

HQMC  
20 Aug 04

E R R A T U M

to MCO 3501.9B W/CH 1-3

MARINE CORPS COMBAT READINESS EVALUATION SYSTEM  
(SHORT TITLE: MCCRES); VOLUME VIII,  
THE MARINE AIR COMMAND AND CONTROL SYSTEM (MACCS)

1. For administrative purposes, the Publications Control Number (PCN) has been reidentified. Change the PCN "10203353700" to read: "10203361700".

PCN 10203361780



DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775

MCO 3501.9B

TE31A  
5 Jun 91

MARINE CORPS ORDER 3501.9B W/CH 1-3

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT)  
TITLE: MCCRES); VOLUME VIII, THE MARINE AIR COMMAND AND  
CONTROL SYSTEM (MACCS)

Ref: (a) MCO 3501.1B

Encl: (1) Volume VIII - Mission Performance Standards (MPS) for  
the Marine Air Command and Control System (MACCS)

1. Purpose. To revise Volume VIII of MCCRES for use in the training and  
evaluation of MACCS units/elements per reference (a).

2. Cancellation. MCO 3501.9A.

3. Action

a. Commanders responsible for the organization, staffing, and  
training of Marine Air Command and Control System units/elements will:

(1) Utilize the MPS's contained in the enclosure as a guideline  
for establishing training goals, training programs for MACCS  
units/elements, and for formal evaluations as directed by command  
elements.

(2) Use, when appropriate, the MPS's for informal readiness  
evaluations, and/or inventory examinations to determine the current  
training status and areas for future progressive training programs.

(3) Make every effort to conduct evaluations when the unit is  
participating in their appropriate role as a part of a Marine Air Ground  
Task Force (MAGTF). This method will strengthen integration efforts and  
give a more complete evaluation of realistic combat readiness.

b. All recipients of this Order will ensure ready availability of  
Volume VIII to all Marines who are responsible for conducting or  
participating in combat readiness evaluations of the MACCS.

MCO 3501.9E

5 Jun 91

4. Recommended Changes. Recommendations for changes and improvements to Volume VIII of MCCRES should be submitted to the Commanding General, Marine Air-Ground Training and Education Center (TE31A), H&S Bn, MCCDC, Quantico, VA 22134-5010.

5. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

*Paul K. Van Riper*  
PAUL K. VAN RIPER  
By direction

DISTRIBUTION: PCN 10203361700  
Copy to: 7000110 (55)  
7230004 (20)  
8145005 (2)  
7000144/8145001 (1)

Reprint for stock only 19 Jun 96.



DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775

MCO 3501.9B Ch 1  
C 461A  
28 May 93

MARINE CORPS ORDER 3501.9B

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT TITLE:  
MCCRES); VOLUME VIII, THE MARINE AIR COMMAND AND CONTROL SYSTEM  
(MACCS)

Encl (1) Revised Table of Contents page  
(2) Section 8D

1. Purpose. To transmit a revised table of contents page to the basic Order, and remove and destroy Section 8D, Air Support Radar Team (ASRT), in its entirety from the basic Order.
2. Action. Remove pages VIII-i and VIII-ii of the basic Order and replace with enclosure (1). Remove and destroy Section 8D, Air Support Radar Team (ASRT), pages VIII-D-i through III-D-31, in its entirety, and replace with enclosure (2). Section 8D is hereby reserved for future use.
3. Summary of Changes. This change deletes the requirement for Air Support Radar Team (ASRT) training under the MCCRES program.
4. Change Notation. Significant changes in the revised pages for this change are denoted by and arrow (>) symbol.
5. Filing Instructions. This Change transmittal will be filed immediately following page 2 of the basic Order.
6. Certification. Reviewed and approved this date.

*C. W. Fulford Jr.*  
C. W. FULFORD JR.  
By direction

DISTRIBUTION: PCN 10203361701  
Copy to: 7000110 (55)  
7230004 (10)  
8145005 (2)  
7000144/6145001 (1)





DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775

MCO 3501.9B Ch 2  
C 461A  
3 JUN 94

MARINE CORPS ORDER 3501.9B Ch 2

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT TITLE:  
MCCRES); VOLUME VIII, MARINE AIR COMMAND AND CONTROL SYSTEM  
(MACCS)

Encl: (1) Section 8E

1. Purpose. To transmit a revised table of contents page to the basic Order, and remove and destroy Section 8E, Marine Air Traffic Control Squadron (MATCS), in its entirety from the basic Order.
2. Action. Remove and destroy Section 8E, pages VIII-i through VIII-E-28 of the basic Order and replace with the enclosure.
3. Summary of Changes. This change recognizes the consolidation of Marine Air Traffic Control Squadron's (MATCS) under the flag of Marine Air Control Squadrons (MACS), and the subsequent establishment of the Marine Air Traffic Control Detachment (MATC Det). Additionally, this change incorporates and standardizes the concepts of the MATC Mobile Team (MMT).
4. Change Notation. Significant changes in the revised pages for this change are denoted by an arrow(>) symbol.
5. Filing Instructions. This Change transmittal will be filed immediately following page 4 of the basic Order.
6. Certification. Reviewed and approved this date.

C. W. Fulford, Jr.  
C. W. FULFORD, JR.  
By direction

DISTRIBUTION: PCN 10203361702  
Copy to: 7000110 (55)  
7230004 (10)  
S145005 (2)  
7000144/8145001 (1)





DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775

MCO 3501.9B Ch 3  
C 461A

06 Dec 1994

MARINE CORPS ORDER 3501.9B Ch 3

From: Commandant of the Marine Corps  
To: DISTRIBUTION LIST

Subj: MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT  
TITLE: MCCRES); VOLUME VIII, MARINE AIR COMMAND AND  
CONTROL SYSTEM (MACCS)

Encl: (1) Section 8F

1. Purpose. To transmit a revised Locator Sheet, table of contents page, MACCS information pages and Section 8F to the basic Order, and remove and destroy those pages and section in their entirety from the basic Order.

2. Action. Remove and destroy page i, pages VIII-1 through VIII-3, pages VIII-i and VIII-ii, and Section 8F, and replace with the attached pages and Enclosure.

3. Summary of Changes. This change contains new operational Mission Performance Standards (MPS's) in section 8F.2, and consolidates logistical MPS's with Combat Service Support (CSS) MPS's in section 8F.4. Equipment Safety and Emergency Destruction Methods MPS's have been moved from section 8F.5 to section 8F.2. Section 8F.5 has been deleted.

4. Change Notation. Significant changes in the revised pages are denoted by an (>) symbol.

5. Filing Instructions. This Change transmittal will be filed immediately following page 6 of the basic Order.

6. Certification. Reviewed and approved this date.

  
B. F. KNUTSON JR.  
By direction

DISTRIBUTION: PCN 10203361703  
Copy to: 7000110 (55)  
7230004 (10)  
8145005 (2)  
7000144/8145001 (1)

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

LOCATOR SHEET

Subj: MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT  
TITLE: MCCRES); VOLUME VIII, THE MARINE AIR COMMAND AND  
CONTROL SYSTEM (MACCS)

Location: \_\_\_\_\_  
(Indicate the location(s) of the copy(ies) of this  
Manual.)

>TABLE OF CONTENTS

	Page
INTRODUCTION.....	VIII-1
SECTION 8 - HEADQUARTERS AND HEADQUARTERS SQUADRON (H&HS MACG)	
SECTION 8A TACTICAL AIR COMMAND CENTER (TACC) TACTICAL AIR DIRECTION CENTER (TADC)	
MPS 8A.1 TACC PLANNING	VIII-A-1
MPS 8A.2 TACC OPERATIONAL EXECUTION	VIII-A-14
MPS 8A.3 MANAGING AVIATION ASSETS.....	VIII-A-20
MPS 8A.4 NBC OPERATIONS .....	VIII-A-26
MPS 8A.5 LOGISTICS.....	VIII-A-36
SECTION 8 - MARINE AIR CONTROL SQUADRON (MACS. MACG)	
SECTION 88 - TACTICAL AIR OPERATIONS CENTER (TAOC)	
MPS 88.1 PLANNING.....	VIII-B-1
MPS 88.2 OPERATIONAL PLANNING.....	VIII-B-10
MPS 88.3 SAAWC EXECUTION.....	VIII-B-15
MPS 88.4 TAOC EXECUTION.....	VIII-B-18
MPS 88.5 EW/C EXECUTION.....	VIII-B-33
MPS 88.6 COMMAND ADMINISTRATION AND LOGISTICS.....	VIII-8-37
MPS 88.7 NBC OPERATIONS.....	VIII-B-44
SECTION 8 - MARINE AIR SUPPORT SQUADRON, DETACHMENT (MASS DET, MASS, MACG)	
SECTION 8C - DIRECT AIR SUPPORT CENTER (DASC)	
MPS 8C.1 PLANNING DIRECT AIR SUPPORT CONTROL ASHORE.....	VIII-C-1
MPS 8C.2 COORDINATION AND CONTROL OF PREPLANNED DIRECT AIR SUPPORT	VIII-C-8
MPS 8C.3 COORDINATION AND CONTROL OF IMMEDIATE AIR SUPPORT	VIII-C-11
MPS 8C.4 AIR DEFENSE MEASURES	VIII-C-28
MPS 8C.5 NBC OPERATIONS	VIII-C-36
>SECTION 8D - (Reserved for future use)	
SECTION 8E - MARINE AIR TRAFFIC CONTROL SQUADRON (MATCS)	
MPS 8E.1 OPERATIONS PREPARATIONS.....	VIII-E-1
MPS 8E.2 EXPEDITIONARY AIR TRAFFIC CONTROL SERVICES	VIII-E-9

	PAGE
MPS 8E.3 COORDINATION WITH EXTERNAL AGENCIES	VIII-E-14
MPS 8E.4 ELECTRONIC WARFARE .....	VIII-E-18
MPS 8E.5 PREPARE FOR NBC OPERATIONS .....	VIII-E-18
SECTION 8F - LOW ALTITUDE AIR DEFENSE BATTALION (LAAD BN)	
MPS 8F.1 LAAD CONTROL COMMUNICATIONS AND PLANNING .....	VIII-F-1
MPS 8F.2 AIRCRAFT DETECTION AND RECOGNITION.....	VIII-F-8
MPS 8F.3 NBC OPERATIONS.....	VIII-F-12
MPS 8F.4 LOGISTICS.....	VIII-F-22
MPS 8F.5 EQUIPMENT SAFETY AND EMERGENCY DESTRUCTION METHODS .....	VIII-F-23
SECTION 8G - LIGHT ANTI-AIRCRAFT MISSILE BATTALION (LAAM BN)	
MPS 8G.1 AAW PLANNING .....	VIII-G-1
MPS 8G.2 OPERATIONAL PREPARATIONS.....	VIII-G-5
MPS 8G.3 AAW OPERATIONS.....	VIII-G-1
MPS 8G.4 COMMAND, ADMINISTRATION AND LOGISTICS.....	VIII-G-23
MPS 8G.5 PERFORM LOGISTICS FUNCTIONS .....	VIII-G-26
MPS 8G.6 PERSONNEL.....	VIII-G-30
MPS 8G.7 NBC OPERATIONS.....	VIII-G-31

TABLE OF CONTENTS

	PAGE
SECTION 8E - MARINE AIR CONTROL SQUADRON AIR TRAFFIC CONTROL (MATC) DETACHMENT	
MPS 8E.1.....	VIII-E-1
OPERATIONAL PREPARATIONS	
MPS E.2.....	VIII-E-9
EXPEDITIONARY AIR TRAFFIC CONTROL SERVICES	
MPS 8E.3	VIII-E-13
COORDINATION WITH EXTERNAL AGENCIES	
MPS 8E.4	VIII-E-16
ELECTRONIC WARFARE	
MPS 8E.5.....	VIII-E-17
NBC OPERATIONS	

TABLE OF CONTENTS

	PAGE
SECTION 8F F - LOW ALTITUDE AIR DEFENSE (LAAD)	
MPS 8F.1.....	VIII-F-1
TASK ORGANIZATION AND PLANNING	
> MPS 8F 2.....	VIII-F-6
LAAD OPERATIONS	
MPS 8F.3.....	VIII-F-17
NBC OPERATIONS	
> MPS 8F.4.....	VIII-F-27
LOGISTICS/COMBAT SERVICE SUPPORT	

VOLUME VIII

MISSION PERFORMANCE STANDARDS

> MARINE AIR COMMAND AND CONTROL SYSTEM (MACCS)

INTRODUCTION

This volume of the Marine Corps Combat Readiness Evaluation System (MCCRES) contains the Mission Performance Standards (MPS's) that have been specifically developed to permit effective evaluation of the performance of the agencies comprising the Marine Air Command and Control System (MACCS). Detailed discussion of the methodology for use of the MPS's by evaluators is contained in MCO 3501.1B. The mission of Marine aviation is to conduct air operations in Support of the Fleet Marine Force (FMF) to include offensive air support, antiair warfare, assault support, electronic warfare, air reconnaissance, and control of aircraft, and missiles. The MACCS consists of agencies which assist the Tactical Air Commander (TAC) in the detailed control required for the six functions of Marine Aviation. The MACCS permits centralized command, coordination and supervision of air operations at the highest Level, while permitting decentralization of control authority to subordinate agencies.

The MACCS is comprised of the following agencies:

TACTICAL AIR COMMAND CENTER (TACC). The senior MACCS agency which exercises supervision, coordination and general control of all tactical air operations in the MAGTF area of operations. It also provides the TAC the facilities and means to direct and coordinate organic aviation with other services. The TACC is operated by personnel from the staff of the aviation element commander, the TAC and air control personnel from the Marine Tactical Air Control Squadron (CMTACS) of the Marine Air Control Group (MACG). The physical shelter and associated communications-electronics for the TACC facility are provided and maintained by the H&HS. Additional communications support is provided by the Marine Wing Communications Squadron (MWCS) of the MACG.

TACTICAL AIR DIRECTION CENTER (TADC). The TADC is an air operations facility subordinate to a TACC (USAF/USMC) acts to coordinate and direct all air operations in a specified portion of the objective area. The TADC is normally identical in organization, facilities and capabilities to a TACC (USMC). The essential difference between the TACC and the TADC is the amount of airspace for which each is responsible and the scope of their assigned functions. For example, when a MAGTF has overall responsibility for control of air in the objective area, the MAGTF commander establishes a TACC. In an amphibious operation during the initial stages of the assault when control is afloat, the landward sector of the Amphibious Objective Area (ADA) may be assigned to a TADC. When the Commander Landing Force (CLF) is capable of assuming control and when approved by the Commander, Amphibious Task Force (CATF), all control of air in the objective area passes ashore. The primary control agency for the landward sector, previously designated the TADC, becomes the TACC. The CATF's TACC reverts to the status of a TADC (afloat).

TACTICAL AIR OPERATIONS CENTER (TAOC). The TAOC is a subordinate operations element of the MACCS tasked with the control of Sector enroute air traffic management and antiair warfare operation to include manned interceptors and surface-to-air missiles (SAM). The TADC provides the MAGTF's sector antiair warfare coordinator (SAAWC) with up-to-date data on the air picture so that he can manage the AAW battle in with the tactical air commander's overall strategy and make informed decisions regarding the commitment of the MAGTF's air defense resources. Each TAOC detects and identifies aircraft within its sector, maintains and disseminates appropriate information on the air situation, and provides the SAAWC with the information necessary so that he can effectively interface with adjacent and higher air defense agencies. Additionally, it provides all facets of airspace management to include navigational assistance to friendly aircraft in other support missions. The TAOC is equipped and manned by personnel from the Marine Air Control Squadrons (MACS) of the MACG. The TAOC will normally be phased ashore as suitable terrain is uncovered by the ground element. Equipment of the TAOC is designed for an incremental buildup, progressing from a manual early warning/surveillance/Limited intercept capability to a semiautomated system capable of passing and receiving data from USN, USAF, USA Tactical Data Systems, and the Marine Corps TACC/TADC and LAAM battalion/batteries. In the early stages of an amphibious operation, the TAOC will normally be assigned the landward sector under the control of the TADC or TACC afloat. When air defense control is passed ashore to the CLF, the TAOC is capable of assuming the AAW and airspace management functions for the entire ADA.

DIRECT AIR SUPPORT CENTER (DASC). The DASC is the subordinate agency responsible for the conduct of air support operations. The DASC provides the means for processing immediate direct air support requests, coordinating aircraft employment with other supporting arms, and control of assigned aircraft within the framework of area airspace control. It is normally the first major air control agency ashore and lands in the same sequence as the senior Fire Support Coordination Center (FSCC). Equipment and personnel to man the DASC are provided by the Marine Air Support Squadron (MASS) of the MACG. The range of operations and support provided by the DASC can span the entire MAGTF structure to include Marine Expeditionary Force (MEF) sized operations. For MEF level operations, the assets of both MASS detachments would be combined to form the necessary facility to support the MEF. The equipment and personnel required to provide support can vary

from a few radios and personnel to the AN/TSQ-155 shelter and communications employed for a MEF Fwd/MEF complex. Additionally, the DASC is capable of detaching elements to form smaller DASC's for special operations of short duration or during displacements of the primary DASC. The configuration and personnel employed will be directly related to the combination of aviation assets and the anticipated supporting arms coordination requirements. Air support control functions in support of a MEU will be found in Volume VII, Marine Expeditionary Unit (MEU) and Volume VIII, Chapter G of the Composite Squadron.

MARINE AIR TRAFFIC CONTROL DETACHMENT (MATC DET). Within the MACCS, expeditionary terminal air traffic control facilities are required for aircraft takeoff, landing, and terminal airspace management. The MATC Det. is organic to the MACS TAOC) and can task organize and equip detachments to support full IMC airfield operations or limited airfield/landing zone operations as required by the mission. In order to provide the required functions of terminal positive control, the MATC Detachment's section is normally organized into three subsections: Control Tower, Ground Control Approach (GCA) and Approach Control. The MATC Det. integrates with the other MACCS agencies to provide continuous control of aircraft from launch to recovery. The MATC Det. is capable of deploying detachments and teams to provide expeditionary ATC support simultaneously at three independent and geographically separated airfields and seven remote area landing sites.

LOW ALTITUDE AIR DEFENSE BATTALION (LAAD Bn). The LAAD Bn is organized to provide close-in, low altitude surface-to-air weapons fires in defense of forward combat areas, vital areas, and installations. It also provides surface-to-air weapons support for units engaged in special operations and independent operations. The LAAD battalion consists of a battalion headquarters (HQ), a headquarters and service (H&S) battery, and two firing batteries. The H&S battery is divided into an H&S battery minus (-) and an H&S battery detachment which can be deployed separately to support two simultaneously deployed firing batteries. Each firing battery has a battery HQ and three firing platoons. Each firing platoon has a platoon HI and three firing sections. The firing section, which is the smallest tactical unit for the LAAD battalion, has a section HQ and five firing teams. The firing team consists of a team leader/gunner and a gunner/driver. Both team members are trained as gunners and in communications, target detection, and aircraft recognition. Normally, the gunner/driver will actually fire the Stinger missile, allowing the team leader to evaluate targets and make engagement decisions. However, during period of intense enemy air activity, both may act as gunners to increase the team's rate of fire.

LIGHT ANTI-AIRCRAFT MISSILE BATTALION (LAAM Bn). The LAAM Battalion provides all-weather day and night, medium range SAM defense of assigned areas of operation, installations, and vital areas against low and medium altitude air attacks. The LAAM battalion consists of a battalion headquarters, and H&S battery, and three firing batteries. The H&S battery is organized into an H&S battery (-) and an H&S battery detachment to support simultaneously deployed firing batteries. Each of the firing batteries is composed of two mirror-image firing platoons, each with two firing sections. This configuration allows a battery to be employed as a single firing unit or as two separate firing elements when required. Each firing platoon has a data-link capability with the TADC via the Army Tactical Data Link-1 (ATDL-T) and an organic identification, friend or foe (IFF) capability.

Marine Corps MACCS employment doctrine task organizes those agencies and terminal control facilities required to accomplish the mission

Since the functions performed by the MACCS are basically the same for either MEF Fwd or MEF level operations, differing essentially only in the density of aviation assets and other supporting arms being commanded, controlled, or coordinated, the MPS's, tasks, and requirements delineated in the succeeding sections will apply to both MEF Fwd or MEF level operations unless specifically noted.

To assess the true combat readiness of the MACCS, it must be evaluated as an entity for each given situation. Concurrent evaluations of the various agencies is the most effective measure of the systems effectiveness and efficiency. Each agency is dependent on actions and mission functions provided the others, and these interdependencies effect mission accomplishment. This need not preclude evaluation of specific agencies during an exercise, but the criteria are structured so that the evaluation of one agency cannot be accomplished without from the rest of the MACCS.

