (visually or orally) check the status of their personnel.
8. The squad/fire team leaders maintain visual contact with the platoon/squad leader.
9. The platoon/squad leader (PL/SL) moves up to the squad/fire team in contact and links up with its leader.
 - a. The PL brings his RATELO, platoon forward observer (FO), the SL of the nearest squad, and one machine gun team.
 - d. The SL of the trail squad moves to the front of his lead fire team.
 - e. The platoon sergeant (PSG) moves forward with the second machine gun team and links up with the PL, ready to assume control of the base-of-fire element.
10. The PL/SL determines whether or not his unit must move out of the engagement area.
11. The PL/SL determines whether or not his unit can gain and maintain suppressive fires with the element already in contact (based on the volume and accuracy of enemy fires against the element in contact).

TASK STEPS AND PERFORMANCE MEASURES:

12. The PL/SL makes an assessment of the situation. He identifies--
 - a. The location of the enemy position and obstacles.
 - b. The size of the enemy force engaging the unit in contact. (The number of enemy automatic weapons, the presence of any vehicles, and the employment of indirect fires are indicators of enemy strength.)
 - c. Vulnerable flanks.
 - d. Covered and concealed flanking routes to the enemy positions.
13. The PL/SL determines the next course of action (for example, fire and movement, assault, breach, knock out bunker, enter and clear a building or trench).
14. The PL/SL reports the situation to the company commander/PL and begins to maneuver the unit.
15. PL directs platoon FO to call for and adjusts indirect fires (mortars or artillery). (SL relay request through the PL.)
 - a. The PL/SL in conjunction with the platoon FO maintains accurate battle tracking of all friendly elements to facilitate quick clearance of fires.
16. Leaders relay all commands and signals from the platoon chain of command.
17. The PSG positions the base of fire element to observe and to provide supporting fires.

NOTE: Once the platoon has executed the React to Contact Drill, the PL makes a quick assessment of the situation (for example, enemy size, location). He decides on a course of action. The PL reports the situation to the company commander.

DRAFT Battle Drill 5: Enter Building/Clear Room Training and Evaluation Outline (T&EO)

DRAFT BATTLE DRILL 5 ENTER BUILDING/CLEAR ROOM

SITUATION: Operating as part of a larger force (during daylight or darkness), the squad is tasked to participate in clearing a building. The PL directs the squad to enter the building or to clear a room. An entry point or breach has already been identified, or will be created before initiating the entry. For a detailed discussion of urban entry breaching techniques see FM 3.06-11 *Combined Arms Operations In Urban Terrain* (DA, 28 Feb 2002), pgs. 3-25 – 3-27. Enemy forces and non-combatants may or may not be present in the room and/or building to be cleared.

SPECIAL CONSIDERATIONS: Platoon and squad leaders must consider the task and purpose they have been given and the method they are to use to achieve the desired results. The PL and SL must operate IAW the ROE and must be aware of the effects that platoon weapons will have on the type and composition of the buildings.

(1) To seize or gain control of a building may not always require committing troops into the structure or closing with the enemy. Before initiating this action and exposing members of the clearing squad to direct enemy contact and risking casualties the PL should consider/direct employment of all organic, crew-served, and supporting weapon systems onto the objective area in order to suppress and neutralize the threat, providing the mission, purpose and building composition and ROE permit.

(2) When conducting urban operations, soldiers must be equipped at all times (day or night) with a properly mounted and immediately useable night vision device or light source to illuminate the immediate area.

NOTE: The following discussion assumes that only the platoon's organic weapons are supporting the squad. Urban situations may require precise application of firepower. This situation is especially true of an urban environment where the enemy is mixed with noncombatants. Non-combatants may be found in the room, which can restrict the use of fires and reduce the combat power available to a SL. His squad may have to operate with *no fire areas* (NFAs). ROE can prohibit the use of certain weapons until a specific hostile action takes place. All soldiers must be aware of the ROE. Leaders must include the specific use of weapons in their planning for precision operations in urban terrain. Leaders should always consider the use of snipers or designated marksman to apply precise fires to the objective.

CONSIDERATIONS FOR ENTRY

(1) Clearing team members must approach the entry point quickly, quietly, and in standard order. The SL must ensure he is in a position to control the actions of both teams. This approach preserves the element of surprise and allows for quick entry and domination of the room. If a breach is required the order may be slightly modified based on the breach technique (See FM 3-

06.11). The members of the fire team are assigned numbers 1 through 4, with the TL normally designated number 2. The rifleman is number one and the grenadier is number 3. If one member of the clearing team is armed with the SAW rather than an M16, he should be designated number 4. The TL is normally the number 2 man because he will have to most immediate decision to make as he enters the room (See figure C-31 corner door versus center door.)

(2) The entire team enters the room as quickly and smoothly as possible and clears the doorway immediately. If possible, the team moves from a covered or concealed position already in their entry order. Ideally, the team arrives and passes through the entry point without having to stop. If the team must stop in order to effectively 'stack' outside the entry point it must do so only momentarily and supporting elements must cover it.

(3) The door is the focal point of anyone in the room. It is known as the *fatal funnel*, because it focuses attention at the precise point where individual team members are the most vulnerable. Moving into the room quickly reduces the chance anyone being hit by enemy fire directed at the doorway.

(4) In order for this battle to be effectively employed, each member of the team must know his sector of fire and how his sector overlaps and links with the sectors of the other team members. Team members do not move to the point of domination and then engage their targets. They engage targets as they calmly and quickly move to their designated point. Engagements must not slow movement to their points of domination. Team members may shoot from as short a range as 1 to 2 inches. They engage the most immediate threat first and then the less immediate threats in sector. Immediate threats are personnel who—

- Are armed and prepared to return fire immediately.
- Block movement to the position of domination.
- Are within arm's reach of a clearing team member.
- Are within 3 to 5 feet of the breach point.