The total scope of air command has been considered in the development of evaluation criteria for the MACCS. Where the MACCS mission execution and planning influences elements of the larger process of aviation employment as part of the MAGTF, standards have been developed to measure the effectiveness of mission area responsibility and functional execution. As the MACCS contributes in large portion to the products of aviation planning and employment preparation; the process of planning, preparation, and mission execution has been addressed as a function of the MACCS as an integral part of the Aviation Combat Element (ACE). Effective mission execution is based on a solid foundation of training and thorough planning. The evaluation of how the MACCS plans and prepares for operational execution will allow for the identification of areas requiring attention or additional training.

#### Summary

The MPS's which comprise the MACCS MCCRES are formulated to ensure that a MACG is capable of performing its assigned mission and tasks. The criteria established for the MPS's are based on a minimum acceptable

level of achievement for a specific agency. MCCRES is designed to enhance combat readiness and ensure that required and realistic training is conducted. Performance on MPS's can be used as an indicator for emphasis in training and establishing training priorities.

MCCRES will only be effective if the MPS's are realistic, the evaluators credible, and the reports factual. All Marines are part of the MCCRES and, therefore, must strive to keep the system dynamic, realistic, and meaningful.

Recommended changes or improvements to this volume or other MCCES documentation is encouraged and should be sent to the Commanding General, Marine Corps Combat Development Command (TE31), Quantico, VA 22134-5001. Each suggested change must cite the specific item, volume, page, paragraph or Line of text, as appropriate, and should be in the following format:

- Item to be changed (MPS, Task, Requirement, or text location).
- Comment.
- Recommendation.

MCO 3501.9B  
6 DEC 1994

SECTION 8F  
LOW ALTITUDE AIR DEFENSE (LAAD)

MCO 3501.9B  
5 JUN 1991

SECTION 8A  
TACTICAL AIR COMMAND CENTER (TACC)

ENCLOSURE (1)

TABLE OF CONTENTS

	PAGE
MPS 8A.1 - TACC PLANNING	
TASK 8A.1.1	VIII-A-1
CONDUCT INITIAL PLANNING AND COORDINATION	
TASK 8A.1.2	VIII-A-3
CONDUCT INTELLIGENCE PLANNING	
TASK 8A.1.3	VIII-A-5
CONDUCT AVIATION COMMAND AND CONTROL PLANNING	
TASK 8A.1.4	VIII-A-7
CONDUCT ANTI-AIR WARFARE PLANNING	
TASK 8A.1.5	VIII-A-8
CONDUCT ASSAULT SUPPORT PLANNING	
TASK 8A.1.6	VIII-A-10
CONDUCT OFFENSIVE AIR SUPPORT (OAS) PLANNING	
TASK 8A.1.7	VIII-A-11
CONDUCT AERIAL RECONNAISSANCE PLANNING	
TASK 8A.1.8	VIII-A-12
CONDUCT ELECTRONIC WARFARE PLANNING	
MPS 8A.2 - TACO OPERATIONAL EXECUTION	
TASK 8A.2.1	VIII-A-14
CONDUCT SITE SELECTION AND OCCUPATION	
TASK 8A.2.2	VIII-A-15
ESTABLISH COMMUNICATIONS	
TASK 8A.2.3	VIII-A-16
CONDUCT TACC BRIEFING	
TASK 8A.2.4	VIII-A-17
PHASING CONTROL ASHORE	
TASK 8A.2.5	VIII-A-18
CONDUCT DATA TRANSFER AND MANAGEMENT	
TASK 8A.2.6	VIII-A-19
CONTINUING COORDINATION	
MPS 8A.3 - MANAGING AVIATION ASSETS	
TASK 8A.3.1	VIII-A-20
MAINTAIN TACTICAL SITUATION AWARENESS	
TASK 8A.3.2	VIII-A-20
MONITOR DAILY ATO	
TASK 8A.3.3	VIII-A-21
USE OF ALERT AIRCRAFT	
TASK 8A.3.4	VIII-A-22
CHANGES TO THE ATO	
TASK 8A.3.5	VIII-A-22
CONDUCT AIR DEFENSE COORDINATION	
TASK 8A.3.6	VIII-A-23
CONDUCT AIR SUPPORT COORDINATION	
TASK 8A.3.7	VIII-A-24
EXTERNAL COORDINATION REQUIREMENTS	
TASK 8A.3.8	VIII-A-25
PROVIDES FOR SUCCESSION OF COMMAND AND CONTROL	
MPS 8A.4 1 - NBC OPERATIONS	
TASK 8A.4.1	VIII-A-26
PREPARE FOR NBC OPERATIONS	
TASK 8A.4.2	VIII-A-27
PREPARE FOR NUCLEAR ATTACK	
TASK 8A.4.3	VIII-A-27
RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	
TASK 8A.4.4	VIII-A-28
RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK	
TASK 8A.4.5	VIII-A-28
PERFORM RADIOLOGICAL DECONTAMINATION	

MCO 3501.9B  
5 JUN 1991

TASK 8A.4.6	CROSS A RADIOLOGICAL CONTAMINATED AREA	VIII-A-29
TASK 8A.4.7	PREPARE FOR A FRIENDLY NUCLEAR STRIKE	VIII-A-30
TASK 8A.4.8	PREPARE FOR A CHEMICAL AGENT ATTACK	VIII-A-31
TASK 8A.4.9	RESPOND TO A CHEMICAL AGENT ATTACK	VIII-A-31
TASK 8A.4.10	PERFORM HASTY DECONTAMINATION	VIII-A-33
TASK 8A.4.11	COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT	VIII-A-34
TASK 8A.4.12	EXCHANGE PROTECTIVE CLOTHING	VIII-A-35
TASK 8A.4.13	SCORE THE NBC EXAM	VIII-A-35

MPS 8A.5 - LOGISTICS

TASK 8A.5.1	CONDUCT LOGISTICS PLANNING	VIII-A-36
-------------	----------------------------	-----------

VIII-A-ii

ENCLOSURE (1)

8A.1 TACC PLANNING

TASK: 8A.1.1 CONDUCT INITIAL PLANNING AND COORDINATION

CONDITION(S): A MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The embarked ACE has been task organized to provide all functions of aviation support, and is prepared to establish aviation control and support facilities ashore on order, Using his original staff, augmented by representatives from subordinate elements, the ACE directs the initiation of planning.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Task organizes an ACE staff for the planning, integration, and control of all organic aviation support provided to the MAGTF upon receipt of the initiating directive.
- .2 \_\_\_\_ Receives MAGTF commander's planning guidance, and issues warning orders to subordinate elements.
- .3 \_\_\_\_ Requests EEI's from the G/S-2 to include: enemy detection and reaction capabilities; type and location of antiaircraft weapons; force concentrations; enemy aircraft, ECH and ECCM capabilities; weather conditions in the AOR; terrain and LZ conditions; and safe areas. Passes information down to subordinate aircraft and control units (See Task: 8A.1.2 INTELLIGENCE PLANNING).
- .4 \_\_\_\_ Plans for liaison officers to represent MAGTF aviation operations with ATF and/or joint forces commands if required.
- 5 \_\_\_\_ Completes an initial estimate of the MAGTF aviation requirements. (KI)
- .6 \_\_\_\_ Establishes early coordination with ATF and/or joint force command aviation planners and control agencies for all phases of operations.
- .7 \_\_\_\_ Establishes early liaison with the GCE/CSSE to ensure aviation coordination and integration with the supported units requirements.
- .8 \_\_\_\_ Plans for procedures to be utilized to coordinate MAGTF aviation use during all the phases of advanced operations, amphibious assault, control ashore, and subsequent joint forces operations if required.
- .9 \_\_\_\_ Prepares aviation estimates of supportability for all operations assigned, and identifies any limitations or problem areas. (KI)
- .10 \_\_\_\_ Prepares those portions of the MAGTF operations plan for which the ACE has staff cognizance or staff input, to include the procedures for supported units to request preplanned, and immediate (JTAR/ASR) aviation support.
- .11 \_\_\_\_ Provides advice to the GCE/CSSE representatives during the formulation of the aviation requirements which includes calculations for troop lifts, preplanned GAS, air interdiction targets, aerial reconnaissance, air defense assets, illumination, C&C flights, and logistic support needs.
- .12 \_\_\_\_ Coordinates antiair warfare employment and concept of operations based on landing force requirements and threat intelligence.
- .13 \_\_\_\_ Convenes an air support requirements and coordination conference, and submits for the MAGTF commander's a approval a prioritized list of requested missions.
- .14 \_\_\_\_ Requests additional air support from CVBG or land based assets, if air requirements estimates indicate inadequate MAGST aviation resources.
- .15 \_\_\_\_ Coordinates with GCE to develop fire support and SEAD integration procedures to be used in conjunction with close air support and assault support missions.
- .16 \_\_\_\_ Prepares ROE, weapons conditions, and alert conditions criteria for CLF/CATF approval, and disseminates them to subordinates after approval.
- .17 \_\_\_\_ Coordinates all communication requirements for subordinate, adjacent and higher level circuits with the MAGTF Comm planners, to include encryption Hardware/software and authentication materials.

- .18 \_\_\_\_\_ Coordinates frequency requirements for radios/radars/TACAN's/data links for subordinate units with MAGTF planners.
- .19 \_\_\_\_\_ Determines basing options ashore for aviation assets to include the siting of air control facilities and surface to air weapons systems as well as airfields, PAP's or remote sites.
- .20 \_\_\_\_\_ Plans amount of bulk fuel required throughout the operation to include transportation to shore based Storage locations.
- .21 \_\_\_\_\_ Determines ammunition, bombs, rockets, and missiles required, by type, and methods of transportation to/from appropriate storage sites.
- .22 \_\_\_\_\_ Plans for any shore based security requirements for all subordinate elements and coordinates with the OCE for personnel or equipment augmentation, if required.
- .23 \_\_\_\_\_ Plans for active security measures which provide for visitor control, early warning, continual observation, and other local security measures.
- .24 \_\_\_\_\_ Plans passive security measures including dispersal, camouflage, hardening positions, and the use of barriers and obstacles.
- .25 \_\_\_\_\_ Preplans TRAP requirements, and coordinates CSAR augmentation with the ATP/joint command.
- .26 \_\_\_\_\_ Plans downed aircraft procedures, and ensures dissemination by Op Order or SOP.
- .27 \_\_\_\_\_ Coordinates a matrix for mission and weather GO/NO GO criteria with the supported unit(s) and the assigned mission commander(s) for the MAGTF commander's approval.
- 28 \_\_\_\_\_ Plans combat intelligence update methods to ensure aircrews/controllers/weapons teams (i.e., LAAD/LAAM) have latest available information.
- .29 \_\_\_\_\_ Coordinates with the MAGTF staff to identify medical facilities appropriate for the delivery of MEDEVAC patients.
- .30 \_\_\_\_\_ Provides continual guidance to subordinate units throughout the planning phase by issuing SOP's, Op Orders, directives, memorandums, or outline plans and hosting staff conferences and informal briefings.

EVALUATOR INSTRUCTIONS: The estimate of supportability can be either verbal or written.

KEY INDICATORS:

#### INITIAL ESTIMATE OF LF AVIATION REQUIREMENTS

This initial estimate is prepared as soon as preliminary information on the assigned mission(s) is available. This initial estimate may only include the number and type of aircraft, the control agencies necessary and the logistic support required. Some of the air support allocations can be deduced from the aviation capabilities of the force involved, estimates of enemy air, and the general mission of the LF.

#### AVIATION ESTIMATE OF SUPPORTABILITY

FMFM 3-1, Appendix A, Porn 7 provides a sample format. The purpose is to summarize significant aviation aspects of the situation as they might influence any courses of action proposed, and to evaluate and determine how aviation units can best be employed to support the contemplated landing force courses of action. The estimate is prepared by the Tactical Air Commander assisted by his staff and subordinate elements. The estimate, at a minimum, provides the following:

1. Which contemplated course(s) of action can best be supported by the ACE.
2. The salient disadvantages of less desirable courses of action.
3. Significant aviation (to include C3) limitations and problems of an operational or logistical nature.

4. Measures that can be taken to resolve existing aviation problems to include requesting additional theater assets.

#### ESTIMATE OF AIR SUPPORT REQUIREMENTS

The detailed planning of landing force aviation requirements commences after the CLF issues his concept of operations. The document is prepared by the ACE and follows the sequence of general requirements totals, Pre D day, D day, and Post D day, and other requirements affecting aviation. The document includes:

1. Number of aviation assets required by type.
2. Amount of bulk fuel necessary to support the aviation element.
3. Amount of ordnance required by type.
4. Number of landing craft and amphibious vehicles required by type to move ground based assets ashore (LAAD, HAWK, airfield services, air control agencies, etc.).
5. Amount of special equipment required by type; organic and otherwise (slings, winches, litters, SATS loaders, airborne DASC, etc.).

TASK: 8A.1.2 CONDUCT INTELLIGENCE PLANNING

CONDITION(S): A MAGIF (MEF/NEB) is in receipt of an initiating directive and has begun planning for an amphibious landing and/or subsequent operations ashore. The embarked ACE is capable of supporting all aviation functions and requires updated and complete intelligence information to carry out their support efforts. The MAGTF commander and the CATF have agreed to form a Joint Intelligence Center (JIC), and are to receive both organic and theater source information. The ACE has a G/S-2 assigned.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Prepares a preliminary aviation intelligence estimate upon receipt of the initiating directive. (KI)
- .2 \_\_\_ Prepares a detailed aviation intelligence estimate upon receipt of the Tactical Air Commander's guidance.
- 3 \_\_\_ Makes early distribution of the intelligence estimate to allow other staff officers and subordinate commanders to prepare their estimates.
- .4 \_\_\_ Determines based on the assigned mission and commanders guidance, essential elements of information (EEI's) and Other Intelligence Requirements (OIR's) of the aviation combat element as a whole.
- .5 \_\_\_ Phrases the commander's EEI's for forwarding to the MAGTF G/S-2 in the form of simple, concise directives consisting of three parts: a positive directive, qualifying questions, and statements directing special attention.
- .6 \_\_\_ Assigns a priority of effort to satisfy intelligence requirements based on the situation and guidance given.
- .7 \_\_\_ Determines ACE requirements for maps, charts, photographs and other graphic aids, and plans for dissemination to subordinates.
- .8 \_\_\_ Plans Pre D day aerial photography support for the MAGTF, and requests CATF assistance for those missions beyond organic capabilities.
- .9 \_\_\_ Uses the collection plan as a basis for issuing orders and requests to collection agencies.
- 10 \_\_\_ Assists higher, adjacent, and supporting commanders in their aviation acquired collection efforts.

- .11 \_\_\_\_\_ Submits requests for intelligence to the JIC, or through them to higher, adjacent, and supported commands.
- .12 \_\_\_\_\_ Develops a continuing aerial reconnaissance and surveillance plan, to include sensor delivery, and submits requests to CATF for those missions requiring external agencies support.
- .13 \_\_\_\_\_ Monitors the collection effort continually to ensure that orders and requests are understood and fulfilled.
- .14 \_\_\_\_\_ Prepares an intelligence annex that defines the manner in which the intelligence operations of the ACE will be conducted.
- .15 \_\_\_\_\_ Develops a dynamic aviation collection plan that provides for the continuous collection of information throughout all phases of the operations, processing of bomb damage assessments, debriefs of all flights, and rapid dissemination of information.
- .16 \_\_\_\_\_ Coordinates with collection agencies in the preparation of aviation tasking assignments to provide advice on the feasibility of aviation tasks and to provide for maximum lead time.
- .17 \_\_\_\_\_ Records information systematically for ease of study and comparison, and sends information to command elements and requesting units.
- .18 \_\_\_\_\_ Develops and maintains a complete Enemy Order of Battle (EOB) which includes information on missiles, aviation assets, EW, naval and ground forces.
- .19 \_\_\_\_\_ Coordinates the fusion of all collected information to form a logical picture or hypothesis of enemy activities which might influence the ACE missions.
- .20 \_\_\_\_\_ Interprets information to determine its significance, and forms logical conclusions which can serve as the basis for determining the effects on the current intelligence estimate.
- .21 \_\_\_\_\_ Coordinates requirements for dissemination; i.e., timeliness, usability of form, pertinence, and security of gathered information with the ACE G/S-3.
- .22 \_\_\_\_\_ Determines form of presentation and in coordination with the G/S-3 and CEO selects the means of transmission for aviation intelligence information gathered.
- .23 \_\_\_\_\_ Requests information on the overhead times of applicable enemy Satellite systems.
- .24 \_\_\_\_\_ Requests an estimate of the enemy's time lag in processing, developing, distributing, and acting upon overhead photography or satellite information.
- .25 \_\_\_\_\_ Provides responsive, timely, and pertinent aviation intelligence support to all elements of the MAGTF.
- .26 \_\_\_\_\_ Provides, in coordination with the G/S-3, input to the MAGTF/CATF target list to include the enemy's C3 Structure.
- .27 \_\_\_\_\_ Prepares a detailed rear area threat assessment for the ACE, and provides updates as information becomes available by continuous coordination with other command elements (MAGTF, GCE, CSSE).

EVALUATOR INSTRUCTIONS: None

KEY INDICATORS:

PRELIMINARY INTELLIGENCE ESTIMATE

The primary purpose of the preliminary estimate is to furnish the commander with sufficient intelligence to formulate basic decisions and to assist him in issuing planning guidance.

VIII-A-4

ENCLOSURE (1)

INTELLIGENCE ESTIMATE

Estimating intelligence is a continuous process that begins immediately after receipt of the initiating directive and continues throughout all phases of the operation. Initial aspects of this estimate are concerned with characteristics of the terrain in the objective area; anticipated weather and conditions at the time projected for the operation; the location, characteristics, and composition of available landing sites; the general strength, disposition, and composition of enemy forces in the objective area; and the location of civilian population concentrations, and places protected by the law of war. This estimate must also be concerned with the following five basic intelligence tasks:

1. Determination of requirements (continuous process).
2. Preparation of collection plans.
3. Processing and dissemination techniques.
4. Collection of confirmatory information.
5. Dissemination of updated intelligence information.

The intelligence estimate is normally written if planning time allows. The subsequent or running estimates made as the operation progresses are generally called for on short notice and are normally based on such a small amount of new material that the estimate is presented orally, supported perhaps by a situation map and notes. However, these changes are incorporated into the basic continuing estimate as soon as possible.

TASK: 8A.1.3 CONDUCT AVIATION COMMAND AND CONTROL PLANNING

CONDITION(S): The ACE of the MAGTF (MEF/MEB) is supported by a complete MACCS which includes the TACC, one or more TAOC's with a forward deployed EW/C to fill critical radar gaps, a DASC with at least one subordinate ASRT, two LAAM Batteries, task organized LAAD assets, a MWCS detachment, and a MATCS detachment providing terminal control at one major airfield and capable of limited control at forward Sites. Aviation priorities and the apportionment of aircraft have been established by the MAGTF commander after receiving recommendations from the TAC. Initial aviation planning will include both amphibious and landward phases of the operation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Formulates MAGTF aviation planning, and provides representatives with direct access to the ATF agencies which exercise control of aviation assets allocated to support the landing force during the initial phases of any landing.
- .2 \_\_\_\_\_ Conducts planning analysis and identifies all communications required tasks.
- 3 \_\_\_\_\_ Integrates and coordinates communications support requirements with the MAGTF CEO, and ATF air control agencies, to include frequency requirements, data links, and security devices.
- .4 \_\_\_\_\_ Prepares a communications estimate of supportability based on the ACE commander's proposed courses of action.
- .5 \_\_\_\_\_ Coordinates the integration of MACIF' air control assets into the overall ATF C3 network with special emphasis on the transition phases of air control moving ashore.
- .6 \_\_\_\_\_ Recommends control measures for approval and inclusion in MAGTF and ATF operations orders to include offensive and defensive control points, handover points, and return to force procedures.
- .7 \_\_\_\_\_ Plans, coordinates and recommends airspace management procedures to integrate fire support capabilities/NCF/UAV's with the aviation tactics selected.
- 8 \_\_\_\_\_ Recommends air defense control measures (CAP positions, RTB procedures, MEZ's, at asset allocations, and priorities to the CLF/CATF.
- .9 \_\_\_\_\_ Identifies needs for airborne control agencies; i.e., TAC(A), FAC(A) and/or HC(A), as required to satisfy mission requirements.

- 10 \_\_\_\_ Coordinates and participates in any required FAC party training with the OCE.
- .11 \_\_\_\_ Coordinates procedures, with the CCE and/or SACC, to mark targets, and provide landward terminal control for OAS/assault support aircraft.
- .12 \_\_\_\_ Establishes procedures for the coordination of Initial Terminal Guidance (ITG) with reconnaissance/advance elements.
- 13 \_\_\_\_ Publishes the requirement to have helicopter landing diagram(s), and coordinates HST procedures to be used.
- .14 \_\_\_\_ Prepares and publishes a communications plan that provides for reliability, speed, flexibility, and security.
- .15 \_\_\_\_ Plans geographic locations of air control units ashore using maps, aerial photography, ECAC studies, threat information, and the ground scheme of maneuver.
- .16 \_\_\_\_ Coordinates control procedures with the ATF for Marine aviation assets moved ashore before ACE C3 is established.
- .17 \_\_\_\_ Establishes a "phasing control ashore checklist" to control the movement of C3 ashore while maintaining support for the MAGTF scheme of maneuver.
- 18 \_\_\_\_ Plans a C3 transition ashore that provides immediate operational functions first, a phased buildup, and follows with heavy lift requirements as transportation becomes available.
- .19 \_\_\_\_ Allocates air defense assets to ensure an "umbrella" over the objective area consistent with the threat conditions when established ashore.
- .20 \_\_\_\_ Identifies physical security requirements for all facilities and control agencies established ashore.
- .21 \_\_\_\_ Establishes procedures published in an SOP for the development and dissemination of the ATO to all required higher, adjacent and subordinate commands when control is established ashore.
- .22 \_\_\_\_ Utilizes formats for fixed-wing and helicopter assignments in the ATO that allow for complete mission information (location, control agencies, routing, frequencies, ordnance, timing, etc.), without reference to other documents.
- .23 \_\_\_\_ Ensures requesting units are promptly informed of any missions that cannot be filled due to lack of assets.
- .24 \_\_\_\_ Ensures authority and procedures to change landing zones or ingress/egress routes are clearly established in Op Order or SOP's.
- .25 \_\_\_\_ Plans ATC requirements ashore which include a phased buildup of capability from remote site VFR capability to full IFA airfield(s).
- .26 \_\_\_\_ Coordinates with other military services and/or civilian ATC organizations of allied/neighborhood countries, if required, to provide procedures for tactical departures and arrivals as well as airspace management.
- .27 \_\_\_\_ Plans contingencies in response to possible degradation or destruction of C3 assets both afloat and ashore.
- .28 \_\_\_\_ Coordinates NBC policies and procedures for all subordinate aviation units to include warning conditions, reaction teams, decontamination teams, required MOPP conditions, and passive and active defensive measures.
- .29 \_\_\_\_ Develops a pilot/controllers handbook which details communication freqs and color codes, alternate or divert airfields, ordinance codes, code words, available NAVAID's, control measures, rules of engagement, restrictive measures, CAS brief form, abbreviated maps and airfield diagrams for all aircrews and control personnel.
- .30 \_\_\_\_ Develops procedures to keep the MAGTF commander, ACE, and supported units, aware of current operational aviation support efforts.

- .31 \_\_\_\_\_ Recommends joint briefing be held for TACRON, SACC, HDC, ACE, flight representatives, AO, and terminal control personnel prior to employment to reconfirm air control measures to be used and coordinate initial activities.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.1.4 CONDUCT ANTTAIR WARFARE PLANNING

CONDITION(S): A MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious landing and subsequent operations ashore. The G/S-2 has provided the latest intelligence of the objective areas and the enemy forces, and the MAGTF commander has received the recommended allocation plan. The MAGTF commander has further requested that the ACE provide continuing coordination with the ATF aviation staff for joint planning. It is imperative that air superiority be established in the area of operations to permit the conduct of if operations at a given time and place without prohibitive interference by the opposing force. A CVBG, or land based aircraft, will provide additional aviation asset for the amphibious requirements as delineated by the CATF/CLF agreement. The ACE tasks organic assets, and coordinates outside requirements with the ATF, based on the priorities set by the MAGTF commander. ACE air defense control agencies, and surface to air weapons systems will be ready to move ashore on order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Gains MAGTF commander's approval for allocation of AAW assets.
- .2 \_\_\_\_\_ Ensures EE1's concerning the capabilities and locations of enemy air and antiair facilities in the objective area, as well as their ECM and ECCM capabilities, are requested from the G/S-2 and passed down to the users.
- .3 \_\_\_\_\_ Coordinates with ATF/joint force AAW planners to integrate LF offensive and defensive AAW capabilities and requirements into the ATF/joint force AAW concept.
- .4 \_\_\_\_\_ Coordinates plans for aviation assets to provide emergency defense of the ATF if a CVBG or land based assets are not available during the ATF transit phase (AV-8's, AH-1's, LAAD, etc., and submits recommendations to the CATF/CLF for approval. (KI)
- .5 \_\_\_\_\_ Disseminates emergency ATF alert procedures (sound power phones, radios, sirens) to aircrews.
- .6 \_\_\_\_\_ Provides ATF control procedures (rules of engagement, ATC, RTF) to assigned aircrews and LAAD gunners for use if the ATF comes under attack.
- .7 \_\_\_\_\_ Provides ATF airborne control frequencies to alert crews prior to launch.
- .8 \_\_\_\_\_ Develops aviation "flush plan" for use if the ATF comes under attack.
- .9 \_\_\_\_\_ Identifies preplanned if offensive MW targets, and analyzes and prioritizes the targets for attack. Provides this target list to the CAIF/CLF for approval.
- 10 \_\_\_\_\_ Coordinates with the ATF MW planners to ensure command representation in the appropriate afloat control facilities (SACC, TACC, HDC, CIC) with particular attention to the period prior to passage of control ashore.
- 11 \_\_\_\_\_ Plans procedures for the timely transmission of early warning information from the ATF assigned AAWC/SAAWC to elements deployed ashore, and visual/radar reports from the deployed LF assets back up to the AAWC/SAAWC during the initial phases of the landing.
- 12 \_\_\_\_\_ Requests AEW support from ATF or theater sources during the amphibious assault phase, while phasing control ashore, and/or during high threat periods once ashore.
- 13 \_\_\_\_\_ Plans for assets established ashore to integrate passive air defense to include the use of cover, concealment, deception, dispersion and protective construction.

- 14 \_\_\_\_\_ Establishes TAOC, LAAM and LAAD communications requirements, and coordinates these requirements with the ATF planners to ensure continuous AAW information flow is provided during the transition from amphibious operations to subsequent operations ashore, and that ultimate control ashore is facilitated.
- 15 \_\_\_\_\_ Recommends updated OAAW missions based on current intelligence information, asset availability, and probability of success.
- 16 \_\_\_\_\_ Requests external assets to strike LF OAAW targets if required.
- .17 \_\_\_\_\_ Develops LF sustained operations ashore AAW plan which counters known threat, and maximizes freedom of movement for ground scheme of maneuver.
- 18 \_\_\_\_\_ Plans for emission control standards within the objective area and ensures dissemination by Op Order/Plan to subordinate units.
- .19 \_\_\_\_\_ Calculates numbers of aircraft required for AAW mission areas and direct support escort of helicopterborne inserts.
- .20 \_\_\_\_\_ Calculates the number of LAAD/LAAM assets required to provide ground based air defense for the LF ashore.
- .21 \_\_\_\_\_ Provides all known antiair warfare missions, and any required standby alert aircraft requirements for inclusion in the ATO, and ensures dissemination to all subordinate units. (When afloat this information is provided to the ATF)

EVALUATOR INSTRUCTIONS: None

KEY INDICATORS:

#### EMERGENCY DEFENSE

MAGTF assets are not included in the planning for the routine defense of the ATF as that function is provided by their own weapons systems, preplanned CVBG cover or land based assets. In an emergency, landing force aviation assets may be used as a final option for ATF defense when:

1. Increasing tensions, intelligence or defense conditions indicate an attack is imminent, or the ATF is under actual attack.
2. The governing rules of engagement permit the intercept or engagement of contacts presumed to be hostile.
3. Other circumstances or situations occur so that the CATF and CLF agree that an emergency exists.

---

TASK: 8A.1.5 CONFLICT ASSAULT SUPPORT PLANNING

CONDITION(S): Preliminary assault support estimates have been made based on the MAGTF commander's guidance and the intended concept of operations. A daily conference is held to coordinate and schedule all MAGTF air support requirements. Assault support includes vertical assault airlift, fixed-wing air delivery, battlefield illumination, inflight refueling, and air evacuation. Elements of the MAGTF are determining their requirements for future operations, and will submit assault support requests prior to the conference. The conference is attended by representatives from the subordinate elements of the MAGTF, and a representative from the embarked TACRON while operational control remains afloat.

VIII-A-8

ENCLOSURE (1)

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Calculates sorties available for assault support, and provides this information to the MAGTF commander and the GCE/CSSE.
- .2 \_\_\_\_\_ Coordinates with GCE representatives to assist them in determining their preplanned assault support requirements 12 hours prior to their required operational activity.
- .3 \_\_\_\_\_ Coordinates with CSSE representatives to assist them in determining their logistical support requirements, including air evacuation of casualties, 12 hours prior to operational activity.
- .4 \_\_\_\_\_ Submits the agreed to prioritized list of all assault support requirements to the MAGTF commander for approval.
- .5 \_\_\_\_\_ Receives MAGTF approved assault support requirements and, based on the priorities assigned, begins developing detailed planning.
- .6 \_\_\_\_\_ Coordinates requirements for airframe configurations required to support special missions (i.e.) litters to meet MEDEVAC tasking, fuel bladders, et al).
- .7 \_\_\_\_\_ Establishes by SOP the method for supported units to request additional immediate assault support, and disseminates those procedures by recommended input to the MAGTF Op Order.
- .8 \_\_\_\_\_ Recommends LZ's to the MAQTF, as well as alternates, based on the concept of operations, zone(s) of action and threat analysis.
- .9 \_\_\_\_\_ Determines distance and fuel requirements, and identifies the need for aerial refueling, FARP's, LZSA's and/or forward sites.
- 10 \_\_\_\_\_ Determines the requirements for navigation/pathfinder aircraft as well as escort aircraft for troop lifts, and requests outside assistance if required (CCVBG or theater land based assets [e.g. E2. E3]).
- 11 \_\_\_\_\_ Coordinates take off, rendezvous, enroute, and recovery time factors in consonance with the supporting aircraft unit, and provides the information to the supported unit(s) and MAGTF commander in the form of the ATO, or input to the ATF ATO if still afloat.
- 12 \_\_\_\_\_ Provides terrain masking and threat avoidance information, based on a detailed terrain analysis and available intelligence, to the aircraft units for primary/alternate route planning. (TAMPS used if available).
- 13 \_\_\_\_\_ Ensures procedures are established for safe flight separation during ingress/egress, and deconfliction with the GCE/ATF during the delivery of other supporting arms (Naval gunfire, artillery or CAS aircraft).
- 14 \_\_\_\_\_ Coordinates the integration of mission control points with the ATF control agencies (HOC, TACC, SACC), and disseminates the information to subordinate elements while control is afloat.
- 15 \_\_\_\_\_ Provides any changes to mission control points, procedures and/or coordination requirements to aircrews and air control agencies when control transitions ashore.
- 16 \_\_\_\_\_ Coordinates plans for ship board troop loading and refueling/rearming cycles with the CATF staff.
- 17 \_\_\_\_\_ Provides guidance for the establishment of maintenance, ordnance and refueling locations ashore.
- 18 \_\_\_\_\_ Develops and distributes code words to identify completion of critical mission phases and coordinates them with the MAGTF.
- 19 \_\_\_\_\_ Provides guidance to ensure the aviation mission commander and ground element commander are in the same aircraft during critical mission phases, if feasible.
- 20 \_\_\_\_\_ Coordinates emergency extraction plans with MAGTF/ATF and GCE for contingencies.
- 21 \_\_\_\_\_ Develops contingency plans for landing at alternate airfields in friendly territory adjacent to the AOR or on ships, in an emergency.
- 22 \_\_\_\_\_ Coordinates details of the Tactical Recovery of Aircraft and Personnel (TRAP) contingency plan, and any ATF requested CSAR augmentation, and ensures its dissemination to subordinate elements.

- 23 \_\_\_\_\_ Provides all known assault support missions and any standby missions, for inclusion into the Air Tasking Order (ATO), and ensures dissemination to all subordinate and supported units. (When control is afloat this information is provided o the ATF

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.1.6 CONDUCT OFFENSIVE AIR SUPPORT (OAS) PLANNING

CONDITION(S): Preliminary OAS allocation estimates have been made based on the MAGTF commander's guidance and the intended concept of operations. After approval of the initial estimates a daily conference is held to coordinate and schedule all MAGTF air support requirements. Elements of the MAGTF are determining their requirements for future operations, and will submit preplanned requests prior to the conference. The conference will be attended by representatives from the subordinate elements of the MAGTF and a representative from the embarked TACRON while operational control remains afloat.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Calculates daily sorties available for OAS (CAS and DAS), and provides this information to the MAGTF commander.
- .2 \_\_\_\_\_ Develops planning figures for a surge effort, identifying how long the surge effort can be sustained, how many days will be required to recover, and the sorties available during recovery.
- .3 \_\_\_\_\_ Coordinates with the GCE to determine their initial estimate of OAS requirements to assist in apportionment decisions.
- 4 \_\_\_\_\_ Assists the GCE and MAGTF staff in the evaluation of OAS and interdiction targets, and prepares detailed plans for approved missions.
- .5 \_\_\_\_\_ Coordinates with the GTE to determine the OAS allocation for preplanned and immediate missions.
- 6 \_\_\_\_\_ Submits the agreed to prioritized list of all OAS requirements to the MAGTF commander for approval.
- .7 \_\_\_\_\_ Receives MAGTF apportionment guidance for OAS and, based on the priorities assigned, begins developing detailing planning.
- .8 \_\_\_\_\_ Recommends requests for additional OAS support from CVBG or land based assets, if requirements indicate inadequate MAGTF aviation assets.
- .9 \_\_\_\_\_ Identifies significant OAS limitations and/or problem areas to the MAGTF commander.
- 10 \_\_\_\_\_ Recommends proposals for modifying the OAS plan if no additional assets are available.
- 11 \_\_\_\_\_ Coordinates requirements for airframe configurations required to support special missions (i.e. laser guided weapons. rockets, smoke tanks. et al).
- 12 \_\_\_\_\_ Coordinates the integration of recommended OAS control points (rendezvous points, contact points, initial points) with the ATF control agencies (HDC, TACC, SACC) while aviation control is still afloat.
- 13 \_\_\_\_\_ Coordinates with squadron/ATF ordnance personnel to ensure appropriate weapons are available consistent with type targets assigned.
- 14 \_\_\_\_\_ Coordinates ship board ordnance loading and refueling/rearming cycles with the ATF, while control is still afloat.
- 15 \_\_\_\_\_ Plans for forward operating bases and control procedures, that are far enough removed from hostile action to preclude large security requirements.

- 16 \_\_\_\_\_ Provides terrain masking and threat avoidance information, based on a detailed terrain analysis and available intelligence, to the OAS aircrews for their detailed planning (TAMPS used if available).
- 17 \_\_\_\_\_ Ensures procedures are established for safety of flight and deconfliction with other supporting arms (naval gunfire, artillery, mortars), and helicopter routes, and any changes are disseminated to aircrews and air control agencies when control is passed ashore.
- 18 \_\_\_\_\_ Coordinates with GCE/CSSE to ensure terminal controllers are knowledgeable and trained in current procedures and forms.
- 19 \_\_\_\_\_ Provides all known OAS missions, and any "on call" requirements, for inclusion in the Air Tasking Order, and ensures dissemination to all subordinate and supported units. (When control is afloat this information is provided to the ATF).

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: BA.1.7 CONDUCT AERIAL RECONNAISSANCE PLANNING

CONDITION(S): Landing Force objectives have been identified. Timely reconnaissance is required for intelligence updates, initial mission planning and follow on damage assessments. In addition to dedicated aircraft, the MAGTF controls UAV assets which must be deconflicted with other flights, and are available for tasking to assist with aviation requirements.

STARDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Receives warning order and initiates detailed aerial reconnaissance planning immediately.
- .2 \_\_\_\_\_ Develops an estimate of supportability based on the MAGTF commander's guidance and the courses of action.
- .3 \_\_\_\_\_ Requests immediate national source aerial imagery of the objective area and any special topographic products available to assist aviation mission planning.
- .4 \_\_\_\_\_ Coordinates with the MAGTF headquarters to develop an observation and surveillance plan for the entire MAGTF "area of interest" which includes tactical air observers, artillery and naval gunfire spotters.
- .5 \_\_\_\_\_ Recommends specific employment of assets for the aerial reconnaissance and observation plan to the MAGTF G/S-2 which complement other assets available (UAV, national sources).
- .6 \_\_\_\_\_ Advises the MAGTF commander of airborne electronic reconnaissance support for the ground scheme of maneuver that is available from external sources, thereby providing up to date Electronic Order of Battle (EOB) information.
- .7 \_\_\_\_\_ Recommends the request for employment of additional theater or national assets, if required, to support current operations.
- .8 \_\_\_\_\_ Task organizes subordinate detachments (VKFP, VMO) based on the assigned missions, available assets, threat knowledge, and basing decisions.
- .9 \_\_\_\_\_ Recommends aerial reconnaissance assets be used in various multimission roles; i.e., adjustment of fires, BDA reports, LZ studies, route reconnaissance, navigation aid to friendly forces, hand held photography, etc.
- 10 \_\_\_\_\_ Ensures procedures are disseminated to all pilots on visual reconnaissance responsibilities during all flights, and required debriefs.
- 11 \_\_\_\_\_ Coordinates with the G/S-2 for the integration of all available sensor capabilities under a single integrated control system.

MCO 3501.9B.  
5 JUN 1991

- .12 \_\_\_\_\_ Recommends airspace management procedures to the MAGTF/ATF to ensure safe employment of manned aircraft and UAV's with other supporting arms.
- .13 \_\_\_\_\_ Assists MAGTF G/S-2 in planning for aerial emplaced sensors (Aerial Delivered Seismic Intrusion Detectors [ADSID]), from both HI and LOW performance aircraft
- .14 \_\_\_\_\_ Plans measures to support any organic aviation reconnaissance mission; i.e. deception, airstrikes, ECM, escort, and/or inflight refueling.
- .15 \_\_\_\_\_ Arranges for any special equipment (NVG, starlite scopes) required for visual observation at night and during periods of low visibility.
- .16 \_\_\_\_\_ Plans for surprise, speed and the avoidance of offensive combat action in order to protect the recon aircraft and ensure the delivery of required information.
- .17 \_\_\_\_\_ Develops a plan for the timely dissemination of combat information collected to all required elements.
- .18 \_\_\_\_\_ Provides input to the MAGTF operations order concerning aerial reconnaissance request procedures and methods of employment.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### AERIAL RECONNAISSANCE

Aerial reconnaissance is defined as the acquisition of intelligence information employing visual observation and/or sensors in air vehicles. Three categories are included:

1. Aerial Photographic Reconnaissance. That division of aerial reconnaissance using hand held cameras, side looking airborne radar (SLAR) and infrared imagery (IR) to obtain information.
2. Electronic Reconnaissance. Those actions taken for the detection, identification, evaluation, and location of foreign electromagnetic radiations emanating from the area of interest thereby providing up to date Electronic Order of Battle (EOB) information.
3. Visual Reconnaissance. Those actions that all pilots and air crew personnel will accomplish. Included also in the visual category are the use of aircraft to provide an aerial platform for tactical air observers, artillery and naval gunfire spotters, and ground unit personnel conducting visual battlefield surveillance.

---

TASK: 8A.1.8 CONDUCT ELECTRONIC WARFARE PLANNING

CONDITION(S): By task organization, MAGTF assets for airborne electronic warfare are limited. The Radio Battalion has provided a Direct Support Unit (DSU) to the supported MAGTF for planning and operations. The ACE tasks organic assets, and coordinates outside aviation EW requirements with the ATF and/or joint force command, based on the priorities set by the MAGTF commander.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Receives MAGTF commander's initial planning guidance.
- .2 \_\_\_\_\_ Prepares an estimate of supportability.
- .3 \_\_\_\_\_ Gains MAGTF commander's approval for allocation of dedicated EW assets.
- .4 \_\_\_\_\_ Coordinates with the MAGTF G/S-2 to establish a single point of control to coordinate EW within the operational area.