TECHNIQUES FOR ENTERING BUILDINGS AND CLEARING ROOMS.

(1) The SL designates the assault team and identifies their entry point location.

(2) The SL positions the follow-on assault team to provide overwatch and supporting fires for the initial assault team.

(3) Assault team members move as close to the entry point as possible, using available cover and concealment.

(a) If an explosive breach or a ballistic breach is to be performed by a supporting element, the assault team remains in a covered position until the breach is made.

(b) They may provide overwatch and fire support for the breaching element if necessary.

(c) All Soldiers must signal being ready to move to the entry point.

(d) If stealth is a consideration team members avoid the use of verbal signals, which may alert the enemy and remove the element of surprise.

(e) Assault team must move quickly from the covered position to the entry point, minimizing the time they are exposed to enemy fire. Soldiers should avoid 'stacking' outside the entry point if they will be exposed to enemy fires. If 'stacking' is required it must be accomplished as quickly as possible and exposure time must be minimized.

(4) The assault team enters through the entry point or breach. Unless a grenade is being thrown prior to entry, the team should avoid stopping outside the point of entry.

(a) If required, the number 2 man may throw a grenade of some type (frag, concussion, or stun) into the room before entry.

(b) The use of grenades should be consistent with the ROE and building structure. The grenade should be cooked off before being thrown, if applicable to the type of grenade used.

(c) If stealth is not a factor, the thrower should sound off with a verbal indication that a grenade of some type is being thrown ("frag out," "concussion out," "stun out"). If stealth is a factor, only visual signals are given as the grenade is thrown.

CAUTION

If walls and floors are thin, fragments from fragmentation grenades and debris created by concussion grenades can injure soldiers outside the room. If the structure has been stressed by previous explosive engagements, the use of these grenades could cause it to collapse. Leaders must determine the effectiveness of these types of grenades compared to possibilities of harm to friendly troops.

(5) On the signal to go, or after the grenade detonates, the assault team moves through the entry point (Figure C-27, page C-30) and quickly takes up positions inside the room that allow it to completely dominate the room and eliminate the threat (Figure C-30). Unless restricted or impeded, team members stop movement only after they have cleared the door and reached their designated point of domination. In addition to dominating the room, all team members are responsible for identifying possible loopholes and mouseholes in the ceiling, walls and floor.

NOTE: Where enemy forces may be concentrated and the presence of noncombatants is highly unlikely, the assault team can precede their entry by throwing a fragmentation or concussion grenade (structure dependent) into the room, followed by bursts of automatic small-arms fire by the number one man as he enters. Carefully consider the ROE and building composition before employing this method.

INDIVIDUAL SECTORS OF FIRE & ACTIONS.

(1) The number 1 and number 2 men are initially concerned with the area directly to their front, then along the wall on either side of the door or entry point (Figures C-27 and C-28). This area

is in their path of movement, and it is their primary sector of fire. Their alternate sector of fire is from the wall they are moving toward, back to the opposite far corner.

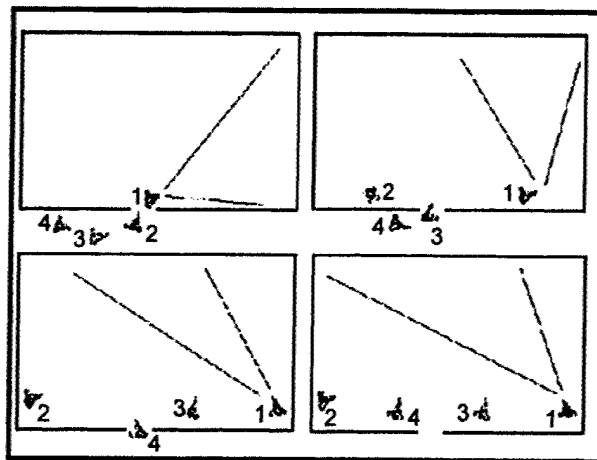


Figure C-27. First man enters room - followed by TL.

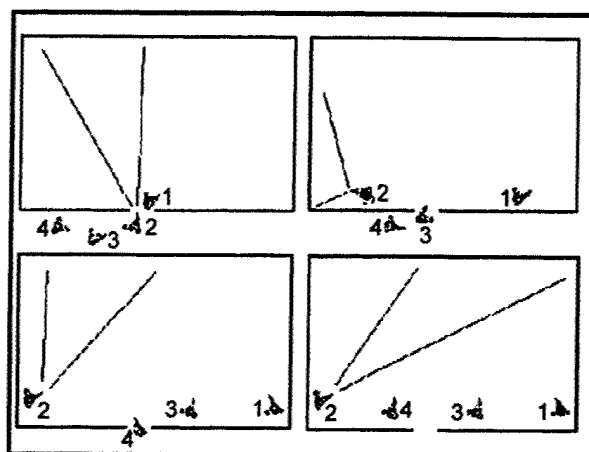


Figure C-28. Second man (team leader) enters room.

(2) The number 3 and number 4 men start at the center of the wall opposite their point of entry and clear to the left if moving toward the left, or to the right if moving toward the right (Figures C-29 and C-30). They stop short of their respective team member (either the number 1 man or the number 2 man).