- .5 \_\_\_\_\_ Coordinates with MAGTF G/S-2/DSU, on how aviation assets can assist in the total EW effort (i.e. placement of monitor teams, airborne relay, etc.).
- .6 \_\_\_\_\_ Follows EW SOP's and ensures proper procedures are included in the MAGTF Operations Order, to include any reports required (MIJI, et al).
- .7 \_\_\_\_\_ Develops aviation signal security plans to include all phases of communication security; i.e., crypto-security, transmission security, emission security, and physical security, and disseminates appropriate procedures to subordinate elements.
- .8 \_\_\_\_\_ Develops inputs to the necessary appendixes for the concept of airborne EW for the MAGTF/ATF. (KI)
- .9 \_\_\_\_\_ Determines and requests EW (airborne and/or ground based) support augmentation for direct support of specific aviation missions assigned if on hand assets are not adequate.
- 10 \_\_\_\_\_ Provides aircraft for airborne electronic surveillance with real time reporting over secure tactical communications nets when required.
- 11 \_\_\_\_\_ Provides aircraft for ESM and ECM support of directed air strikes and/or assault support missions.
- 12 \_\_\_\_\_ Ensures individual mission plans include both active and passive EW (any aircraft can be used as an airborne listening platform).
- 13 \_\_\_\_\_ Conducts OPSEC/COMSEC monitoring and reporting as directed by the MAGTF.
- 14 \_\_\_\_\_ Ensures that all planners, operators, and users of electronic equipment thoroughly understand the EW threat.
- 15 \_\_\_\_\_ Ensures aviation self defense ECM/ECCM capabilities; i.e., RHAW gear, chaff, flares, are installed and operable on all aviation assets.
- 16 \_\_\_\_\_ Develops procedures to ensure ERIM's and ERIR's generated from the MAGTF aviation units are requested through the MAGTF G/S-2.
- 17 \_\_\_\_\_ Plans those aviation portions of the procedures for the emergency extraction of monitoring or radio relay teams, if required.
- 18 \_\_\_\_\_ Ensures inclusion of EW plans when conducting rehearsals.
- 19 \_\_\_\_\_ Submits EW reports in accordance with established SOP's and/or Operations Orders in a timely manner.
- 20 \_\_\_\_\_ Assists the MAGTF 0/5-3 C3CM officer in targeting the enemy's C3 structure and in planning for EW support of C3CM/SEAD missions.
- 21 \_\_\_\_\_ Plans, in coordination with the MAGTF G/5-3 C3CM officer, for a viable ACE ECCM plan (to include EMCON) which accounts for varying degrees of threat capabilities.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### ELECTRONIC WARFARE

The use of electromagnetic energy to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum and those actions which retain friendly use of the electromagnetic spectrum. Three categories are included:

1. Electronic Warfare Support Measures (ESM). That division of electronic warfare involving actions taken under direct control of an operational commander to search for, intercept, and identify/locate sources of radiated electromagnetic energy for the purpose of immediate threat recognition.
2. Electronic Countermeasures (ECM). Those actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum.

a. Electronic jamming. Deliberate radiation, radiation, or reflection of electromagnetic energy with the object of impairing the use of electronic devices, equipment, or systems used by the enemy.

b. Electronic deception. Deliberate radiation, alteration, absorption, or reflection of electromagnetic energy in a manner intended to mislead an enemy in the interpretation or use of information received by his electronic systems. Both manipulative and imitative deception are included.

3. Electronic Counter-Countermeasures (ECCM). That division of electronic warfare involving actions taken to retain effective friendly use of the electromagnetic spectrum.

---

## 8A.2 TACC OPERATIONAL EXECUTION

### TASK: 8A.2.1 CONDUCT SITE SELECTION AND OCCUPATION

CONDITION(S): The MAGTF commander has directed that aviation command and control facilities will be established ashore. The Tactical Air Commander (TAC) has requested recommendations from his staff to the exact siting for the TACC, and has coordinated with the ATF for a phased time line which includes initial operations as a TADC. On order, the MAGTF's TACC will control all aviation functions once established ashore.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Coordinates with the MAGTF command element to ensure TADC/TACC siting considerations are included in selecting the initial positions ashore.
- .2 \_\_\_ Conducts a map survey/aerial reconnaissance to uncover suitable TADC/TACC site(s).
- .3 \_\_\_ Considers communications paths to higher, adjacent and subordinate units when selecting site(s), and those assets reasonably available to complete those links.
- .4 \_\_\_ Determines equipment requirements based on the MAGTF concept of operations, projected location of subordinate MACCS agencies/terminal controllers, and aircraft basing ashore.
- .5 \_\_\_ Selects site that meets physical requirements for equipment emplacement (i.e. level within 10 degrees, adequate space for planned equipment and antennas, and trafficable).
- .6 \_\_\_ Selects advanced party to conduct a physical reconnaissance, locate positions for equipment, and stake specific sites(s).
- .7 \_\_\_ Establishes phased plan of equipment arrival to facilitate rapid commencement of manual operational capabilities and communications, with automated functions planned as lift becomes available.
- .8 \_\_\_ Prepares diagrams or models which depict equipment locations, and are the basis for setup crew briefings.
- .9 \_\_\_ Ensures site plans consider maximum dispersal and remoting of equipment to reduce EW/IR signatures.
- 10 \_\_\_ Advance party members serve as guides for equipment placement upon arrival on site.
- 11 \_\_\_ Equipment is emplaced at the site under the supervision of the TACC OIC, NCOIC, and maintenance officer.
- 12 \_\_\_ Automated TADC/TACC system emplaced and ready to commence operations within a hours of arrival of first equipment on site.
- 13 \_\_\_ Ensures maps and charts of the tactical area of interest are available and displayed within the TADC/TACC.

- 14 \_\_\_ Ensures situational displays are updated with restricted/protected areas, ACA's, navigational aids, enemy and friendly positions, and concentrations of civilians.
- 15 \_\_\_ Ensures meteorological data is obtained and displayed within the TADC/TACC.
- 16 \_\_\_ Ensures maximum cover and concealment are utilized for equipment placement to reduce enemy detection.
- 17 \_\_\_ Establishes a "hardening plan" to provide protection from attack, and coordinates the materials (sandbags, wood, etc.) and heavy equipment required.
- 18 \_\_\_ Provides physical security consistent with the threat.
- 19 \_\_\_ Plans for alternate TACC locations which may be utilized with no prior warning, 6-12 hours warning, or 24 hours warning of expected enemy attack.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.2.2 ESTABLISH COMMUNICATIONS

CONDITION(S): The MAGTF commander has directed that aviation command and control facilities will be established ashore. The Operation Orders and communications annex and/or CEOI have been disseminated. Threat forces are reported to have both ECM and ESM capabilities. The TADC/TACC equipment is in place and operationally ready.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Net activation procedures were in accordance with SOP's, published Comm plan, and accepted practices.
- 2 \_\_\_ Activates and monitors nets required in the Op Orders.
- 3 \_\_\_ Communications are available for standby operational contingency actions; e.g., hot pad scramble, MEDEVAC, SAR, etc.
- 4 \_\_\_ Communications plan reflects correct key lists and edition numbers, and they are verified as being on hand.
- 5 \_\_\_ Ensures proper ComSec materials are on hand and available to each required operator position.
- 6 \_\_\_ Ensures operators are familiar with secure voice devices.
- 7 \_\_\_ Personnel demonstrate the ability to use authentication methods on uncovered nets.
- 8 \_\_\_ Proper Comsec procedures are followed with regard to minimum transmissions, brevity codes/words, and circuit discipline.
- 9 \_\_\_ Personnel do not compromise unit locations or strengths, or commit other "BEADWINDON" security violations.
- 10 \_\_\_ Posts communications status to include delineated alternate paths and current EMCON status.
- 11 \_\_\_ Ensures operations personnel are aware of alternate communications paths to assure constant contact with higher, adjacent and subordinate commands when required.
- 12 \_\_\_ Communication restoration priorities have been published and provided to communication maintenance personnel.
- 13 \_\_\_ Detects instances of communications jamming or imitative deceptions and provides reports in accordance with appropriate annex of the Op Order.

- 14 \_\_\_ Directs changes in ECON conditions to subordinate agencies when processed intelligence or combat information reveals a change in the enemy's threat capabilities.
- 15 \_\_\_ Demonstrates appropriate operator actions in the event of lost communications.
- 16 \_\_\_ Ensures communication plan includes communication requirements for succession of command or control in case of catastrophic failure of any major air control agency (TADC/TACC, DASC, TAOC).

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.2.3 CONDUCT TACC BRIEFING

CONDITION(S): The ATO for the first day of the amphibious operation has been published. All liaison has been performed by the ACE staff, and mission planning is complete. The Tactical Air Commander (TAC) holds an eviction brief prior to each crew change to ensure coordination of effort, and overall knowledge of planned and immediate capabilities.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Receives threat intelligence update brief from the ACE G/S-2.
- 2 \_\_\_ Briefs current weather information and any effect it may have on operational activities or changes required to previous plans.
- 3 \_\_\_ Clearly States mission priorities.
- 4 \_\_\_ Briefs detailed ground scheme of a maneuver, forces and weapons involved, control points, LZ's/alternate LZ's, ingress/egress routes, CAP positions and escorts.
- 5 \_\_\_ Briefs fire support integration plan, and control measures to be utilized.
- 6 \_\_\_ Briefs current Rules of Engagement/alert conditions and/or weapons conditions information.
- 7 \_\_\_ Provides essential elements of information (EEI's) for aerial reconnaissance to include visual information acquired by aircraft performing other types of missions.
- 8 \_\_\_ Briefs launch authority assignments and procedures.
- 9 \_\_\_ Briefs SOP for authority to change routes, LZ's, and/or targets.
- 10 \_\_\_ Briefs SOP for downed aircraft over land or sea, to include escape and evasion considerations.
- 11 \_\_\_ Briefs time line for any special missions, or major evolutions.
- 12 \_\_\_ Briefs COMM plan to include NORDO procedures, code words, frequencies, EMCON/ECCM procedures, aircraft and ground signals, voice and data circuits available, etc.
- 13 \_\_\_ Briefs any deception plans to be used.
- 14 \_\_\_ Specifically briefs information required by the TAC during operations, and the communication methods to be used to gather that information.
- 15 \_\_\_ Briefs any changes to MAGTF control procedures or the contact frequencies.
- 16 \_\_\_ Briefs any changes to aviation control points, handover points, and return to force procedures.
- 17 \_\_\_ Briefs FARP requirements, locations, and control procedures, if required.
- 18 \_\_\_ Briefs friendly locations of air defense assets ashore, and any changing MEZ requirements.

- 19 \_\_\_ Briefs any changes to TACP control procedures or communications requirements.
- 20 \_\_\_ Provides any changes to the Pilot/Controller handbook.
- 21 \_\_\_ Briefs availability of on call CAS, AAW, aerial reconnaissance, Electronic Warfare (EW), smoke obscuring, or illumination missions.
- 22 \_\_\_ Briefs any changes to the published ATO.
- 23 \_\_\_ Briefs availability of additional theater aviation assets for AAW, CAS, EW, reconnaissance, or airborne C3 requirements.
- 24 \_\_\_ Briefs any special requirements for joint service reporting or coordination.
- 25 \_\_\_ Affords briefing participants the opportunity to ask questions in order to ensure a thorough understanding.
- 26 \_\_\_ Establishes the time and place of debriefing for each crew change.

EVALUATOR INSTRUCTIONS: None

KEY INDICATORS: None.

---

TASK: 8A.2.4 PHASING CONTROL ASHORE

CONDITION(S): As soon as practical, the MAGTF establishes air control facilities ashore in order to provide increased surveillance, rapid response times, and a landward extension of the ATF's weapons control capabilities. Initially the ACE will provide a TADC that will operate in a standby status monitoring all air control circuits. As the MACCS becomes functional, the CATF/CLF may agree to pass all or portions, of air control responsibilities ashore. In a preplanned sequence, the afloat agencies are relieved of responsibility but continue to monitor the appropriate communications nets. The afloat agencies will remain prepared to act as backup or alternate agencies until the termination of the amphibious operation, or they are required to displace out of the area.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Total operational crew is on hand and briefed concerning duties for passage of control.
- 2 \_\_\_ Equipment is in place and operators are monitoring all communication nets required by the Op Order.
- 3 \_\_\_ Automated data links are operational, and parameters comply with appropriate OPDAT/OPGEN messages.
- 4 \_\_\_ Updated intelligence information, to include the friendly and enemy order of battle and the current ATO, are on hand and posted.
- 5 \_\_\_ Procedures are delineated in the Operation Orders/SOP'S for the phasing of control ashore.
- 6 \_\_\_ Checklists are adequate and utilized to ensure there is no interruption of landing force support while transferring control.
- 7 \_\_\_ Ensures that subordinate MACCS agencies have working communications links and are capable of carrying out their required responsibilities and tasks to allow for the phasing of control ashore.
- 8 \_\_\_ Ensures that subordinate MACCS agencies have all required intelligence information, current ATO, and updated procedural information prior to transfer of control ashore.
- 9 \_\_\_ Transfer "checklist" plan allows for individual portions to be transferred if all functions are not ready simultaneously.
- 10 \_\_\_ Accomplishes liaison with all joint command agencies to ensure awareness of passage of control ashore.

- 11 \_\_\_\_\_ Exchange of air defense warnings, weapons conditions, antiair warfare intelligence, and other pertinent data continues while the transfer takes place.
- 12 \_\_\_\_\_ Exchange of air support information to include status of current flights, requests from supported units, and around threat information continues while the transfer takes place.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A. 2.5 CONDUCT DATA TRANSFER AND MANAGEMENT

CONDITION (S): In the initial phases of an amphibious operation, the ATF will publish appropriate DPDAT/OPGEN messages for all deployed forces. The data links are used to expand operational coverage areas, send and receive order functions, and fill gaps in radar coverage. In subsequent operations ashore, the TACC will publish the data link parameters to all users by message.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_\_ Current ATF published OPDAT/OPGEN messages are on hand, reviewed, and implemented for Tactical Data Links (TADIL).
- 2 \_\_\_\_\_ TACC publishes OPDAT/OPGEN messages when established ashore, if required, and serves as the single point of contact for MAGTF aviation data link matters.
- 3 \_\_\_\_\_ OPDAT/OPGEN messages contain all required information in accordance with Joint Interface Operational Procedures (JIOF), NWP-32, and/or local SOP's.
- 4 \_\_\_\_\_ Maintenance procedures for link initialization are in accordance with current SOP's.
- 5 \_\_\_\_\_ Operational data program is loaded with its variable parameters.
- 6 \_\_\_\_\_ Operational tactical data links management personnel are implementing appropriate procedures for link activation with other agencies.
- 7 \_\_\_\_\_ Track management and order functions are performed at operational display consoles.
- 8 \_\_\_\_\_ Display symbology is complete, accurate, and monitored for emergencies, early warning information, and operational updates (i.e., splash reports, et al).
- 9 \_\_\_\_\_ Daily ATO has been received from the ATF/joint forces command and posted in order to compare track numbers, and SIF/IFF codes displayed.
- 10 \_\_\_\_\_ Data links are used to update current operational and intelligence information, which is made available to supervisory personnel.
- 11 \_\_\_\_\_ Recommends any necessary changes to the tactical data interface configuration to maintain a reliable and accurate situation display.
- 12 \_\_\_\_\_ Data link information is available at least 90 percent of the operational time.
- 13 \_\_\_\_\_ Plotting boards adequately display AOA and necessary airspace control areas, MEZ's, and FEZ's to facilitate the conduct of manual crosstell of surveillance information if data link is not operational.
- 14 \_\_\_\_\_ Necessary communications are available for passing manual crosstell data if required.
- 15 \_\_\_\_\_ Publishes manual crosstell procedures in the operation plan to include coordinate system and track reporting priorities. Coordinates requirements with available surveillance agencies.
- 16 \_\_\_\_\_ Display section personnel are capable of maintaining manual crosstell displays that accurately reflect the current tactical situation.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.2.6 CONTINUING COORDINATION

CONDITION(S): All MACCS agencies are established ashore, and the CATF/CLF have agreed that overall aviation command will be assigned ashore. The Tactical Air Commander's operational command post is the TACC, from which all aviation support for the MAGTF will be coordinated.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Maintains communications with the ATF after control is passed ashore as long as naval command elements remain in the area.
- 2 \_\_\_ Coordinates with naval agencies (TADC, SACC) for the continued use of Navy aviation assets in support of the MAGTF.
- 3 \_\_\_ Performs liaison with the Joint service command, if required, to reconfirm apportionment and allocation decisions, and to make additional support requirements known.
- 4 \_\_\_ Establishes liaison necessary to request additional aviation assets from any theater/national sources through the MAGTF commander, if tactically required.
- 5 \_\_\_ Hosts meetings, conferences, or briefings with MAGTF/GCE/CSSF to ensure appropriate integration of aviation assets to provide support to the MAGTF concept of operations.
- 6 \_\_\_ Continues to monitor subordinate MACCS agencies ability to manage and perform operational functions assigned.
- 7 \_\_\_ Coordinates all air defense activities in the assigned area of responsibility to include the dissemination of updated alert and weapons conditions.
- 8 \_\_\_ Coordinates all air support activities in support of the MAGTF.
9. \_\_\_ Serves as the single operational point of contact for MAGTF aviation matters with external agencies.
- 10 \_\_\_ Prepares daily ATO's based upon the requirements of the supported units and the MAGTF commander's priorities.
- 11 \_\_\_ Utilizes ATO format that allows for complete mission information without reference to other documents.
- 12 \_\_\_ Informs requesting units of any missions that cannot be filled due to lack of assets.
- .13 \_\_\_ Assigns adequate TACC crew members to monitor aviation support to the MAGTF on a 24-hour a day basis.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

8A.3 MANAGING AVIATION ASSETS

TASK: 8A.3.1 MAINTTAIN TACTICAL SITUATION AWARENESS

CONDITION(S): Situation awareness of complex aviation functions in support of a MAGTF run throughout MPS's for the TACC. A primary responsibility of the operational crew is to ensure responsiveness to the needs of the supported units, end provide recommendations to the Tactical Air Commander based on the current aviation situation. Updated threat intelligence input is required for analysis, and continued integration of operations and planning personnel is necessary to plan for future events.

STANDARDS: EVAL: Y; N;, NE

- 1 \_\_\_ TACC has the necessary operational consoles to allow display of the air situation.
- 2 \_\_\_ Displays include current track data, airborne assets, required boundaries, and ground based missile and control locations.
- 3 \_\_\_ Displays adequately allow monitoring the execution of the fixed-wins portion of the ATO.
- 4 \_\_\_ Displays adequately allow monitoring the execution of the assault support portion of the ATO.
- 5 \_\_\_ Appropriate operational summary records are being kept, and analyzed for required follow on support.
- 6 \_\_\_ Comparisons with MAGTF/GCE/CSSE information is made to allow for adjustments of location and quantity of aviation support.
- 7 \_\_\_ Displays depict available assets for "on call" launches to fulfill immediate needs.
- 8 \_\_\_ Coordination with aviation planners is maintained to facilitate surge/add on activities.
- 9 \_\_\_ Disseminates available command information/intelligence to subordinate agencies (DASC, TAOC) to allow for decentralized control.
- 10 \_\_\_ Disseminates updated combat information/intelligence to aviation units to assist in mission planning.
- 11 \_\_\_ Equipment status for all agencies/aviation units are current and allows for rapid appraisal of capabilities.
- 12 \_\_\_ Communications displays depict the current status of capabilities/frequencies in use/security devices.
- 13 \_\_\_ Updated operational information is readily available for operator use; i.e., weather, call signs, IFP/SIF modes and codes, MEZ's, control points, et al.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.3.2 MONITOR DAILY ATO

CONDITION(S): The preplanned aviation requirements are inputted from the supported unit(s) through the MAGTF commander, who assigns priorities in accordance with his desired concept of operations. Alert aircraft to respond to specific contingencies are also included. The formats for fixed-wing and helicopter tasking assignments allow for complete mission information without reference to other documents. Timeliness of ATO receipt at subordinate units, supported units and air control agencies is vital to their proper planning.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Closely monitors ATO execution to ensure that scheduled events are on time.
- 2 \_\_\_ Obtains revised check-in times/replacement times for missions that fail to launch on time or air abort, and passes the information to supported units and air control agencies.
- 3 \_\_\_ Updated information is rapidly passed to the appropriate air control agency as it becomes available.
- 4 \_\_\_ Diverts missions to satisfy resource shortages, or emergencies, according to priorities set by the MAGTF/TAC.
- 5 \_\_\_ Notifies, as early as possible, agencies/units impacted by diverts.
- 6 \_\_\_ Launches on call missions/or new missions to replace diverted missions if tactically required.
- 7 \_\_\_ Continuously validates assigned priorities as the air schedule progresses.
- 8 \_\_\_ Collects and records mission summary data as missions are completed.
- 9 \_\_\_ Monitors airborne missions to determine the adequacy of the aviation schedule, and coordinates with aviation planners to add additional assets if tactically required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.3.3 USE OF ALERT AIRCRAFT

CONDITION(S): Alert aircraft are assigned by ATO in an attempt to respond to additional tactical needs as operations proceed. Due to the variables involved, certain generalities concerning ordinance loads, equipment configurations, and special equipment must be made. Alert aircraft do not have the benefit of detailed preplanning, and thus normally are configured for general purpose activities. Established alert conditions and times are promulgated in Operations Orders and ATO messages. Decentralized launch authority may also be utilized to improve reaction times to ground needs. This method may prove most useful for AV-8's in forward sites, forward placed MEDEVAC aircraft, and/or reaction packages. The TACC will monitor all aviation assets utilized.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Immediate communications between launch authority agencies and aviation alert assets at ground sites exist.
- 2 \_\_\_ Processing of requests for ground alert aircraft are handled in such a manner as to minimize response times.
- 3 \_\_\_ Alerts are passed to scramble sites while requests are being validated.
- 4 \_\_\_ Alert aircraft are airborne within limits of prescribed launch period (5, 10, 15 minutes) after receipt of a valid request.
- 5 \_\_\_ Mission request data is processed and recorded after the mission has been approved and the launch directed.
- 6 \_\_\_ Reconstitution requirements are coordinated with aviation planners to satisfy the continuing alert conditions.
- 7 \_\_\_ Divert authority is used effectively as a substitute for ground launch when tactical conditions require.

MCO 3501.9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.3.4 CHANGES TO THE ATO

CONDITION(S): Changing requirements must be anticipated in combat operations. Requests will be canceled, diverts will occur, missions will be added on. Close coordination between the operations and planning personnel of the TACC will be required to ensure maximized use of aviation assets to complement the ground scheme of maneuver, and the maintenance of local air superiority. The battlefield is dynamic, and TACC personnel must be flexible and imaginative when responding to changing needs.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_ Continuous communications exist between the TACC and higher, adjacent, and subordinate headquarters to receive and request mission changes.
- 2 \_\_\_\_ Requested add on missions are received, recorded, and processed without delay.
- 3 \_\_\_\_ Add on missions are passed to both the requestor and the provider in enough time and with enough detail to allow for adjustments throughout the system.
- 4 \_\_\_\_ Terminal controllers are assigned for add on missions if the requesting unit is not capable of that function.
- 5 \_\_\_\_ Use of divert authority is coordinated to allow for schedule adjustments without undesirable impacts on the original requestor.
- 6 \_\_\_\_ Use of divert authority is coordinated to allow for orderly reconstitution by replacement aircraft if tactically required.
- 7 \_\_\_\_ TACC monitors the use of on call missions to ensure the adequacy of the on call schedule.
- 8 \_\_\_\_ Additional aircraft are put on alert status if required by the tactical situation.
- 9 \_\_\_\_ Maintains lists of secondary missions and terminal controllers that are available for scheduled aircraft that are not used by the original requestor(s), based on the tactical situation and intelligence information.
- 10 \_\_\_\_ Coordination between operations and planning personnel is evident when major changes to the ATO are necessitated by tactical requirements.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.3.5 CONDUCT AIR DEFENSE COORDINATION

CONDITION(S): The TAOC is normally assigned the responsibility of decentralized control of an integrated air defense network, and supports the Sector Anti-air Warfare Coordinator. Close coordination is maintained with the TACC for all command functions of AAW, and the assignment of aircraft and missile assets to maintain the air defense objectives. All preplanning, and Operations Order dissemination has been accomplished.

VIII-A-22

ENCLOSURE (1)

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Establishes air defense procedures for MEZ's, CAP stations, RTF methods, control points, et al by dissemination of operations Orders/Plans/Briefings.
- 2 \_\_\_ Acts as net control station for the Tactical Air Alert functions.
- 3 \_\_\_ Monitors the timely launch of air defense aircraft in accordance with the ATO.
- 4 \_\_\_ Establishes communications for the input of additional air defense information from HAWK, LAAD, airborne aircraft, and other services assets for "pop up" targets or unknown aircraft.
- 5 \_\_\_ Processes air defense reports in a timely manner.
- 6 \_\_\_ Ensures passage of acquired intelligence updates to subordinate elements and disseminates changes in alert or weapons conditions immediately.
- 7 \_\_\_ Makes required adjustments in weapons assignments and control procedures in the event of changes to the Air defense threat axis.
- 8 \_\_\_ Disseminates emission control conditions in the objective area.
- 9 \_\_\_ Directs adjustments of LAAD general/direct support allocations to ground units based on combat needs and MAGTF approval.
- 10 \_\_\_ Provides the availability and status of air defense assets to the TAOC.
- 11 \_\_\_ Responds to requests for additional missions, or inflight refueling, of CAP aircraft.
- 12 \_\_\_ Coordinates with the Group/Squadron for the timely launch of alert aircraft and any necessary ordnance reconfiguration required to counter the threat.
- 13 \_\_\_ Coordinates offensive AAW strikes of uncovered threat targets.
- 14 \_\_\_ Monitors status of airborne aerial refueling assets and coordinates with controlling agency to ensure sufficient fuel is available to meet operational requirements.
- 15 \_\_\_ Ensures personnel are familiar with sector SALVO/SCRAM requirements in the event of mass raids.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.3.6 CONDUCT AIR SUPPORT COORDINATION

CONDITION(S): Decentralized control of offensive air support and assault support missions is normally assigned to the DASC. The DASC maintains constant coordination with the FSCC, and provides updated information concerning the ground scheme of maneuver, and the integration of aviation assets into those efforts. Immediate requests are received by the DASC, and launch authority of available alert assets forward based AV-8's. MEDEVAC, reaction packages, etc.) may be assigned to them. Close coordination with the TACC is maintained for all command functions of air support operations.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Establishes air support procedures for immediate requests, terminal controllers, control points, et al by dissemination of operations Order/Plans/briefings.
- 2 \_\_\_ Establishes procedures for divert and alert launch authority, and assigns those responsible.
- 3 \_\_\_ Monitors the timely launch of air support aircraft in accordance with the ATO.
- 4 \_\_\_ Ensures communications with supporting aircraft units to maintain availability status

- 5 \_\_\_ Adjusts the preplanned schedule to meet tactical needs, if required.
- 6 \_\_\_ Coordinates changes to the ATO with the DASC for passage to the supported unit(s).
- 7 \_\_\_ Processes requests for on call or additional air support assets in a timely manner.
- 8 \_\_\_ Coordinates secondary missions and terminal controllers for scheduled aircraft that are not used by their original requestor.
- 9 \_\_\_ Provides updated intelligence information to the DASC and air support aircraft of threat capabilities that could effect the air support effort.
- 10 \_\_\_ Ensures establishment of necessary information exchange between the TAOC and the DASC for the transit of air support aircraft through the air defense system.
- .11 \_\_\_ Receives summary reports from the DASC as prescribed in the Operations Order, and uses them for analysis of follow on support requirements.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.3.7 EXTERNAL COORDINATION REQUIREMENTS

CONDITION(S): Different theaters of operation require different coordination procedures with joint service commands and possibly foreign countries. The TACC may be assigned the responsibility for total aviation command and control, control only within a specific sector, or required to coordinate with other adjacent commands/countries on the battlefield. Adequate preplanning and early coordination is the keynote for integration of assets, and final success.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Preplanning conferences are hosted or attended to ensure the integration and coordination of efforts.
- 2 \_\_\_ Delineates detailed procedures to be used in Operations Orders/Plans/briefings.
- .3 \_\_\_ Provides for the voice communications interface between the TACC and external air control/coordination agencies.
- 4 \_\_\_ Provides for data link exchange between the TACC and external control agencies.
- 5 \_\_\_ Assigns liaison personnel to external agencies who are familiar with the concept of operations and the general flow of events.
- 6 \_\_\_ TACC personnel demonstrate familiarity with restrictions/limitations placed on USN/USMC aircraft by external agencies.
- 7 \_\_\_ Provides airspace coordination instructions to aircrews/controllers in the form of daily SPINS or a pilot/controller handbook.
- 8 \_\_\_ Monitors data/voice interface to ensure information is passed in a timely manner, satisfying the requirements of the external agencies,

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.3.8 PROVIDES FOR SUCCESSION OF COMMAND AND CONTROL

CONDITION(S): Contingencies for operational casualties must be planned in advance to properly train and equip alternate agencies that will assume combat functions. ATF facilities may reassume functions in an amphibious Landing if catastrophic failure occurs or subordinate agencies may be assigned autonomous decentralized command of specific activities. An alternative agency matrix should be thought out and published in advance. In almost every instance of casualty, there are surviving means of communications. Use of those communications to obtain required information may be vital to coordinating succession of command and control.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Publishes succession plan in operations order/plan/briefings.
- 2 \_\_\_ Personnel are familiar with published plans to adjust for a casualty within the MACCS.
- 3 \_\_\_ Provides alternate communications to allow for information exchange should any agency become a casualty.
- 4 \_\_\_ Plans for information required should the DASC become a casualty, and possible interim alternatives (ASRT, FSCC).
- 5 \_\_\_ Briefs air support coordinator on actions to take if the DASC becomes a casualty.
- 6 \_\_\_ Plans for information required should the TAOC become a casualty, and possible interim alternatives (ECT, AWACS, BCC).
- 7 \_\_\_ Briefs air defense coordinator on actions to take if the TAOC becomes a casualty.
- 8 \_\_\_ Plans for the succession of command if the TAC becomes a casualty, or must change his command post if the TACC becomes inoperable (TAOC, MATCS, DASC, MAGTF COC, etc.).

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

DASC CASUALTY

In the event the DASC becomes a casualty, the below functions must be assumed.

1. JTAR/ASR Processing.
2. Supporting Arms Coordination.
3. Supervising the ATO Execution.
4. ASRT Control.

TAOC CASUALTY

The amphibious scenario presumes the continued presence of a landward and seaward sector. Doctrine prescribes reversion/succession of control to whichever air defense agency survives the other. In a joint/combined operation, succession of control may be assigned to an agency external to the MACCS. Existing EWCT sites, HAWK batteries and airborne CAP aircraft re possible alternatives within the MACCS. The following functions are necessary to be continued:

1. Surveillance and Identification.

2. Weapons Management/Control.
3. Airspace Management/Control.

---

8A.4 NBC OPERATION

TASK: 8A.4.1 PREPARE FOR NBC OPERATIONS

CONDITION(S): Threat forces have been reported to be capable of employing NBC munitions in the area where the TADC/TACC is located aimed at destroying/disrupting operations. Due to the threat, passive and active defense measures must be used for survival of the unit.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ TADC/TACC has established an SOP which outlines procedures for enemy NBC strikes and reports required.
- 2 \_\_\_ All individual NBC defense equipment authorized by the unit table of equipment (T/E) is issued to each individual and is serviceable.
- 3 \_\_\_ All unit NBC defense equipment (Radiac instruments, DECON apparatus, etc.) authorized by T/E's is operationally ready and distributed to designated and trained/knowledgeable operators.
- 4 \_\_\_ Shortages are identified and replacement actions are taken.
- 5 \_\_\_ Decontamination equipment and hulk decontaminates are assembled and prepared for ready transport to a decontamination area.
- 6 \_\_\_ M11 decontamination equipment units are filled (water used for training).
- 7 \_\_\_ NBC trained personnel are available on a 24 hour a day basis.
- 8 \_\_\_ MOPP level is established by the TAC/appropriate staff member and personnel are at or above the required MOPP level.
- 9 \_\_\_ Ensures personnel are familiar with the radiation exposure guide (FM 3-3) and Mission Oriented Protective Posture (FM 3-4) for the control of exposure of personnel to radiation or chemical hazards.
- 10 \_\_\_ Ensures Marines properly identify NATO or Threat NBC contamination markers.
- 11 \_\_\_ Emplacement of equipment maximizes utilization of terrain features for cover, concealment, and topographic shielding.

EVALUATOR ISTRUCTIONS: Provide the unit information to expect an imminent nuclear attack by the enemy, and integrate NBC scenerios with normal assignments. Evaluator(s) should be school trained in the areas of NBC Defense (MOS 57XX) or be thoroughly trained in this area as part of Evaluators' School.

KEY INDICATORS: None.

TASK: 8A.4.3 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): TADC/TACC is informed that nuclear weapons have been used in the area of operations, SOP's and/or Operations Orders are on hand to provide checklists, sequence of actions, and guidance

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Backup/alternate command, control, and communications procedures are identified.
- 2 \_\_\_ Subordinate/displaced elements are alerted.
- 3 \_\_\_ TADC/TACC continues their mission while implementing actions to minimize casualties and damage.
- 4 \_\_\_ Vehicles and equipment are protected from heat, blast, and radiation.
- 5 \_\_\_ Electronic equipment is protected from electromagnetic pulse (EMP) and Transient Radiation Effects on Electronics (TREE) by removing it from exposed locations and placing it in covered/hardened locations/vehicles.
- 6 \_\_\_ Periodic monitoring is initiated, using available survey instruments.
- 7 \_\_\_ Personnel identify/prepare shelters from heat/blast and radiation.
- 8 \_\_\_ All loose items, flammable/explosive items, food and water are secured/protected from heat/blast and radiation.
- 9 \_\_\_ Marines are familiar with standard first aid procedures to provide self/buddy aid for nuclear blast and thermal effects.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK. 8A.4.3 RESPOND TO TITLE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator or by other appropriate means.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Upon recognizing the attack, all personnel take immediate action to shield themselves from the effects of detonation.
- 2 \_\_\_ Chain of command and communications are maintained or re-established. TADC/TACC resumes mission if possible.
- 3 \_\_\_ NBC-1 initial and follow up reports (as required) are rapidly submitted to MAGTF headquarters by personnel designated or responsible for collecting the information. Reliable and complete reports are rapidly forwarded, by secure means when possible.
- 4 \_\_\_ Casualties are given first aid and are evacuated to a medical treatment station as the mission permits; fatalities are evacuated to a graves registration collection point.
- 5 \_\_\_ Damage assessment is submitted by secure means to higher/supported headquarters per SOP.
- 6 \_\_\_ Continuous monitoring is initiated, using available survey instruments.

MCO 3501.9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast heat dazzle, radiation and electromagnetic pulse (EMP). EMP casualties will be assessed by the evaluator for all communications Systems (antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle) during the simulated nuclear detonation.

KEY INDICATORS: None.

TASK: 8A.4.4 RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): A surface or subsurface nuclear detonation has occurred. The TADC/TACC location is within the predicted fallout zone. An M5A2 radiological fallout predictor, or substitute, is available. The unit gets effective downwind messages at least once every 3 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit, NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation.

STANDARDS: EVAL: Y: N: NE

- 1 \_\_\_ TADC/TACC mission is performed concurrently with all other actions.
- 2 \_\_\_ Supervisors are advised of estimated time of fallout arrival and subordinate units are notified.
- 3 \_\_\_ Continuous monitoring is maintained using available survey instruments.
- 4 \_\_\_ Equipment, munitions, POL, food, and water are protected from fallout.
- 5 \_\_\_ Personnel take protective measures to minimize fallout effects as mission permits.
- 6 \_\_\_ NBC-4 reports are forwarded, as required, to the MAGTF command element by secure means.
- 7 \_\_\_ Unit total dose information is recorded and reported to MAGTF command elements, using available secure means.
- 8 \_\_\_ Exposure is minimized while TAC determines if relocation to a clean area is necessary or possible. Optimum time of exit is calculated.
- 9 \_\_\_ Personnel are able to handle and provide first aid treatment to casualties in a nuclear environment.
- 10 \_\_\_ Casualties and fatalities are assessed.

EVALUATOR INSTRUCTIONS: TADC/TACC commander is advised of estimated time of fallout arrival.

KEY INDICATORS: None.

TASK: 8A.4.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time end tactical situation permits decontamination.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Decontamination priorities are established.
- 2 \_\_\_ Decontamination point is established.
- 3 \_\_\_ Decontamination personnel wear appropriate protective clothing and equipment.

VIII-A-28

ENCLOSURE (1)

- 4 \_\_\_ Personnel, individual equipment and individual weapons are decontaminated per FM 3-5.
- 5 \_\_\_ Unit equipment and vehicles are decontaminated per FM 3-5.
- 6 \_\_\_ Contaminated areas are marked with NATO standard NBC markers.
- 7 \_\_\_ Adequacy of decontamination is determined using available personnel and equipment monitoring instruments.
- 8 \_\_\_ Contaminated materials are discarded according to tactical SOP, marked as contaminated, and location is provided to the MAGTF command element.
- 9 \_\_\_ Decontamination team personnel are decontaminated as necessary.
- 10 \_\_\_ Operational Exposure Guidance (OEG) is not exceeded.
- .11 \_\_\_ Total dose information is recorded and reported to the MAGTF command element.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.4.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): Tactical situation forces TADC/TACC to cross a radiological contaminated area while moving to a new site. Unit receives a NBC-5 report or contamination overlay from the MAGTF command element.

STANDARDS: EVAL: Y; N: NE

- 1 \_\_\_ Temporary facilities are established to continue the mission while a new site is being set up.
- 2 \_\_\_ NBC-5 report and/or contamination overlay is posted to situation map and route determined.
- 3 \_\_\_ Route clearance and approval is obtained if necessary.
- 4 \_\_\_ Turn back dose and dose rate are provided to advance party and/or reconnaissance team.
- 5 \_\_\_ Vehicles receive additional shielding and personnel are provided all available protection from dust.
- 6 \_\_\_ Advance party and/or recon team is dispatched to reconnoiter new areas.
- 7 \_\_\_ Crosses suspected contaminated area while employing contamination avoidance techniques.
- 8 \_\_\_ Operational exposure guidance is not exceeded.
- 9 \_\_\_ After clearing the contaminated area, the degree of personnel and equipment contamination is determined, using available personnel and equipment monitoring instruments.
- .10 \_\_\_ Decontamination priorities are established and performed as required.
- .11 \_\_\_ Unit total dose information is recorded, using available total dose instruments, and reported to higher headquarters.
- .12 \_\_\_ Mission requirements are transferred to the new TADC/TACC prior to bringing the rear party forward.

EVALUATOR INSTRUCTIONS: None.

MCO 3501.9E  
5 JUN 1991

KEY INDICATORS: None.

---

TASK: 8A.4.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): Unit receives a friendly nuclear STRIKWARN per FM 3-3, appendix TAOC/TACC is located within minimum safe distance (MSD) 2 to 3.

STANDARDS: EVAL: Y: N: NE

- 1 \_\_\_ Personnel accurately and completely apply the STRIKMMW to the situation map within 5 minutes after message receipt.
- 2 \_\_\_ Pertinent information regarding the planned detonation (time of burst, ground zero, fallout coverage, MSD, etc.) is available to the TAC.
- 3 \_\_\_ TAC is advised of the vulnerability of the unit to the burst (within MSD 1, 2, or 3) and residual contamination (within predicted fallout zone).
- 4 \_\_\_ TAC is advised of the measures needed to prevent casualties, damage, and extended interference with the mission.
- 5 \_\_\_ TADC/TACC implements protective measures, as directed by higher headquarters, consistent with the mission.
- 6 \_\_\_ Personnel minimize exposure by rolling down sleeves, buttoning collars, and wearing additional clothing equal to a two layer uniform.
- 7 \_\_\_ Personnel take cover in foxholes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, etc.), or lie prone on open ground.
- 8 \_\_\_ Vehicles are placed behind masking terrain.
- 9 \_\_\_ Duplicate electronic devices are turned off; erected antennas are disassembled; antennas are tied down. Bare minimum radio equipment remains erected.
- 10 \_\_\_ All loose items (small weapons, tools, etc.) and highly flammable/explosive items (POL, propellants, missiles, etc.) are placed in armored vehicles or shelters.
- .11 \_\_\_ TAC acknowledged the warning before the expected time of burst. All Subordinate units have been warned and protective measures implemented. (KI)

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to unprotected personnel and equipment.

KEY INDICATORS:

WARNING

TADC/TACC may warn subordinate/detached elements of an impending nuclear detonation by using one of the following methods

1. Using a code word or brevity code from the CECI to indicate the message is a nuclear strike warning.
2. A brief, prearranged message that directs the receiver to implement specific protective measures.
3. Encoded message with expected time of burst, sent by secure voice or messenger.