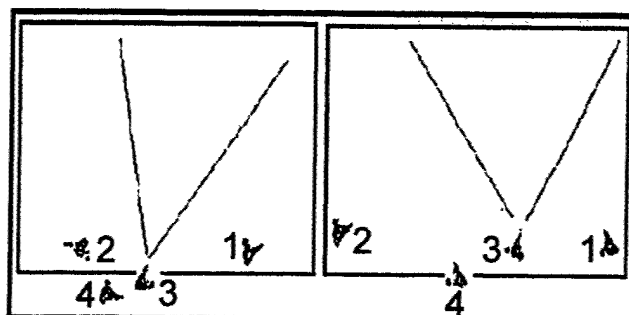


Figure C-29. Third man enters room.

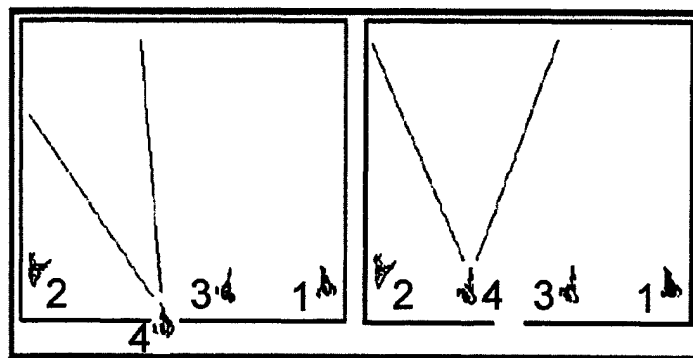


Figure C-30. Fourth man in room.

(3) The team members move toward their points of domination, engaging all threat or hostile targets in sequence in their sector. Team members must exercise fire control and discriminate

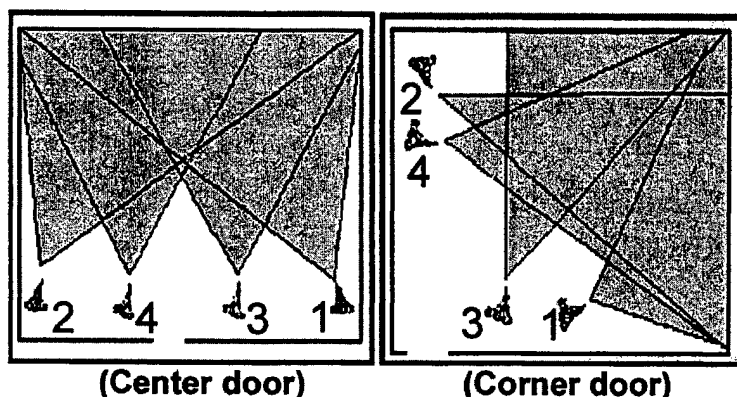


Figure C-31. Points of domination and sectors of fire - center door versus corner door.

between hostile and noncombatant room occupants (The most practical way to do this is to identify whether or not the target has a weapon in his/her hands.) Shooting is done without stopping, using reflexive shooting techniques. Because the soldiers are moving and shooting at the same time, they must move using the careful hurry. Figure C-31 shows all four Soldiers at their points of domination for a room with a center door and their overlapping sectors of fire.

CLEARING TEAM MOVEMENT TO POINTS OF DOMINATION.

Review Figures C-27 through C-31

(1) The first man (rifleman) enters the room and eliminates the immediate threat. He has the option of going left or right, normally moving along the path of least resistance to one of two corners. When using a doorway as the point of entry, the path of least resistance is determined initially based on the way the door opens; if the door opens inward, he plans to move away from the hinges. If the door opens outward, he plans to move toward the hinged side. Upon entering, the size of the room, enemy situation, and furniture or other obstacles that hinder or channel movement become factors that influence the number 1 man's direction of movement.

(2) The direction each Soldier moves in should *not* be preplanned unless the exact room layout is known. Each Soldier should go in a direction opposite the man in front of him (Figure C-27). Every team member must know the sectors and duties of each position.

(3) As the first man goes through the entry point, he can usually see into the far corner of the room. He eliminates any immediate threat and continues to move along the wall if possible and to the first corner, where he assumes a position of domination facing into the room.

NOTE: Team members must always stay within 1-meter of the wall. If a team member finds his progress blocked by some object that will force him more than 1 meter from the wall he must either step over it if able or stop where he is and clear the rest of his sector from where he is. If this action creates dead space in the room then the team leader will direct which clearing actions to take once other members of the team have reached their points of domination.

(4) The second man (normally the team leader), entering almost simultaneously with the first, moves in the opposite direction, following the wall. (Figure C-28). The second man must clear the entry point, clear the immediate threat area, clear his corner, and move to a dominating position on his side of the room. The second man must also immediately determine if he is entering a 'center door' or 'corner door' and act accordingly. (Figure C-28 vs. C-31).

(5) The third man (normally the grenadier) simply goes opposite of the second man inside the room, moves at least one meter from the entry point and takes a position that dominates his sector (Figure C-29).

(6) The fourth man (normally the SAW gunner) moves opposite of the third man, clears the doorway by at least one meter, and moves to a position that dominates his sector (Figure C-30).

NOTE: If the path of least resistance takes the first man to the left, then all domination points are the mirror image of those shown in the diagrams.

(7) Points of domination should not be in front of doors or windows so team members are not silhouetted to the outside of the room (Figure C-31). No movement should mask the fire of any of the other team members.

(8) On order, any member of the assault team may move deeper into the room overwatched by the other team members. The TL should control this action.

NOTE: If at any point a Soldier experiences a weapon malfunction in the presence of any enemy, he has to make an immediate decision. If the enemy is outside immediate danger distance from the Soldier, then the Soldier should drop to one knee, indicating that he has experienced a weapons malfunction while attempting to engage the enemy and the follow-on Soldier should engage the enemy (dropping to one knee will ensure that the follow-on Soldier's fields of fire is clear and prevent fratricide.) Once on a knee, the Soldier must remain there until the TL directs him to stand up. If the enemy is so close that he presents an immediate threat and dropping to a knee would only expose the US Soldier to immediate harm, then the Soldier must attempt to subdue or disable the enemy soldier so that the other members of the clearing team can assist him once they have cleared their sectors and eliminated any other threats in the room.