VIII-A-30

ENCLOSURE (1)

TASK: 8A.4.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S): TADC/TACC is informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ TADC/TACC has and uses a chemical defense SOP which addresses chemical defense/decontamination procedures.
- 2 \_\_\_ TADC/TACC is directed to increase MOPP consistent with mission, temperature, work rate, and TAC guidance.
- 3 \_\_\_ Unit tasks that require a high degree of manual dexterity or physical strength, and are difficult to perform in MOPP 4 are identified. Alternate methods, such as rotating or assigning additional personnel, are planned.
- 4 \_\_\_ Marines identify criteria for and demonstrate the capabilities for donning the protective mask and chemical protective ensemble.
- 5 \_\_\_ The buddy system is planned to facilitate monitoring/treatment for chemical agent poisoning and emergency decontamination of team members.
- 6 \_\_\_ TADC/TACC continues its mission while implementing all actions to minimize casualties and damage.
- 7 \_\_\_ Portions of essential equipment, munitions, POL, food, and water supplies that cannot be placed in a shelter are covered with expendable or readily decontaminated tarps, shelter halves, or ponchos.
- 8 \_\_\_ Detector paper is affixed to visible, horizontal surfaces of protective clothing and on equipment, munitions, etc.
- 9 \_\_\_ TADC/TACC decontamination equipment is checked to ensure the M11 is filled, individuals have complete M13 and M256 kits, and there is an available water source with a supporting road network.
- 10 \_\_\_ Potential decontamination sites are reported to the MAGTF command element.
- .11 \_\_\_ Available chemical agent alarms are set up and monitored.
- .12 \_\_\_ Protective NBC equipment and supplies are properly used and maintained in a high state of serviceability.
- .13 \_\_\_ Marines demonstrate a knowledge of chemical agent symptoms.

EVALUATOR INSTRUCTIONS: TADC/TACC is informed that chemical weapons have been used in theater and that attack is imminent.

KEY INDICATORS: None.

TASK: 8A.4.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): TADC/TACC is subjected to a chemical agent attack. Site should support the type of activities being conducted and permit the safe use of simulators and devices.

STANDARDS: EVAL: Y: N: NE

- 1 \_\_\_ Upon hearing a chemical alarm, personnel take immediate protective measures followed by treatment/decontamination of casualties. (KI)
- 2 \_\_\_ Personnel automatically mask upon notification of any enemy artillery, rocket, or air attack/overflight.

- 3 \_\_\_ Personnel automatically mask upon perceiving a suspicious odor, airborne droplets, mist, or smoke from unknown source.
- 4 \_\_\_ Marines do not unmask until authorized. (K)
- 5 \_\_\_ TADC/TACC personnel are able to perform mission for at least 4 hours while in MOPP 4.
- 6 \_\_\_ Type of chemical agent is identified using a chemical detector kit, and reported per operations order
- If persistent agent.
- 7 \_\_\_ Contamination is located and marked with NATO standard markers.
- 8 \_\_\_ Location and type of contamination is reported to the MAGTF command element, and plotted per FM 3-3.
- 9 \_\_\_ TAC determines if immediate relocation to a clean area is necessary or possible and advises the supported unit engineer element OIC.
- 10 \_\_\_ Priorities are determined for decontamination. Decontamination support is requested if required.
- 11 \_\_\_ WIA's are wrapped, marked as contaminated, and evacuated as mission permits. Medical treatment facility is warned.
- 12 \_\_\_ KIA's are wrapped, marked as contaminated, and evacuated as mission permits. Graves registration collection point is warned.
- If non persistent agent:
- 13 \_\_\_ Unmasking procedure is followed. (KI)
- 14 \_\_\_ WIA's are evacuated to the medical treatment facility as mission permits.
- .15 \_\_\_ KIA's are evacuated to the graves registration collection point as mission permits.
- .16 \_\_\_ Detector units are serviced and returned to operation.
- .17 \_\_\_ Expended chemical defense items are replaced as required.
- .18 \_\_\_ TAC adjusts MOPP level as required.
- .19 \_\_\_ TADC/TACC personnel are able to handle and provide first aid treatment to casualties in a chemical environment.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat designated casualties." Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, well supported situation imposed by the trainer/evaluator. Ninety percent of the personnel must successfully accomplish the tasks for the unit to receive a "yes" evaluation.

KEY INDICATORS:

CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach, without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it, break the seal on their masks, and keep their eyes open for 15 seconds.
2. Then they clear their masks, re-establish the seal and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and reseal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

---

TASK: 8A.4.10 PERFORM HASTY DECONTAMINATION

CONDITION(S): Personnel and equipment have been contaminated by a chemical agent. Time is not available for complete decontamination. The hazard is such that hasty decontamination is required to allow the unit to continue the mission. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; U; NE

- 1 \_\_\_ Personnel decontaminate individual weapons and personal equipment using appropriate decontamination measures.
- 2 \_\_\_ Extent of decontamination is determined and decontamination priorities are established.
- 3 \_\_\_ Contaminated protective covers are removed, decontaminated, or discarded.
- 4 \_\_\_ Decontamination procedures are appropriate to items being decontaminated. (KI)
- 5 \_\_\_ TADC/TACC equipment and vehicles are decontaminated using appropriate washdown methods.
- 6 \_\_\_ Adequacy of decontamination is determined. If inadequate:
  1. Procedures are repeated.
  2. Decontamination support is requested or risk of using equipment is accepted.
- 7 \_\_\_ Contaminated materials are discarded according to tactical SOP, marked as contaminated, and location provided to the MAGTF command element.
- 8 \_\_\_ TAC reduces MOPP level if required

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

DECONTAMINATION PROCEDURES

1. If support is not available for conducting hasty decontamination, initial decontamination of unit equipment, vehicles, and weapons may be accomplished by:
  - a. Removing all gross liquid contamination with sticks or other improvised devices, which are buried after use.
  - b. Utilizing M11 decontamination apparatus filled with DS2 to spray areas. Frequently used or touched, (Water is used to simulate DS2 in a training environment.)
2. Contaminated items that may need special decontamination treatment are:
  - a. POL, food, and water containers and munitions. These are washed with soapy water, rinsed, and thoroughly air dried.
  - b. Communications equipment, electronic vans, and other electronic equipment. Decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (water is used for training purposes).
  - c. Optical instruments. Blotted with rags and then wiped with lens cleaning solution or organic solvent.
3. Adequacy of decontamination is determined using the chemical agent detector kit.

---

TASK: 8A.4.11 COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT

CONDITION(S): TADC/TACC equipment has been contaminated by a chemical agent. Hasty decontamination has been accomplished. Time is available for complete decontamination. Decontamination support from a decontamination unit is available upon request.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_ Coordination is made with the decontamination unit as to time of arrival, supplies, equipment, and personnel support to be furnished by the contaminated unit, and estimated time of completion is established.
- 2 \_\_\_\_ TADC/TACC requests and receives route clearance to Personnel Decontamination Station/Equipment Decontamination Station (PDS/EDS) assembly area. Advance party (personnel to augment decontamination operation and establish security) is dispatched to PDS/EDS.
- 3 \_\_\_\_ Main body arrives at PDS/EDS assembly area and organizes for processing.
- 4 \_\_\_\_ Decontamination begins as scheduled.
- 5 \_\_\_\_ TADC/TACC personnel reorganizes in a clean area upwind of residual effects for the resumption of their mission.
- 6 \_\_\_\_ TAC adjusts MOPP level as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8A.4.12 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S): The protective clothing is contaminated and a suitable uncontaminated area is available.

STARDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_ Contaminated clothing is removed without transfer of contamination.
- 2 \_\_\_\_ Individuals put on new protective clothing.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8A.4.13 SCORE THE NBC EXAM

CONDITION(S): Classroom atmosphere. An exam will be prepared at the wing/brigade level and will take no more than 30 minutes. All available personnel will take the examination.

STARDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_ Unit averaged 10 percent or higher.
- 2 \_\_\_\_ Unit averaged 20 percent or higher.
- 3 \_\_\_\_ Unit averaged 30 percent or higher.
- 4 \_\_\_\_ Unit avera8ed 40 percent or higher.
- 5 \_\_\_\_ Unit averaged 50 percent or higher.
- 6 \_\_\_\_ Unit averaged 60 percent or higher.
- 7 \_\_\_\_ Unit averaged 70 percent or higher.
- 8 \_\_\_\_ Unit averaged 80 percent or higher.
- 9 \_\_\_\_ Unit averaged 90 percent or higher.
- .10 \_\_\_\_ Unit averaged 100 percent.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N as appropriate. As an example, if the team average was 76 percent, 8A.4.13.1 through 8A.4.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA:

1. Number of personnel in unit:
2. Number of personnel taking exam:
3. Unit average:

KEY INDICATORS: None.

---

8A.5 LOGISTICS

TASK: 8A.5.1 CONDUCT LOGISTICS PLANNING

CONDITION(S): A MAGTF (MEB/MEF) is in receipt of an initiating directive and is planning for an amphibious landing and subsequent operations ashore. A TACC will be moved ashore and establish operational control. Adequate logistic preplanning and early coordination is required to ensure sustainability.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Determines transportation requirements to move equipment, personnel, and supplies from point of debarkation to the operational site.
- 2 \_\_\_ Identifies any special vehicles, material handling equipment, or site preparation equipment necessary to emplace TACC equipment in selected site.
- 3 \_\_\_ Identifies maintenance float (SDR's) pack up and class IX repair part requirements necessary to support organic critical low density and ground common electronic systems.
- 4 \_\_\_ Calculates pre-expended bin items and quantities based upon rates of consumption and expected resupply rate to support operational requirements.
- 5 \_\_\_ Identifies special test and support equipment required to support electronic systems.
- 6 \_\_\_ Identifies to the supporting BSSG/FSSG any special supply, repair, or calibration services required to support the TACC systems and equipment deployed.
- 7 \_\_\_ Calculates the rate of POL resupply necessary to sustain operations based upon consumption estimates and storage capabilities.
- 8 \_\_\_ Coordinates movement of POL resupply from the source location to the operating site.
- 9 \_\_\_ Plans for the billeting, feeding, health and comfort requirements for all assigned Marines.
- 10 \_\_\_ Analyzes the affect of climatic conditions in the operating area on the storage, use, and resupply of the TACC resources.
- 11 \_\_\_ Identifies special materials required to support the security and hardening plans.
- 12 \_\_\_ Coordinates the transportation requirements to move supplies and repair parts from/to higher echelon maintenance facilities.
- 13 \_\_\_ Coordinates contact teams from BSSG/FSSG to effect repair of ground common items beyond the capabilities of organically assigned personnel.
- 14 \_\_\_ Submits communications requirements to allow for contact with higher echelon repair and resupply activities when required.
- 15 \_\_\_ Coordinates with the ACE/MACG commander to obtain health service support for TADC/TACC personnel.
- 16 \_\_\_ Identifies any special licensing and certification required for motor transport, generator or MHE augmentation.
- 17 \_\_\_ Coordinates with the ACE/MACG G/S-4 for accident and casualty reporting, and evacuation procedures.
- 18 \_\_\_ Identifies any protective clothing or equipment required to ensure occupational health and safety.
- 19 \_\_\_ Coordinates with the ACE/MACG for personnel requirements to augment security forces and camp support augmentation (mess hall, clean up, etc.).

MCO 3501.9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

VIII-A-37

ENCLOSURE (1)

MCO 3501.9B  
5 JUN 1991

SECTION 8B  
TACTICAL AIR OPERATIONS CENTER (TAOC)

ENCLOSURE (1)

TABLE OF CONTENTS

	PAGE
MPS 8B.1 - PLANNING	
TASK 8B.1.1 CONDUCT INITIAL PLANNING	VIII-E-1
TASK 8B.1.2 CONDUCT INTELLIGENCE PLANNING	VIII-B-2
TASK 8B.1.3 CONDUCT ELECTRONIC WARFARE PLANNING	VIII-B-3
TASK 8B.1.4 ..... PLAN SITE SELECTION	VIII-B-5
TASK 8B.1.5..... CONDUCT AIR DEFENSE SPECIFIC PLANNING	VIII-B-6
TASK 8E.1.6..... CONDUCT ALTERNATE TACC PLANNING	VIII-B-8
MPS 8B.2 - OPERATIONAL EXECUTION	
TASK 8B.2.1 ..... CONDUCT RECONNAISSANCE SELECTION. AND OCCUPATION OF POSITION (RSOP)	VIII-B-10
TASK 8B.2.2..... ESTABLISH AN EW/C SITE AND COMMUNICATIONS	VIII-B-11
TASK 8B.2.3..... ESTABLISH SMWC FACILITY AND COMMUNICATIONS	VIII-B-13
TASK 8B.2.4..... ESTABLISH TAOC AND COMMUNICATITONS	VIII-B-14
MPS 8B.3 - SAAWC EXECUTION	
TASK 8B.3.1..... CONDUCT ASSET MANAGEMENT	VIII-B-15
TASK 8B .3 2 TRANSFER OF CONTROL	VIII-B-17
TASK 8B.3.3..... CONDUCT INTELLIGENCE PROCESSING	VIII-B-17
MPS 8B.4 - TAOC EXECUTION	
TASK 8B.4.1..... CONDUCT INTEGRATED SURVEILLANCE	VIII-B-18
TASK 8B.4.2..... AIRSPACE MANAGEHEMENT AND CONTROL	VIII-B-20
TASK 8B.4.3..... CONDUCT ENGAGEENT CONTROL	VIII-B-24
TASK 8B.4.4..... CONDUCT DATA TRANSFER AND MANAGEMENT	VIII-B-31
TASK 8B.4.5..... TRANSFER OF CONTROL TO TAOC FROM AFLOAT	VIII-B-32
MPS 8B.5 - EW/C EXECUTION	
TASK 8B.5.1..... CONDUCT SURVEILLANCE	VIII-B-33
TASK 8B.5.2..... CONDUCT ENGAGEMENT CONTROL	VIII-B-34
TASK 8B.5.3..... CONDUCT AIRSPACE MANAGEMENT AND CONTROL	VIII-B-35
TASK 8B.5.4..... TRANSFER OF CONTROL IF SUPERSEDED BY A TAOC	VIII-B-36

MPS 8B.6 - COMMAND, ADMINISTRATION, LOGISTICS, AND CONTINUING ACTION OF  
MARINES

TASK 8B.6.1	DISCIPLINE	VIII-E-37
TASK 8B.6.2	USE OF CAMOUFLAGE AND CONCEALMENT	VIII-B-38
TASK 8B.6.3	ESTABLISH A COMMAND POST (CP)	VIII-B-38
TASK 8B.6.4	OPERATE A COMMAND POST	VIII-B-39
TASK 8B.6.5	CONDUCT MAINTENANCE/REPAIR OF EQUIPMENT	VIII-B-40
TASK 8B.6.6	CONDUCT SUPPLY OPERATIONS	VIII-B-40
TASK 8B.6.7	CONDUCT ADMINISTRATIVE OPERATIONS	VIII-B-41
TASK 8B.6.8	ESTABLISH AND MAINTAIN SITE SECURITY	VIII-B-41
TASK 8B.6.9	OPERATE AN AID STATION	VIII-B-43
TASK 8B.6.10	PROCESS ENEMY PRISONERS OF WAR (POW'S)	VIII-B-43

MPS 8B5.7 - NBC OPERATIONS

TASK 8B.7.1	PREPARE FOR NBC OPERATIONS	VIII-B-44
TASK 8B.7.2	PREPARE FOR NUCLEAR ATTACK	VIII-B-45
TASK 8B.7.3	RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	VIII-B-45
TASK 8B.7.4	RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK	VIII-B-46
TASK 8B.7.5	PERFORM RADIOLOGICAL DECONTAMINATION	VIII-B-46
TASK 8B.7.6	CROSS A RADIOLOGICAL CONTAMINATED AREA	VIII-B-47
TASK 8B.7.7	PREPARE FOR A FRIENDLY NUCLEAR STRIKE	VIII-B-48
TASK 8B.7.8	PREPARE FOR A CHEMICAL AGENT ATTACK	VIII-B-49
TASK 8B.7.9	RESPOND TO A CHEMICAL AGENT ATTACK	VIII-B-49
TASK 8B.7.10	PERFORM HASTY DECONTAMINATION	VIII-B-51
TASK 8B.7.11	COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT	VIII-B-52
TASK 8B.7.12	EXCHANGE PROTECTIVE CLOTHING	VIII-B-52
TASK 8B.7.13	SCORE THE NBC EXAM	VIII-B-53

8B.1 PLANNING

TASK: 8B.1.1 CONDUCT INITIAL PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The aviation combat element (ACE) has been constituted and staff planning has begun. The MACS commander has been assigned as the Sector Antiair Warfare Commander (SAAWC). Command relationships have been established and the SAAWC will be directing the planning efforts of air defense elements within his assigned sector. The SAAWC and his staff will support the ACE/MACG planning staff in preparing the AAW appendix to the ACE operations order.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Establishes early coordination with ATF and/or joint force command aviation planners and adjacent/subordinate units for all phases of operations.
- 2 \_\_\_ Task organizes a SAAWC planning staff.
- 3 \_\_\_ Uses an established SOP for planning.
- 4 \_\_\_ Provides air defense missile and aircraft control specialist input to the aviation estimates of supportability for all operations assigned, and identifies any limitations or problem areas.
- 5 \_\_\_ Coordinates all communication requirements for subordinate, adjacent and higher level circuits with the ACE/MAGTF communications planners, to include encryption hardware/software and authentication materials.
- 6 \_\_\_ Coordinates all frequency requirements (voice, data, radars) for subordinate, adjacent and higher level circuits with the ACE/MAGTF communications planners.
- 7 \_\_\_ Coordinates liaison with adjacent/subordinate elements throughout the planning phase.
- 8 \_\_\_ Recommends a course of action to the Tactical Air Commander (TAC).
- 9 \_\_\_ Upon approval of a course of action by the TAC issues directives, memorandums, or outline plans to subordinate units and hosts staff conferences or informal briefings as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

INITIAL ESTIMATE OF LF AVIATION REQUIREMENTS

This initial estimate is prepared as soon as preliminary information on the assigned mission(s) is available. This initial estimate may only include the number and type of aircraft, the control agencies necessary, and the logistic support required. Some of the air defense allocations can be deduced from the aviation capabilities of the force involved, estimates of enemy air, and the general mission of the LF.

AVIATION ESTIMATE OF SUPPORTABILITY

FMFM 3-1, appendix A, provides a sample format. The purpose is to summarize significant aviation aspects of the situation as they might influence any courses of action proposed, and to evaluate and determine how aviation units can best be employed to support the contemplated landing force courses of action. The estimate is prepared by the Tactical Air Commander (TAC) assisted by his staff and subordinate elements. The estimate, at a minimum, provides the following:

1. Which contemplated course(s) of action can best be supported by the ACE.
2. The salient disadvantages of less desirable courses of action.
3. Significant aviation (to include C3) limitations and problems of an operational or logistical nature.

4. Measures that can be taken to resolve existing aviation problems to include requesting additional theater assets.

TASK: 8B.1.2 CONDUCT INTELLIGENCE PLANNING

CONDITION(S) A MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious landing and/or subsequent operations ashore. The embarked ACE is capable of supporting all aviation functions and the TAOC requires updated and complete intelligence information to carry out their support efforts. Within the SAAWC staff, an S-2 has been assigned.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Obtains a preliminary aviation intelligence estimate upon receipt of the initiating directive. (KI)
- 2 \_\_\_ Requests a detailed aviation intelligence estimate upon receipt of the tactical air commander's guidance.
- 3 \_\_\_ Develops the SAAWC's EEI's for forwarding to the ACE G/S-2 in the form of simple, concise requests, consisting of three parts; positive requests, qualifying questions and statements, and prioritization of submitted requests.
- 4 \_\_\_ Determines TAOC requirements for maps, charts, photographs and other graphic aids, and plans for dissemination and crew briefings.
- 5 \_\_\_ Obtains from higher headquarters a complete Enemy Order of Battle (EOB) which includes information on missiles (including ARM's), aviation assets, EW, naval and ground forces.
- 6 \_\_\_ Coordinates with the ACE S-2 the fusion of all collected information to form a logical picture or hypothesis of enemy activities which might influence the ACE/MACG/MACS missions.
- 7 \_\_\_ Establishes procedures for intelligence collection and dissemination; i.e., timeliness, usability of form, pertinence, and security of gathered information with ACE/MACG G/S-3.
- 8 \_\_\_ Determines form of presentation and in coordination with the S-3 and CEO ensures a dissemination means for aviation intelligence information gathered.
- 9 \_\_\_ Interprets information for significance, and forms logical conclusions which can serve as the basis for determining the effects on air defense operations.
- 10 \_\_\_ Provides responsive, timely, and pertinent aviation intelligence support to the ACE/MACG G/S-2.
- 11 \_\_\_ Prepares a detailed rear area threat assessment for the TAOC and any deployed sites (EWIC's) within the assigned Sector, and provides updates as information becomes available.
- 12 \_\_\_ Requests information on the overhead times of applicable enemy Satellite systems.
- 13 \_\_\_ Requests an estimate of the enemy's time lag in processing, developing, distributing, and acting upon overhead photography or satellite information.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

PRELIMINARY INTELLIGENCE ESTIMATE

The primary purpose of the preliminary estimate is to furnish the commander with sufficient intelligence to formulate basic decisions and to assist him in issuing planning guidance.