(9) Once the room is cleared, the TL signals to the SL that the room has been cleared. The SL marks the room (IAW the unit SOP – See FM 3.06-11). The SL determines whether or not his

squad can continue to clear through the building.

(10) The squad reorganizes as necessary. Leaders redistribute the ammunition. The SL reports to the PL when the room is clear.

Reasons for Modifying the Entry Technique.

Although this technique is an extremely effective procedure for clearing a room, leaders may be required to modify the existing actions to meet their current situation. Some example reasons and methods of modifying the technique are shown in Table C-1.

REASON	METHOD
Objective rooms are consistently small	Clear with 2 or 3 men
Shortage of personnel	Clear in teams of 2 or 3
Enemy poses no immediate threat	2 or 3 men search rooms to ensure no enemy or noncombatants are present
No immediate threat, speed is critical	1 to 3 men visually search each room

Table C-1. Reasons and methods for modifying entry techniques.

(1). **Three- and Two-Man Teams.** When full four-man teams are not available for room clearing three- and two-man teams can be used. If the number one or two man discovers that the room is very small he can also yell 'short room' or 'short' that tells the 3 or 4 man (whomever was following him) to stay outside of the room. Figures C-32 and C-33 show the points of domination and sectors of fire for a three-man clearing team. Figures C-34 and C-35 show the actions for a two-man team.

CAUTION

Ricochets are a hazard. All Soldiers must be aware of the type of wall construction of the room being cleared. The walls of an enclosed room also present many right angles. Combined with hard surfaces such as concrete, a bullet may continue to ricochet around a room until spent. Body armor and the Kevlar helmet provide some protection from this hazard.

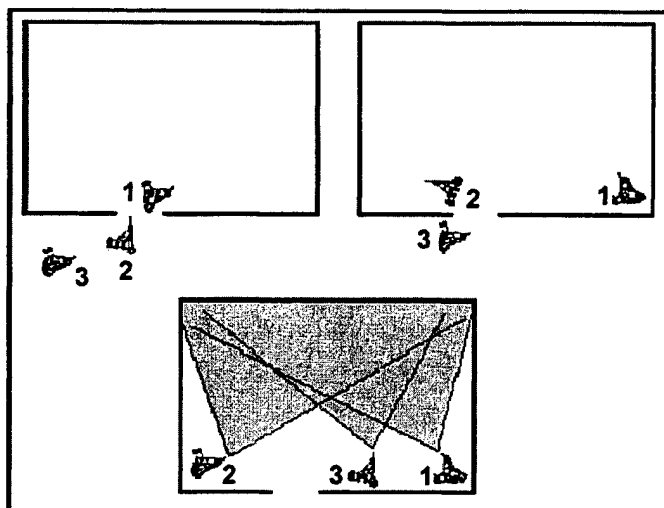


Figure C-32. Points of domination and sectors of fire (three-man team, center door).

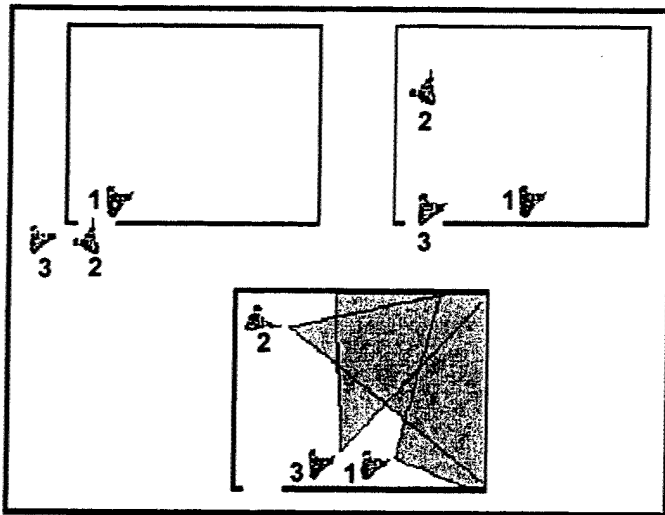


Figure C-33. Points of domination and sectors of fire (three-man team, corner door).

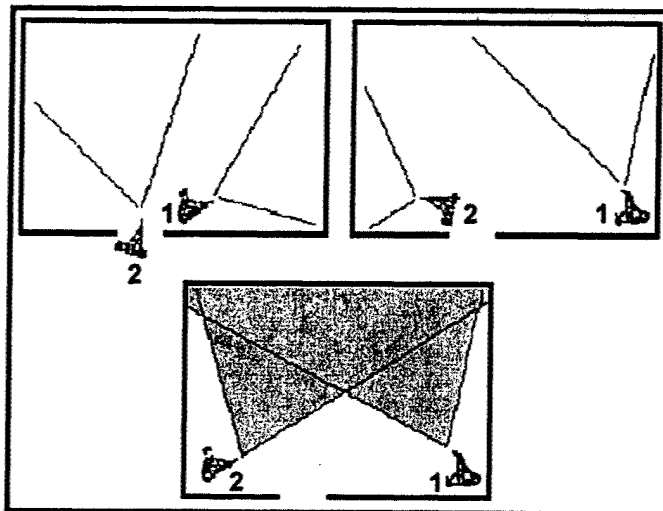


Figure C-34. Points of domination and sectors of fire (two-man team, center door).

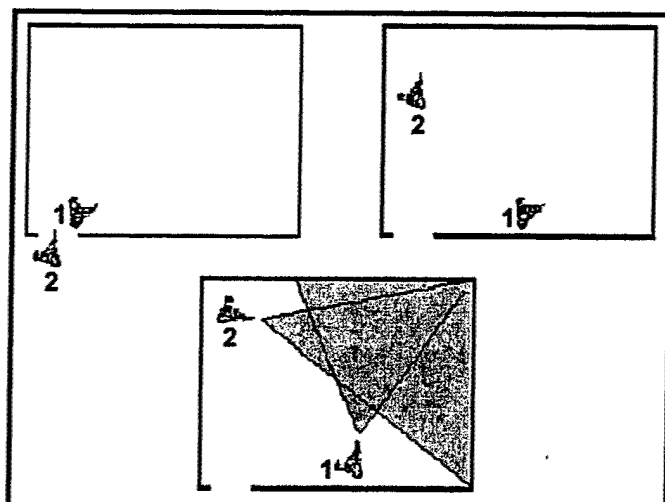


Figure C-35. Points of domination and sectors of fire (two-man team, corner door).

Appendix F: FSW-Specific Collective Task Training and Evaluation Outlines (T&EOs)

The following T&EOs are a combination of performance measures from selected collective tasks contained in Appendix D. The modified T&EOs were designed to conduct a training assessment of FSW-specific missions. By using and combining performance measures from the collective tasks in Appendix D and the draft battle drills from Appendix E, T&EOs can be developed to support assessments of the other missions.

Performance measures that could *not* be evaluated as part of the FSW training were deleted. Underlined portions of the text indicate that the performance measure was modified to reflect a change from a platoon-level task to that at the squad-level or to apply the measure specifically to the FSW mission. *Red italicized text* accompanied by the symbol “➔” in front of the line indicates AI-controlled activities. The corresponding collective task number for each performance measure is listed in parentheses at the end of the corresponding measure, e.g. (07-3-1000 [Assault a Building]).

Performance measures that begin with “When queried” indicate that the original performance measure was modified and that the training observer should solicit a response by questioning the squad leader. These performance measures will indicate the thought process that the squad leader would apply in planning the mission. For example, with the mission briefing screen up and the observer viewing performance measure 1, the observer can ask the squad leader questions such as, “What process would you (the squad leader) go through to plan the mission? The correct answer would be troop-leading procedures. A correct response indicates that the squad leader clearly understands the normal mission planning process.

FSW-Specific Collective Task Performance Measures for the following FSW missions:

Mission 1: Malnika

Mission 2: The Delivery

Mission 6: Invasion

The combined task list includes selected T&EO performance measures from:

- Collective Task #07-3-1279 Conduct Tactical Movement in a Built-up Area.
 - Collective Task # 07-3-1406 React to Snipers
-

Condition: The squad is conducting operations as part of a company-level mission and has received a fragmentary order (FRAGO) to conduct a mission in a built-up area at the location and time specified. All necessary personnel and equipment are available. The squad does *not* have communications with higher and adjacent elements, but can submit reports to the PL via the FSW reporting system. Known enemy locations have been provided in the mission briefing (FRAGO). The squad has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Enemy forces and noncombatants are present in the operational environment.

Standard: The squad conducts tactical movement in a built-up urban area in accordance with (IAW) the mission briefing, the unit tactical standing operating procedures (TSOP), and the PL or PSG's direction. The squad will begin the mission at the predetermined start point and conduct a tactical movement using the appropriate movement formation and technique to arrive at the interim company objective rally point (ORP). The squad must complete the mission as a combat effective force. The squad must also destroy known enemy positions provided in the mission briefing (FRAGO) and react to other possible enemy encounters along the route. Noncombatants casualties to will be avoided, if at all possible.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
NOTE: After squad leader reads mission briefing, administer a pause to ask a series of questions to determine proficiency in mission planning. * 1. <u>When queried, squad leader explains</u> developing his plan using troop-leading procedures. (07-3-1279) a. Conducts a map reconnaissance <u>using the FSW mission briefing submenu</u>. (07-3-1279) b. Considers routes for dismounted elements that: (1) Provides cover and concealment from ground observation and fires. (07-3-1279)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
(2) Avoids moving directly forward from firing positions. (07-3-1279) (3) Avoids open areas and potential kill zones. (07-3-1279) (4) Avoids obvious avenues of approach. (07-3-1279) (5) Do not mask friendly suppressive fires. (07-3-1279) c. <u>When queried, squad leader explains</u> direct fire responsibilities. (07-3-1279) d. <u>When queried, squad leader explains</u> reorganizing the <u>squad</u>, as necessary, to accomplish the mission and or compensate for combat losses. (07-3-1279) * 2. <u>When queried, squad leader explains</u> actions on chance contact with the enemy. (07-3-1279) * 3. <u>When queried, squad leader explains plans</u> to keep the squad abreast of the situation (disseminate reports, if applicable, overlays, and other pertinent information to each team leader or all squad members. (07-3-1279) * 4. <u>When queried, squad leader</u> issues orders and instructions to include ROE and ROI. (07-3-1279) * 5. <u>Squad</u> moves DISMOUNTED in a built-up area. (07-3-1279) a. Moves on covered and concealed route(s), whenever possible. (07-3-1279) →b. <i>Moves in the streets, alleys, and other danger areas only when required by the situation. (07-3-1279)</i> →(1) <i>Elements move in single file along the side of the street, staying close to the buildings without "hugging" walls. (07-3-1279)</i> →(2) <i>Elements move quickly and members remain dispersed. (07-3-1279)</i> →(3) <i>Each soldier is assigned an area to observe so there is 360° security. (07-3-1279)</i> Note: When moving with two squads or teams abreast, a technique is to have each squad or team overwatch the buildings across the street, observing the stories above the opposite moving element. (4) Elements use smoke and available obstacles for cover and concealment. (07-3-1279) c. Rotates elements, during movement, as necessary. (07-3-1279) d. Moves as two elements, <u>maintaining mutual support</u>. (07-3-1279) Note: Normally this includes a movement element and an overwatch element. When necessary, these elements or parts of them exchange roles. If moving in small elements, there may not be designated overwatch elements. →e. <i>Crosses urban danger areas using cover, concealment, speed, and overwatch. (07-3-1279)</i>		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
Note: An element normally crosses as a dispersed group at the same time, but METT-TC conditions may cause the element leader to decide to cross the fire team in buddy teams or individually. f. Maintains security (Clears buildings as necessary to continue movement). (07-3-1279) *6. <u>Squad</u> reacts to enemy sniper fire. (07-3-1406) a. Reports contact to higher headquarters using FSW reporting menu. (07-3-1406) b. Bypasses the sniper. (07-3-1406) (1) Uses smoke to obscure the enemy snipers view. (07-3-1406) (2) Uses available fires to suppress the sniper. (07-3-1406) (3) Maneuvers to break contact with the sniper. (07-3-1406) c. Eliminates the sniper. (07-3-1406) (1) Complies with ROE and ROI. (07-3-1406) (2) Uses smoke to obscure the enemy sniper's view. (07-3-1406) (3) Uses available firepower to suppress and fix the sniper. (07-3-1406) (4) Maneuvers to close on the sniper and eliminates or forces him to withdraw. (07-3-1406) 7. <u>Squad</u> consolidates and reorganizes as necessary. (07-3-1279) 8. <u>Squad</u> secures enemy prisoners of war (EPW), as required. (07-3-1279) 9. <u>Squad</u> treats and evacuates <u>friendly</u> casualties, as necessary. (07-3-1279) 10. <u>Squad</u> secures and searches enemy killed in action, as required. (07-3-1279) 11. <u>Squad leader</u> reports to <u>PL</u> using <u>FSW reporting means</u>, as required. (07-3-1279) 12. <u>Squad</u> arrives at the specified location at the specified time. (07-3-1279) 13. <u>Squad is able to</u> continue operations, as directed. (07-3-1279)		