VIII-B-2

ENCLOSURE (1)

INTELLIGENCE ESTIMATE

Estimating intelligence is a continuous process that begins immediately after receipt of the initiating directive and continues throughout all phases of the operation. Initial aspects of this estimate are concerned with characteristics of the terrain in the objective area; anticipated weather and conditions at the time projected for the operation; the location, characteristics and composition of available landing sites; the general strength, disposition, and composition of enemy forces in the objective area; and the location of civilian population concentrations, end places protected by the law of war. This estimate must also be concerned with the following five basic intelligence tasks:

1. Determination of requirements (continuous process).
2. Preparation of collection plans.
3. Processing and dissemination techniques.
4. Collection of confirmatory information.
5. Dissemination of updated intelligence information.

The intelligence estimate is normally written if planning time allows. The subsequent estimates are made as the operation progresses and are generally called for on short notice. The estimate is normally based on such a small amount of new material that it is presented orally, supported perhaps by a situation map and notes. However, these changes are incorporated into the basic continuing estimate as soon as possible.

---

TASK: 8B.1.3 CONDUCT ELECTRONIC WARFARE PLANNING

CONDITION(S): The enemy has a known electronic warfare (EW) and electronic intelligence (ELINT) capability against all MAGTF assets. The EW officer assumes an active role in EW planning for the TAOC EW/C's.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ The unit uses an SOP for electronic warfare planning and operations.
- 2 \_\_\_ Requests detailed intelligence assessment of enemy EOB from ACE G/S-2 and/or electronic warfare officer (EWO) to include the antiradiation missile (ARM) threat.
- 3 \_\_\_ Submits recommendations for emission control (EMCON) standards within the AOR for inclusion in the EW appendix to the operations order. These measures will encompass all air defense operations. (KI)
- 4 \_\_\_ Develops and submits plans to effectively integrate radar emissions control procedures for all ground based sensors appropriate to the ARM threat, with due regard to maintaining effective surveillance of the AOR. (KI)
- 5 \_\_\_ Considers the EW threat when determining the locations of ground based sensors.
- 6 \_\_\_ Plans effective utilization of ARM radar decoy equipment.
- 7 \_\_\_ Provides input to the MAGTF C3CM deception plan.
- 8 \_\_\_ Plans for maximum employment of secure communications and data links in the control and coordination of weapons platforms.
- 9 \_\_\_ Ensures that planners, operators, and users of electronic equipment thoroughly understand the EW threat, and the EMCON procedures/ECCH techniques used to counter it.

MCO 3501.9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: In the absence of higher command participation in the planning process, the TACC will complete the required EW planning and publish an EW appendix to the squadron operations order.

KEY INDICATORS:

#### EMCON MEASURES

The ACE planning staff will be responsible for the ACE EMCON plan, with the TAOC providing specialist input. Factors to consider are:

1. MINICOM procedures.
2. Use of brevity codes and authentication tables.
3. Use and security of COMSEC materials.
4. Delegation of EMCON control authority.
5. Signals security.
6. Beadwindow calls.
7. Gingerbread procedures.
8. Directional antennas.
9. Circuit discipline.
10. Appropriate radio/wattage.

#### RADAR EMISSIONS CONTROL SECTION

An effective, simple radiation control plan is required to deny ELINT to the enemy for targeting purposes and to reduce the vulnerability of ground based radar to the ARM threat. Differentiating between radar and communications EMCON measures affords greater flexibility to the TAOC and LAAM units to manipulate their emissions in the face of the threat. Delegating authority to the SAAWC to set RADCON levels speeds reaction to an imminent ARM attack and enables surveillance coverage to be optimized while reducing the overall radar signature of the air defense system. Specific areas to be considered include:

- 1 Radar blinking and blanking.
2. 1FF
  - Use of frequency diversity and frequency agility.
  - Data linked or voice transmitted cuing to other radar units (e.g., HAWK).
3. NAVAIDS
  - Physical dispersion and appropriate siting of emitters (advantageous masking and creation of multipath signals).
  - Placement of RADAR decoys.

VIII-B-4

ENCLOSURE (1)

TASK: 8B.1.4 PLAN SITE SELECTION

CONDITION(S): The MAGTF commander has directed that aviation command and control facilities will be established ashore. The TAC has requested recommendations from the SAAWC as to the possible site(s) for the TAOC and/or EW/C. The TAOC's phased timeline has been coordinated with the ACE and stipulates initial operations requirement with the EW/C, followed by gradual buildup to full TAOC capability. A longer term provision for an EW/C to function in a gap filler role has also been identified.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Using maps, aerial photos, charts and other graphic aids, conducts survey to identify candidate sites in concert with established air defense priorities.
- 2 \_\_\_ Submits prioritized siting considerations to the ACE.
- 3 \_\_\_ Produces radar coverage diagrams for candidate sites using TAMPS, ECAC studies or manual computation.
- 4 \_\_\_ Determines optimum siting locations for communications connectivity with higher/adjacent and subordinate agencies, using PROPHET/MINI MUF computer programs, line of sight (LOS) diagrams and HF frequency propagation predications (chirp sounder).
- 5 \_\_\_ Submits a prioritized list of candidate sites to the ACE based on map surveys and other studies. (KI)
- 6 \_\_\_ Establishes phased plan of equipment arrival to facilitate rapid commencement of manual operational capabilities and communications, with automated functions planned as lift becomes available.
- 7 \_\_\_ Selects advanced party to conduct a physical reconnaissance, locate positions for equipment, and stake out a specific equipment sites.
- 8 \_\_\_ Prepares diagrams or models which depict equipment locations, and are the basis for setup crew briefings.
- 9 \_\_\_ Ensures site plans consider maximum dispersal and remoting of equipment to reduce EW/IR signatures.
- .10 \_\_\_ Plans for alternate TAOC locations which may be utilized as required.
- .11 \_\_\_ Plans for additional EW/C sites which may be utilized at short notice and with minimal prior preparation, as the tactical situation dictates.

EVALUATOR INSTRUCTIONS: Evaluator will be required to examine planning documents and maps and question TAOC personnel to determine compliance with the listed requirements.

KEY INDICATORS:

CANDIDATE SITES

Siting considerations for TAOC and/or EW/C encompass all task organized equipment and personnel in both movement and physical requirements. The following characteristics should be considered:

1. Level ground within + 10 degrees.
2. Spatial requirements (e.g., antennas, RF hazards).
3. Logistic supportability.
4. Camouflage and concealment.
5. Trafficable and access.
6. Emergency destruction and/or movement.

7. Drainage.
  8. Defendable.
  9. Radar coverage of assigned airspace/vital area.
- 

TASK: 8B.1.5 CONDUCT AIR DEFENSE SPECIFIC PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The Aviation Combat Element (ACE) has been constituted and staff planning has begun. The SAAWC and his staff are supporting the ACE planning staff in preparing the air defense portions of the operations order. The MAGTF commander has given guidance to the TAC on the apportionment of ACE assets to the air defense mission. The ACE G/S-2 has provided the latest intelligence of the objective area and the enemy forces. It is imperative that air superiority be established/maintained in the objective area. Preliminary site selection planning has occurred.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Provides input to the identification of critical assets, vital areas and air defense priorities.
- 2 \_\_\_ Coordinates the preparation of the ACE surveillance plan to include the communications required for effective surveillance coordination of all available sensors. (KI)
- 3 \_\_\_ Establishes and coordinates air defense communications requirements with the ACE planners to ensure continuous AAW information flow.
- 4 \_\_\_ Determines the operational procedures used to integrate AEW into overall air defense system (e.g., orbit areas, crosstell procedures, data links, communications, etc.).
- 5 \_\_\_ Recommends air defense control measures, e.g., weapons engagement zones return to force (RTF) procedures, for inclusion in air defense appendix of the ACE operations order.
6. \_\_\_ Recommends the utilization of allocated air defense weapons platforms (Radar/nonradar fighters, LAAM and LAAD) to the ACE.
7. \_\_\_ Ascertains availability of air-to-air and surface-to-air missiles. Develops specific requirements for a resupply plan (push vs. pull) for SAM's.
- 8 \_\_\_ Remains cognizant of all planning and coordination involved in establishing airspace management/control procedures.
- 9 \_\_\_ Plans for the tactical redeployment/alternate siting of AAW assets in response to changes in the surveillance plan, the threat, or the ground force positions.
- 10 \_\_\_ Identifies the need for airborne early warning aircraft to the ACE/MACG to supplement radar coverage.
- 11 \_\_\_ Participates in preparing the Air Defense Appendix to the operations order based on an analysis of the enemy air order of battle (EOB), and own systems capabilities and limitations. (KI)

EVALUATOR INSTRUCTIONS: In the absence of higher echelon planning, the squadron initiates the planning process based upon a locally generated operational scenario and publishes a squadron Operations order. Planning should be conducted using the anti-air warfare planning processes delineated in FMFM 5-5.

KEY INDICATORS:

ACE SURVEILLANCE PLAN

The ACE surveillance plan provides the foundation for all subsequent air defense operations and should consider all available means (electronic and visual) to detect, identify, and track air vehicles in the AOR. While the location of individual elements of the surveillance system (TAOC and LAAM radars, CAP's, AEW, LAAD) teams, etc.) will be influenced by many operational and topographical factors, every effort should be made to provide detection capabilities at all altitudes throughout the AOR, with particular emphasis on likely threat avenues of approach. Overlapping and redundant surveillance cover should be achieved where possible and a reliable, swift and redundant communications plan devised to ensure rapid dissemination of detections.

AIR DEFENSE APPENDIX

FMFM 5-5 delineates the staff planning chain followed to produce the air defense appendix to the ACE operations order. The SAAWC, and SAAWC operations officers, are specifically tasked with completing the detailed planning to support the ACE/MACG concept of operations. Close and continuous coordination must occur between the ACE/MACG planning staff and the SAAWC and his staff. Some specific items which should be considered during the detailed preparation of the air defense appendix are:

1. Centralized/decentralized operations procedures.
2. Autonomous operations procedures.
3. Rules of engagement (ROE).
4. Air defense warning conditions.
5. Air defense alert states.
6. Air defense weapons control status.
7. Air defense identification criteria.
8. C2 agency casualty plan.
9. Weapons engagement zone configuration (MEZ/FEZ).
10. Crossover zones and methods of coordination/deconfliction.
11. Return-to-Force (RTF) procedures.
12. ECON measures.
13. Track telling.
14. Data link configuration and priority.
15. Communication prioritization.
16. Control procedures.

MCO 3501.9B  
5 JUN 1991

TASK: 8B.1.6 CONDUCT ALTERNATE TACC PLANNING

CONDITION(S): The TAOC and the TACC are ashore and fully operational. The TAOC is configured to perform operationally as the Alternate TACC (ALT TACC) should the TACC/TADC become a casualty.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Predetermined procedures to initiate assumption of ALT TACC role are delineated in appropriate SOP or operations plan.
- 2 \_\_\_ Predetermined functions to be performed by the ALT TACC are identified and delineated in appropriate SOP or operations plan.
- 3 \_\_\_ An ALT TACC facility is designated. (KI)
- 4 \_\_\_ Additional communications required for activation are identified. (KI)
- 5 \_\_\_ Personnel and communications equipment augmentation required is identified. (KI)
- 6 \_\_\_ Standing TAOC crew responsibilities are predesignated.
- 7 \_\_\_ Air Situation displays, including ground combat information and intelligence essential to other air efforts, are available as required. (KI)

EVALUATOR INSTRUCTIONS: Evaluator will determine in advance of the operation if the TACC will be declared a casualty. This important mission/task does not depend on the TACC actually being declared a casualty to evaluate the planning requirements. The procedures established at the MACG/MACS level should be reviewed to determine their applicability to the operation and consistency with the needs of the current tactical situation.

KEY INDICATORS:

#### AIR SITUATION

The air situation displays used in the TACC mode should include:

1. Air Tasking Order (ATO).
2. Event number.
3. Ordnance (missile and bomb availability).
4. RIO sequence.

#### TOT/TOS

1. Mission.
2. Status (strip alert, air alert, etc.).
3. Routing.
4. Terminal control agency.
5. Aircraft identification.
6. Call sign.
7. SIF/IFF mode and code.
8. Frequency (check-in/check-out, etc.).

VIII-B-8

ENCLOSURE (1)

INTELLIGENCE

- 1 Enemy ground order of battle.
- 2 Enemy air order of battle.
- 3 Enemy missile sites.

FRIENDLY SITUATION

- 1 Friendly ground situation and scheme of maneuver.
- 2 Friendly air assets by location.
- 3 Friendly missile locations for LAAM; areas for LAAD.

PHYSICAL SHELTER

The physical structure/facility to be used as the ALT TACC should include:

- 1 Work spaces for designated personnel.
- 2 User access to communications.
- 3 Status Boards.

AUGMENTATION

Augment personnel from the ACE/other control agencies include:

- 1 Tactical Air Watch Officer (TAWO).
- 2 Assault Support Watch Officer (ASWO).
- 3 Air support operator(s).
- 4 TAC or his designated alternate (G/S-3).
- 5 Intelligence representative.

COMMUNICATIONS REQUIREMENTS

At least the following additional communications and assets will be necessary:

- 1 Tactical Air Request (TAR) net(s).
- 2 Tactical Air Direction (TAD) net(s).
- 3 Direct Air Support (DAS) net.

8B 2 OPERATIONAL EXECUTION

TASK: 8B.2.1 CONDUCT RECONNAISSANCE, SELECTION, AND OCCUPATION OF POSITION (RSOP)

CONDITION(S): The MAGTF (MEF/MEB) ACE has assigned the TAOC a mission and has identified the vital areas/critical assets. Movement to the general area of operation has been completed. The higher command element has ordered TAOC and EW/C site physical reconnaissance to commence. The MEF/MEB ACE has approved the site locations and has directed TAOC unit elements to expeditiously establish an air defense capability at the primary site(s).

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ RSOP team and equipment are designated.
- 2 \_\_\_ RSOP team is briefed on its missions and functions, and is provided with essential elements of friendly and enemy information.
- 3 \_\_\_ RSOP team and main body convoy routes reconnoitered where possible.
- 4 \_\_\_ RSOP team deployed to primary Site using proper convoy or helo procedures.
- 5 \_\_\_ Communications maintained between RSOP team and the main body.
6. \_\_\_ Site security provided for during RSOP.
- 7 \_\_\_ RSOP team deploys to primary site with MOPP equipment for protection.
- 8 \_\_\_ Site occupied and secured prior to proceeding with other RSOP activities.
- 9 \_\_\_ Sweep conducted of the position by RSOP team for NBC contaminants if required.
- .10 \_\_\_ RSOP team directed in the sweep of the position for mines, antipersonnel devices, and unexploded ordnance.
- .11 \_\_\_ Hasty radar coverage diagram prepared using the surveying transit for radar positioning. (KI)
- .12 \_\_\_ Dead spots in radar coverage identified for single sensor site. (EW/C)
- .13 \_\_\_ Possible dead spots in radar coverage identified for multisensor sites and selects sensor positions to minimize total number of dead spots and optimize overlapping coverage.
- .14 \_\_\_ Equipment positions marked for follow on emplacement.
- .15 \_\_\_ Known reference points (KRP's) for the primary site(s) are selected and recorded. (KI)
- 16 \_\_\_ Helo landing area for MEDEVAC and logistic purposes is designated. (KI)
- .17 \_\_\_ Storage area for small arms ammunition and other explosives is designated.
- .18 \_\_\_ Bivouac and support areas are designated. (KI)
- .19 \_\_\_ Advance party members serve as guides for equipment placement upon arrival on site.
- .20 \_\_\_ Personnel briefed on contingency plans. (KI)
- .21 \_\_\_ Convoy drivers briefed on the primary and alternate routes, and a security man provided for each vehicle.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

KNOWN REPERENCE POINTS (KRP)

Both primary and secondary KRP's at a distance of at least 1km from the system are selected and recorded. An alternate KRP 300 to 500 meters from the system should also be established should environmental conditions require their use due to darkness, fog, or poor visibility.

BIVOUAC/SUPPORT AREAS

Bivouac, supply, motor transport, and other support areas are located in a terrain masked position. Maximum advantage of natural cover is taken to enhance the effectiveness of and reduce the amount of camouflage needed to conceal the area profile.

HELICOPTER LANDING AREA

Helicopter landing areas should be sufficient distance from operational equipment/billeting area to prevent interruption of operations and injury to personnel. They should be free of foreign object damage (FOD) materials. Area dimensions should be as specified in OH 5-3A or as otherwise directed in the ACE operations order.

CONTINGENCY PLANS

Plans addressing quick reaction by the unit should be drawn up and briefed to squadron personnel as required. The following considerations should be evident:

NBC

1. Air/ground attacks (to include rules of engagement).
2. Distribution/dispersion of critical personnel.
3. Communications (visual, radio).
4. Security during movement and stops.
5. Alternate routing.
6. Convoy speed and separation.

---

TASK: 8B.2.2 ESTABLISH AN EW/C SITE AND COMMUNICATIONS

CONDITION(S): The EW/C has arrived at the designated operational site the equipment is about to be emplaced.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Personnel are task organized to move and set up equipment. (KI)
- 2 \_\_\_ Detachment commander has received mission tasking and provided appropriate briefing to subordinates.
- 3 \_\_\_ Personnel have been briefed on the ground defense plan encompassing rules of engagement and the land/air threat as it presently exists.
- 4 \_\_\_ Fighting positions are designated with sectors of fire assigned.

- 5 \_\_\_\_\_ Upon arrival at the operational site, initial communications are established to advise and keep the TAOC/higher authority updated to equipment Status and operational capability. (KI)
- 6 \_\_\_\_\_ Support equipment, tentage, radios, and vehicle parking areas are sited to take advantage of cover and concealment provided by natural terrain features.
- 7 \_\_\_\_\_ Equipment emplaced as prescribed in technical manuals (TM's), and operational status achieved within the allotted time.
- 8 \_\_\_\_\_ Pull mission essential communications are established and maintained from the EW/C operators to the TAOC/higher authority to enable the EW/C to perform its mission.
- 9 \_\_\_\_\_ Written directives are available detailing the movement and establishment of follow-on automated TAOC equipment.

EVALUATOR INSTRUCTIONS: The evaluator will ensure that all detachment personnel are aware of the overall mission and their specific responsibilities through persistent questioning. The evaluator will ensure that any communications initiated are per the published communications plan. The equipment setup times start when the equipment arrives on site.

KEY INDICATORS:

PERSONNEL TASK ORGANIZATION

Personnel require specific individual tasking to ensure that mission essential functions can be carried out concurrently; e.g., antenna erection, control checks, communications checks, cabling, etc.

MISSION ESSENTIAL COMMUNICATIONS

Communications requirements will be mission dependent and will differ contingent upon whether control is afloat or ashore. The EW/C site is assigned the mission of early warning reporting and limited GCI. The following communications nets are provided as a suggested start point:

1. Control Afloat
  - Antiair Warfare Coordination/Reporting (AAWC/R).
  - Tactical Air Traffic Control (TATC).
  - Guard.
  - Fighter Air Direction (PAD).
  - Combat Information and Detection (CI/D).
  - Landing Force Command (LFC).
  - Voice Product Net (VPN).
  - Interface Coordination Net (ICN).
2. Control Ashore
  - Tactical Air Command (TAC).
  - Tactical Air Traffic Control (TATC).
  - Guard.
  - Fighter Air Direction (FAD).
  - Air Operations Control (AOC).

- Command Action (CA).
- Combat Information and Detection (CT/D).

Note: The above communications are not prioritized, nor is it required that all nets be maintained operational to achieve a "yes" grade. The key requirement is that the EW/C was able to fulfill its mission.

#### EQUIPMENT

The EWIC detachment equipment will be dictated by the mission assigned. Similarly, the equipment requirements may also be influenced by whether the site is planned to remain as a stand alone EW/C unit, or if it is intended to be the core element for the build up to a full TAOC. As a guide to assist the evaluator in judging the performance of the EW/C unit establishment, the following representative lists are offered, with a desired set-up time of 1 1/2 hours after arrival to initiate mission functions.

#### EXAMPLE T/E

1. Radar and auxiliary equipment (AN/TPS-63).
2. Radar and auxiliary equipment (AN/TPS-59).
3. Radios Communications.
4. Van Generators.
5. Generators Communications antenna.
6. Communication antennas.
7. Radar remote system Control Van (AN/TXQ-3).
8. Motor transport equipment

Note: Above lists assume the AN/TPS-63 radar is deployed; however, if for mission essential purposes the AN/TPS-59 is substituted for the ANITPS-63, the time allowed should be increased to 4 hours.