FSW-Specific Collective Task Performance Measures for the following FSW missions:

Mission 5: Hide and Seek

The combined task list includes selected T&EO performance measures from:

- Draft Battle Drill 5: Enter a Building/Clear a Room
 - Collective Task #07-3-1279 Conduct Tactical Movement in a Built-up Area
 - Collective Task # 07-3-1406 React to Snipers
-

Condition: The squad is conducting operations as part of a company-level mission and has received a fragmentary order (FRAGO) to conduct a mission in a built-up area at the location and time specified. All necessary personnel and equipment are available. The squad does *not* have communications with higher and adjacent elements, but can submit reports to the PL via the FSW reporting system. Known enemy locations have been provided in the mission briefing (FRAGO). The squad has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Enemy forces and noncombatants are present in the operational environment.

Standard: The squad conducts tactical movement in a built-up urban area in accordance with (IAW) the mission briefing, the unit tactical standing operating procedures (TSOP), and the PL or PSG's direction. The squad will begin the mission at the predetermined start point and conduct a tactical movement using the appropriate movement formation and technique to arrive at the interim company objective rally point (ORP). The squad is required to search two building serving as possible weapon cache sites. The squad must also react to other possible enemy encounters along the route as stipulated in the mission briefing (FRAGO). The squad must complete the mission as a combat effective force. Noncombatants casualties to will be avoided.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
NOTE: After squad leader reads mission briefing, administer a pause to ask a series of questions to determine proficiency in mission planning. * 1. <u>When queried, squad leader explains</u> developing his plan using troop-leading procedures. (07-3-1279) a. Conducts a map reconnaissance <u>using the FSW mission briefing submenu.</u> (07-3-1279) b. Considers routes for dismounted elements that: (1) Provides cover and concealment from ground observation and fires. (07-3-1279)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
(2) Avoids moving directly forward from firing positions. (07-3-1279) (3) Avoids open areas and potential kill zones. (07-3-1279) (4) Avoids obvious avenues of approach. (07-3-1279) (5) Do not mask friendly suppressive fires. (07-3-1279) c. <u>When queried</u>, the <u>squad leader identifies</u> direct fire responsibilities. (07-3-1279) d. <u>When queried</u>, the <u>squad leader explains</u> reorganizing the <u>squad</u>, as necessary, to accomplish the mission and or compensate for combat losses. (07-3-1279) * 2. <u>When queried</u>, the <u>squad leader explains</u> actions on chance contact with the enemy. (07-3-1279) * 3. <u>When queried</u>, <u>squad leader explains plans</u> to keep the squad abreast of the situation (disseminate reports, if applicable, overlays, and other pertinent information to each team leader or all squad members. (07-3-1279) * 4. <u>When queried</u>, <u>squad leader</u> issues orders and instructions to include ROE and ROI. (07-3-1279) * 5. <u>Squad moves DISMOUNTED</u> in a built-up area. (07-3-1279) a. Moves on covered and concealed route(s), whenever possible. (07-3-1279) ➔b. <i>Moves in the streets, alleys, and other danger areas only when required by the situation. (07-3-1279)</i> ➔ (1) <i>Elements move in single file along the side of the street, staying close to the buildings without "hugging" walls. (07-3-1279)</i> ➔ (2) <i>Elements move quickly and members remain dispersed. (07-3-1279)</i> ➔ (3) <i>Each soldier is assigned an area to observe so there is 360° security. (07-3-1279)</i> Note: When moving with two squads or teams abreast, a technique is to have each squad or team overwatch the buildings across the street, observing the stories above the opposite moving element. (4) Elements use smoke and available obstacles for cover and concealment. (07-3-1279) c. Rotates elements, during movement, as necessary. (07-3-1279) d. Moves as two elements, <u>maintaining mutual support</u>. (07-3-1279) Note: Normally this includes a movement element and an overwatch element. When necessary, these elements or parts of them exchange roles. If moving in small elements, there may not be designated overwatch elements. ➔e. <i>Crosses urban danger areas using cover, concealment, speed, and overwatch. (07-3-1279)</i> Note: An element normally crosses as a dispersed group at the same time, but METT-TC conditions may cause the element leader to decide to cross the fire team in buddy teams or individually.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
f. Maintains security (Clears buildings as necessary to continue movement). (07-3-1279) *6. <u>Squad</u> reacts to enemy sniper fire. (07-3-1406) a. Reports contact to higher headquarters using FSW reporting menu. (07-3-1406) b. Bypasses the sniper. (07-3-1406) (1) <u>Squad</u> uses smoke to obscure the enemy snipers view. (07-3-1406) (2) <u>Squad</u> uses available fires to suppress the sniper. (07-3-1406) (3) <u>Squad</u> maneuvers to break contact with the sniper. (07-3-1406) c. Eliminates the sniper. (07-3-1406) (1) Complies with ROE and ROI. (07-3-1406) (2) <u>Squad</u> uses smoke to obscure the enemy sniper's view. (07-3-1406) (3) <u>Squad</u> uses available firepower to suppress and fix the sniper. (07-3-1406) (4) <u>Squad</u> maneuvers to close with the sniper and eliminate or force him to withdraw, <u>as necessary</u>. (07-3-1406) 7. <u>Squad</u> consolidates and reorganizes as necessary. (07-3-1279) 8. <u>Squad</u> secures enemy prisoners of war (EPW), as required. (07-3-1279) 9. <u>Squad</u> treats and evacuates <u>friendly</u> casualties, as necessary. (07-3-1279) 10. <u>Squad</u> secures and searches enemy killed in action, as required. (07-3-1279) *11. The <u>squad leader</u> reports to <u>PL</u> using <u>FSW reporting means</u>, as required. (07-3-1279) NOTE: As the squad approaches a building to be cleared, administer a pause to question the squad leader on doctrinal questions. *12. <u>When queried</u>, the squad leader can identify which team is the assault team. (Battle Drill 5) *13. <u>When queried</u>, the squad leader can identify the location of the entry point for the assault team. (Battle Drill 5) *14. <u>When queried</u>, the squad leader can identify the standard breaching order. (Battle Drill 5) NOTE: The members of the fire team are assigned numbers 1 through 4, with the team leader normally designated number 2. The rifleman is number one and the grenadier is number 3. If one member of the clearing team is armed with the SAW rather than an M16 rifle or carbine, he should be designated Number 4. The team leader is normally the number 2 man because he will have to most immediate decision to make as he enters the room. *15. The squad leader positions himself to be able to control the actions of both teams. (Battle Drill 5)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
*16. The squad leader positions the follow-on assault team to provide over-watch and supporting fires for the initial assault team. (Battle Drill 5) *17. The squad leader positions the assault team members as close to the entry point as possible, using available cover and concealment. (Battle Drill 5) NOTE: ROE instructions prevent use of a grenade to precede the assault team entry. If a grenade were to be used, it must be thrown from a distance aiming through the door or a window. FSW does not allow a grenade to be thrown into a room with the team adjacent to an entry point, but from a distance. ➔18. <i>The entire team enters the room as quickly and smoothly as possible and clears the doorway immediately. If possible, the team moves from a covered or concealed position already in their entry order. Ideally, the team arrives and passes through the entry point without having to stop. If the team must stop in order to effectively 'stack' outside the entry point it must do so only momentarily and it must be covered by supporting elements. (Battle Drill 5)</i> ➔19. <i>Each member of the team knows his sector of fire and how his sector overlaps and links with the sectors of the other team members. (Battle Drill 5)</i> ➔a. <i>The number 1 and number 2 men are initially concerned with the area directly to their front, then along the wall on either side of the door or entry point. This area is in their path of movement, and it is their primary sector of fire. Their alternate sector of fire is from the wall they are moving toward, back to the opposite far corner. (Battle Drill 5)</i> ➔b. <i>The number 3 and number 4 men start at the center of the wall opposite their point of entry and clear to the left if moving toward the left, or to the right if moving toward the right, stopping short of their respective team member (either the number 1 man or the number 2 man). (Battle Drill 5)</i> ➔20. <i>Team members move to the point of domination engaging all threat or hostile targets in sequence in their sector. (Battle Drill 5)</i> ➔a. <i>Team members exercise fire control and discriminate between hostile and noncombatant room occupants (The most practical way to do this is to identify whether or not the target has a weapon in his/her hands.) (Battle Drill 5)</i> ➔b. <i>Shooting is done without stopping, using reflexive shooting techniques using the careful hurry. Team members may shoot from as short a range as 1 to 2 inches. (Battle Drill 5)</i> ➔c. <i>Team members engage the most immediate threat first and then the less immediate threats in sector. (Battle Drill 5)</i> NOTE: Immediate threats are personnel who: - Are armed and prepared to return fire immediately. - Block movement to the position of domination. - Are within arm's reach of a clearing team member. - Are within 3 to 5 feet of the breach point.		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO- GO
→21. Once the room is cleared, the team leader signals to the squad leader that the room has been cleared. (Battle Drill 5) →22. The squad leader marks the room (IAW unit SOP – See FM 3.06-1) (Battle Drill 5) *23. The squad leader determines whether or not his squad can continue to clear through the building. (Battle Drill 5) *24. <u>The squad leader</u> reports to <u>PL</u> using <u>FSW reporting means</u>, as required. (07-3-1279) 25. <u>Squad is able to</u> continue operations, as directed. (07-3-1279)		

FSW-Specific Collective Task Performance Measures for the following FSW missions:

Mission 3: Election Day

Mission 4: Red Cross

The task list includes selected T&EO performance measures from:

- Collective Task #07-3-1406 React to Snipers.
- Collective Task #07-3-1432 Take Action on Contact

Condition: The squad is conducting operations as part of a higher headquarters and receives fire from an enemy sniper **or** makes unexpected contact with the enemy - reacts to contact ([1] under direct fire, [2] visual contact when the element is in immediate danger, or [3] visual contact when the element is **not** in immediate danger). The squad receives fires from enemy weapons, visually acquires the enemy, or makes contact with an enemy. The squad must react immediately for their protection. All necessary personnel and equipment are available. The squad does **not** have communications with higher and adjacent units, but can submit reports to the PL via the FSW reporting system. The squad has been provided guidance on the rules of engagement (ROE) and rules of interaction (ROI). Enemy forces and noncombatants are present in the operational environment.

Standard: The squad is conducting stability operations in a built-up urban area. The squad is ordered to guard a voting site (Scenario 3. Election Day) or a humanitarian aid food truck (Scenario 4. Red Cross) when they are notified that hostile Kazarian forces or sympathizers may be in their vicinity. The squad must react to contact in accordance with (IAW) tactical standing operating procedures (TSOP) and the PL or PSG's direction. The squad must successfully guard the avenues of approach to the voting site (building) or successfully protect the food truck. The squad must also complete the mission as a combat effective force. Non-combatants casualties to will be avoided, if at all possible.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
NOTE: Based on tactical situation, the squad will conduct performance measures 1, 2, or 3, then complete performance measures 4-12, as they apply. 1. <u>Squad</u> conducts actions on contact (sniper fire). (07-3-1406) a. Returns fire immediately to destroy or suppress the enemy. (07-3-1406) →b. <i>Deploys to covered and concealed positions, if available. (07-3-1406)</i> c. Conducts battle drills, as necessary. (07-3-1406) d. Maintains visual contact with the enemy while continuing to develop the situation through reconnaissance or surveillance. (07-3-1406) 2. <u>Squad</u> reacts to enemy sniper fire. (07-3-1406)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
a. <u>Squad</u> leader reports contact to PL using <u>FSW reporting means</u>, as required. (07-3-1406) b. <u>Squad</u> eliminates the sniper. (07-3-1406) (1) Complies with ROE and ROI. (07-3-1406) (2) Uses smoke to obscure the enemy snipers view, <u>if applicable</u>. (07-3-1406) (3) Uses available firepower to suppress and fix the sniper. (07-3-1406) (4) Maneuvers to close with the sniper and eliminates or forces him to withdraw. (07-3-1406) 3. <u>Squad</u> reacts to contact. (07-3-1432) a. <u>Squad</u> deploys and reports. (07-3-1432) b. Reacts when contact entails direct fire (07-3-1432) (1) Returns fire immediately to destroy or suppress the enemy. (07-3-1432) ➔ (2) <i>Deploys to covered and concealed positions, if available.</i> (07-3-1432) (3) Maintains visual contact with the enemy while continuing to develop the situation through reconnaissance or surveillance. (07-3-1432) c. Reacts to visual contact. (element is in immediate danger.) (07-3-1432) (1) Initiates fires to destroy or suppress the enemy. (07-3-1432) ➔ (2) <i>Deploys to covered and concealed positions.</i> (07-3-1432) (3) Conducts further actions as directed by PL or PSG. (07-3-1432) d. Reacts to visual contact. (element is not in immediate danger.) (07-3-1432) ➔ (1) <i>Deploys.</i> (07-3-1432) (2) Maintains visual contact. (07-3-1432) (3) Conducts further actions as directed by PL or PSG. (07-3-1432)		
NOTE: The observer may consider an administrative halt to have the squad leader discuss his options/intent for performance measures 4 and 5.		
* 4. <u>Squad</u> leader evaluates the situation. (07-3-1432) a. Confirms friendly and enemy situations. (07-3-1432) b. <u>If practical</u>, searches for the flanks of the enemy and any elements that could mutually support enemy position(s). (07-3-1432) c. Sends updated <u>spot report</u> (SPOTREP) to PL using FSW reporting means. (07-3-1432)		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
d. Directs the actions of <u>fire team</u> not in contact in a manner that supports the elements in contact. (07-3-1432) e. Directs <u>fire team</u> NOT in contact to continue the mission IAW the <u>mission briefing</u> and/or FRAGO. (07-3-1432) * 5. <u>Squad</u> leader directs the squad to destroy the inferior <u>enemy</u> force. (07-3-1432) 6. <u>Squad</u> complies with ROE and ROI. (07-3-1432) 7. <u>Squad</u> consolidates and reorganizes as necessary. (07-3-1406/1432) 8. <u>Squad</u> treats and evacuates <u>friendly</u> casualties, as necessary. (07-3-1406/1432) 9. <u>Squad</u> secures enemy prisoners of war (EPW), if applicable. (07-3-1406/1432) →10. <u>Squad</u> processes captured documents and or equipment, if applicable. (07-3-1406/1432) 11. <u>Squad</u> secures and searches enemy killed in action, as required. (07-3-1406/1432) *12. <u>Squad</u> leader reports to PL using <u>FSW reporting means</u>, as required. (07-3-1406/1432) 13. <u>Squad is able to</u> continue operations, as directed. (07-3-1406/1432)		