---

#### TASK: 8B.2.3 ESTABLISH SAAWC FACILITY AND COMMUNICATIONS

CONDITION(S): An EW/C site has been established ashore as the core element for the TAOC to follow. CATF has determined that the AAW area will be divided into separate, but adjacent AAW sectors. One sector is the responsibility of the CLF, delegated to the TAC and exercised by the AAWC. In anticipation of the imminent arrival of the main TAOC, and with concern to establishing coordination with the ground based air defense agencies ashore and the existing AAW agencies afloat, the TAC has instructed the SAAWC to establish his operations facility ashore.

STARDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ SAAWC determined the communications needlines and the type and extent of facilities required to complete the tasking given him by the TAC.(KI)
- .2 \_\_\_\_ SAAWC staff is task organized and briefed.
- .3 \_\_\_\_ EW/C briefed and prepared for arrival of SAAWC facility.
- .4 \_\_\_\_ Movement plan briefed end executed.
- .5 \_\_\_\_ Equipment emplaced and communications needlines established.
- .6 \_\_\_\_ TACC (afloat) and TADC advised of operational capability.

- .7 \_\_\_\_\_ SAAWC and staff monitor MW operations, assist the integration of land and sea-based AAW agencies/assets, and prepares to exercise control and authority of AAW operations in assigned sector upon command.

EVALUATOR INSTRUCTIONS: With the introduction of the TACM (AN/TYQ-23) into the TAOC, the facility (AN/TYA-9B SOG) normally used by the SAAWC can no longer be provided from TAOC organic equipment. Future portable data link equipment now in development may be used to support a SAAWC facility. Until such equipment is fielded, adhoc facilities will be used to manually display information and terminate required communications. The composition of the SAAWC staff is situation dependent. The following personnel nominally are identified in the makeup of the staff; a SAAWC operations officer, intelligence officer, plotters/recorders, radio operators/controllers, SAAWC representative, and one or two watch officers (SAAWC reliefs).

EY INDICATORS:

#### SAAWC COMMUNICATIONS NEEDLINES

The purpose of establishing the SAAWC facility in advance of formal transfer of control ashore is to enhance coordination between land-based AAW agencies, the TADC, and the TACC (afloat). Additionally, it enables the SAAWC and his staff to acquire situational awareness in preparation for assuming control of the assigned AAW sector. The SAAWC will determine the number/priority of doctrinal communications needlines required to execute his mission.

---

TASK: 8B.2.4 ESTABLISH TAOC AND COMMUNICATIONS

CONDITION(S): Build up of air control facilities ashore continues. The TAOC is ordered ashore to assume the mission of the senior air defense control agency for its assigned AAW sector.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Operations officer has received mission tasking from the SAAWC/MACS commander and provides appropriate briefings to his subordinates.
- .2 \_\_\_\_\_ Personnel are task organized to move and set up equipment.
- .3 \_\_\_\_\_ Personnel have been briefed on the ground defense plan, encompassing rules of engagement and land/air threat existent.
- .4 \_\_\_\_\_ Unit advises and updates higher command element of equipment status and operational capability as set up work continues.
- .5 \_\_\_\_\_ Tactically emplaces the TAOC equipment, to include support equipment, tentage, radio antennae and vehicles to take full advantage of cover provided by natural terrain features.
- .6 \_\_\_\_\_ Equipment emplaced as prescribed in technical manuals and achieves operational status in the time allotted.
- .7 \_\_\_\_\_ A limited TECHON and SYSCON is established and operational.
- .8 \_\_\_\_\_ Full mission capability as prescribed by the TAC is attained; commences integration with the SAAWC facility, other MACCS agencies and AAW agencies/assets afloat.
- .9 \_\_\_\_\_ Assumed functions of core element EW/C and either absorbed EW/C equipment into TAOC system, or prepared to displace EW/C to alternate location.
- .10 \_\_\_\_\_ Implemented passive air defense measures; i.e., camouflage, deceptive measures (dummy antennas).
- .11 \_\_\_\_\_ Written directives were available detailing the movement and emplacement of TAOE equipment and personnel.

EVALUATOR INSTRUCTIONS: The preceding standards are predicated on a core element EW/C being in place for the TAOC to build from. However, should the TAOC be required to setup from scratch, the communications needlines specified in 8B.2.2.4 should be given first priority.

KEY INDICATORS:

#### OPERATIONAL STATUS

Required operational status will vary dependent of the mission(s) assigned to the TAOC by the TAC. For evaluation purposes, the TAOC will be considered as achieving operational status when it is capable of performing its doctrinal functions of air surveillance and control of aircraft and missiles for AAW in support of the MAGTF. Time allotted to achieve operational status will be a hours after arrival on site of the last mission essential item of equipment.

#### 8B.3 SAAWC EXECUTION

TASK: 8B.3.1 CONDUCT ASSET MANAGEMENT

CONDITION(S): The SAAWC facility and required communications are established and the TAOC has achieved operational status. The SAAWC is exercising control and management of AAW assets within the assigned AAW sector. The integration of the MACCS ashore continues in preparation for phasing of aviation control ashore.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Reaffirmed mission objectives and confirmed the extent of authority delegated to the SMWC.
- .2 \_\_\_ Ascertained numbers/types/locations and status of assets allocated for air defense in the AAW sector.
- .3 \_\_\_ Ensured SAAWC staff watch schedules were published and personnel were briefed in detail on the mission. (KI)
- .4 \_\_\_ Coordinated with and briefs adjacent AAW agencies on the air defense plan for the sector.
- .5 \_\_\_ Clearly understands rules of engagement (ROE) and identification criteria and ensures that they are strictly adhered to by weapons platforms and other AAW agencies within the sector.
- .6 \_\_\_ Sets air defense warning conditions for the sector.
- .7 \_\_\_ Sets air defense weapons release conditions for the sector.
8. \_\_\_ Activates and deactivates weapons engagement zones (WEZ's) in the sector and allocates weapons platforms to active WEZ's.
- 9 \_\_\_ Exercises launch authority over allocated air defense aircraft when authorized by the TAC.
- .10 \_\_\_ Ensures accurate status is maintained on all airborne air defense aircraft and disseminated as needed to higher end adjacent agencies. (KI)
- .11 \_\_\_ Ensures accurate status is maintained on strip alert air defense aircraft. (KI)
- .12 \_\_\_ Ensures accurate status is maintained on all surface-to-air weapons in the sector. (KI)
- .13 \_\_\_ Closely monitors status of all committed air defense weapons platforms and ensures timely replacement of assets as required.
- .14 \_\_\_ Closely monitors operational status of MACCS AAW agencies in the sector and directs/recommends system reconfiguration (to include movement) of assets to ensure optimum surveillance and weapons engagement functions are maintained.

- .15 \_\_\_\_\_ Closely monitors sector airspace management/control and recommends to the airspace control authority (ACA) changes to the airspace control procedures that may be dictated by the tactical situation.
- .16 \_\_\_\_\_ Executes control of radar emissions as outlined in the ECON plan of the ACE operations order, making modifications as required by the tactical situation.
- .17 \_\_\_\_\_ Revises defensive tactics in response to the air and ground threat.
- .18 \_\_\_\_\_ As required, assumes TACC functions per the ACE operations order. (See 8B.1.6.)

EVALUATOR INSTRUCTIONS: The degree of authority granted to the SAAWC to control air defense operations in the assigned AAW sector will vary. Prior to the transfer or control ashore his authority is normally more limited, to the extent that evaluation of some of the above standards may require the evaluator to gauge the SAAWC's performance operating in an advisory, vice controlling, capacity.

KEY INDICATORS:

#### STATUS OF ASSETS

SAAWC will derive status of assets through multiple sources (e.g., air tasking order, TAOC weapons section, TACC/TADC, other MACCS agencies) and the display format of information will be directed by the SAAWC. The following fields of information are recommended as being essential:

1. Aircraft call signs and type.
2. ETD/ATD.
3. Mission.
4. Aircraft alert states (strip/air).
5. Air-to-air weapons loadout and fuel (ACP 165E).
6. Tanker availability and fuel giveaway.
7. Air defense warning conditions and weapons conditions.
8. Ready missiles (surface to air).
9. Status of weapons engagement zones.
10. AEW aircraft availability, TOS, and coverage.
11. HAWK operational status.
12. Status and location of other MACCS agencies.

Additional displays of equipment and communication status, OAS/DAS aircraft Status, and air/ground situation may also be required.

#### SAAWC STAFF

The battle staff shall be task organized, situationally dependent on scenario, scale or intensity of operations anticipated. An example SAAWC battle staff shall include: SAAWC, SAAWC operations officer, intelligence representative, surface to air weapon (SAW) representative, fixed-wing aviation representative and associated plotters.

TASK: 8B.3.2 TRANSFER OF CONTROL

CONDITION(S): The CATF has determined that the AAW area will be divided into separate but adjacent sectors. One sector is the responsibility of the CLF usually identified as the landward Sector, with authority delegated to the TAC and exercised by the SAAWC. The MACCS has been declared functional and the TAC has requested control of anti-air warfare in the designated sector. In a preplanned sequence, the afloat agencies are relieved of responsibility but continue to monitor the appropriate communications nets. The afloat agencies will remain prepared to act as backup or alternate agencies, until required to displace out of the area.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Procedures are delineated in the operation order/directives for the phasing of control ashore.
- .2 \_\_\_ Checklists are adequate and utilized to ensure there is no interruption of sustaining operations while transferring control of anti-air warfare ashore.
- .3 \_\_\_ Total operational crew is on hand and briefed concerning duties for passage of control.
- .4 \_\_\_ Equipment is in place and operators are monitoring all communication nets required by the operations order.
- .5 \_\_\_ Automated data links are operational (not required for the transfer of control), and parameters comply with appropriate TAC/TECH OPDAT messages.
- .6 \_\_\_ Updated intelligence information, to include the friendly and enemy order of battle and current ATO, are on hand and posted.
- .7 \_\_\_ Subordinate MACCS AAW agencies have all required intelligence information, current ATO, and updated procedural information prior to transfer of control ashore.
- .8 \_\_\_ Exchanges of air defense warnings, weapons release conditions, anti-air warfare intelligence, and other pertinent data continues while the transfer takes place.
- .9 \_\_\_ SAAWC ensures all requirements have been met and then advises the TADC/TACC that all air defense agencies are prepared for the phasing of control of AAW ashore.
- .10 \_\_\_ As directed, the preplanned sequence of phasing control of AAW ashore is completed and the SAAWC acknowledges/produces any reports required.
- .11 \_\_\_ Upon completion of transfer of control of AAW ashore, the SAAWC advises the TADC/TACC (ashore) that the TAOC now has control referencing date/time (local).

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8B.3.3 CONDUCT INTELLIGENCE PROCESSING

CONDITION(S): The transfer of control ashore of AAW has been completed. Maintaining the intelligence picture for the SAAWC is required.

- .1 \_\_\_ Updates to the aviation intelligence estimate continue and are briefed as appropriate.
- .2 \_\_\_ Subsequent EEI's are developed and forwarded to higher headquarters as required.
- .3 \_\_\_ Conducts intelligence briefings/debriefings for and from operational crews.
- .4 \_\_\_ Records information systematically for ease of study and comparison, and sends information to command elements and requesting elements.

MCO 3501.9B  
5 JUN 1991

- .5 \_\_\_\_\_ Maintains a complete Enemy Order of Battle (EOB) which includes information on missiles (including ARM's), aviation assets, EW, naval and ground forces.
- .6 \_\_\_\_\_ Coordinates the fusion of all collected information to form a logical picture or hypothesis of enemy activities which might influence the ACE AAW missions.
- .7 \_\_\_\_\_ Interprets information for significance, and forms logical conclusions which can serve as the basis for determining the effects on air defense operations.
- .8 \_\_\_\_\_ Provides responsive, timely, and pertinent aviation intelligence support to the ACE G/S-2.
- .9 \_\_\_\_\_ Updates rear area threat assessment for the TAOC and any deployed sites. (EW/C).

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

#### 8B.4 TAOC EXECUTION

TASK: 8B 4.1 CONDUCT INTEGRATED SURVEILLANCE

CONDITION(S): The TAOC is ashore, established and fully operational to perform its mission. The mission includes the ability to provide integrated surveillance of the designated sector of responsibility.

STARDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Surveillance personnel are task organized; comprised of a Surveillance Identification Director (SID), one or more surveillance operators (So's), Electronic Counter-counter measures (ECCM) operators and a Track Data Coordinator (TDC).
- .2 \_\_\_\_\_ SID receives initial briefing from SAD which supplements general guidance obtained from the operations order.
- .3 \_\_\_\_\_ Prepares and delivers surveillance briefing during assigned crew briefs. (KI)
- .4 \_\_\_\_\_ SID specifies SO areas of responsibility, identification procedures to be employed and closely supervises SO's on position.
- .5 \_\_\_\_\_ SID briefs ECCM operators on actions to be taken when ECM is experienced and supervises their activities on position.
- .6 \_\_\_\_\_ SID continuously confirms correct identification assignments to tracks in the system.
- .7 \_\_\_\_\_ SID prioritizes the use of surveillance dedicated communications in the section.
- .8 \_\_\_\_\_ SID ensures all surveillance information is effectively integrated in a timely and accurate manner. (KI)
- .9 \_\_\_\_\_ SID ensures that an operational data form ("cutsheet") is prepared and implemented.
- .10 \_\_\_\_\_ SID effectively manages data link operations, either directly or through supervision of the TDC.
- .11 \_\_\_\_\_ SID effectively integrates surveillance crew functions with the weapons and traffic sections.
- .12 \_\_\_\_\_ SO's detect air tracks and initiate symbology within 30 seconds in the manual mode. (KI)
- .13 \_\_\_\_\_ SO's correctly apply the briefed identification criteria to identify and classify all targets detected.
- .14 \_\_\_\_\_ SO's maintain accurate tracking on all targets acquired.

VIII-B-18

ENCLOSURE (1)

- .15 \_\_\_\_\_ SO'S correctly employ prescribed communications to exchange surveillance data external agencies.
- .16 \_\_\_\_\_ SO's demonstrate skills required to perform tracking and identification in a "build-up mode" of operations.
- .17 \_\_\_\_\_ SO's demonstrate practical knowledge of formats and switch actions associated with surveillance functions.
- .18 \_\_\_\_\_ ECCM operators demonstrate practical knowledge of radar console operations, and surveillance functions.
- .19 \_\_\_\_\_ ECCM operators demonstrate practical knowledge of all radar ECCM features and apply them appropriately to minimize the effects of jamming.
- 20 \_\_\_\_\_ ECCM operators take correct actions in response to changes in EMCON measures.
- .21 \_\_\_\_\_ SID ensures MIJI/FIR reports are forwarded to the appropriate authority.

EVALUATOR INSTRUCTIONS: The evaluator should obtain details of the raid plans (routes, altitudes, speeds and strengths) to enable him to qualitatively assess the performance of the surveillance section during key times through the exercise. The evaluator will not attempt to provide immediately detailed assessments on the detection, identification, and racking of every target; he should seek to make a balanced and objective judgment on the overall effectiveness of the surveillance team.

KEY INDICATORS:

#### SURVEILLANCE BRIEF

The SID brief will be completed for each crew and will contain, as a minimum, the following:

1. Area of Responsibility (AOR).
2. Enemy air threat/axis.
3. Sectors of responsibility (should overlap).
4. Censored areas/sector inhibits.
5. Clutter gates.
6. Manual or auto acquire (1FF and/or Video).
7. Terrain features affecting radar.
8. Location of known areas of heavy air traffic/civil air routes.
9. Identification criteria (posted).
10. Mode. I.
11. Mode. II.
12. Mode III.
13. Mode IV (per ATP-260).
14. Flight profiles.
15. Classification criteria. After identification, tracks classified per applicable directive/orders.
16. Track block allocations.
17. Casualty procedures.

18. Communications.
19. Visual reported track display (nonreal time).

#### SURVEILLANCE INTEGRATION

Integrated surveillance considers all sources of detection data from electronic or visual means (e.g., LAAM) radar, LAAD, itinerant traffic, 2-way TADIL C, fighters, et al). This data must be initially cross correlated with existing known system tracks or initiated as a new unknown system tracks). All externally reported tracks are to be treated as time sensitive.

#### DETECTION, IDENTIFICATION AND TRACKING OF AIRTRACKS

Irrespective of whether the system is operating in auto or manual acquisition modes, all operators, but particularly the SO's, need to be alert to detect targets and initiate tracking/identification at the earliest opportunity. Recognizing that factors such as the volume of air tracks in the AOR, and quality of the radar presentation (weather/terrain clutter/ECM) will affect the speed with which detections can be made, the target evaluation time allotted will be 30 seconds from the origination of a consistent raw video response. To achieve a "yes" evaluation, 90 percent or greater of targets must be detected and tracked within the 30 seconds timeframe (3 sweeps).

---

#### TASK: 8B.4.2 AIRSPACE MANAGEMENT AND CONTROL

CONDITION(S): The TADC is ashore, established, and fully operational. The mission includes providing airspace management and control in the designated sector of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Assigns traffic section comprising of a Senior Traffic Director (STD) and/or Tactical Air Traffic Controller (TATC) as required.
- .2 \_\_\_ The STD/TATC receives an initial briefing from the SAD which augments general guidance obtained from the operations order.
- .3 \_\_\_ STD/TATC prepares and delivers the traffic section briefings during the main operations crew briefs. (KI)
- .4 \_\_\_ STD/TATC prioritizes traffic dedicated/related communications within his section.
- .5 \_\_\_ STD/TATC ensures traffic management and control procedures are adhered to by all controllers.
- .6 \_\_\_ STD/TATC ensures all traffic information is effectively integrated and disseminated (internally and to external agencies) in a timely fashion. (KI)
- .7 \_\_\_ STD/TATC remains cognizant of the status of all pertinent NAVAIDS, airfield approach/departure routes and other airfield facilities.
- .8 \_\_\_ STD/TATC provides enroute control to itinerant traffic, correctly employing applicable contact points (CP's) and routes from the operations orders/spins.
- .9 \_\_\_ STD/TATC augments surveillance section by tracking all aircraft in the sector operating under his control.
- .10 \_\_\_ STD/TATC maintains continuous coordination with air traffic control unit(s) for departure and recovery of friendly/allied aircraft.
- .11 \_\_\_ STD/TATC provides situational awareness updates to all aircraft that RIO through the TAOC. (KI)
- .12 \_\_\_ STD/TATC provides navigational assistance to tanker aircraft and facilitates join-ups using correct RT procedures.

- .13 \_\_\_\_\_ STD/TATC monitors tankers fuel giveaway and passes timely updates to the SAAWC plotters and staff as required.
- .14 \_\_\_\_\_ STD/TATC prioritizes low fuel state aircraft to the tankers.
- .15 \_\_\_\_\_ STD/TATC maintains coordination with other MACCS agencies (CATC, DASC, ASRT) and conducts radar/procedural handovers and takeovers expeditiously.
- .16 \_\_\_\_\_ STD/TATC maintains close coordination with the SWD to assist in identification of aircraft recovering through MEZ's/FEZ's on the RTF corridors. (KI)
- .17 \_\_\_\_\_ STD/TATC maintains a RIO log and relays airborne times on nonair defense aircraft to the SAAWC plotters.
- .18 \_\_\_\_\_ STD/TATC ensures that any information pertaining to flight safety hazards is made available to weapons controllers and necessary external agencies; e.g., EW/C, DASC. (KI)
- .19 \_\_\_\_\_ STD/TATC assists in the safe recovery of aircraft in distress by providing expedited routes and communications handovers.
- .20 \_\_\_\_\_ STD/TATC directs aircraft to appropriate frequency or terminal controller per the ATO or changes as passed.
- .21 \_\_\_\_\_ STD/TATC provides timely and accurate "stranger" information to aircraft under his control.
- .22 \_\_\_\_\_ STD/TATC are cognizant of emergency procedures, SAR plan, and brevity code words. (KI)
- .23 \_\_\_\_\_ STD/TATC receive, process and disseminate the ATO to the TAOC crew and subordinate agencies.

EVALUATOR INSTRUCTIONS: The evaluator will verbally check knowledge-based standards to ensure operators fully understand what is required to perform their mission correctly. Evaluator will ascertain controller knowledge of navigational aids, procedures, and flight restrictions.

KEY INDICATORS:

TRAFFIC SECTION BRIEF

The STD/TATC will brief air space management and control procedures during each main operations crew brief. The traffic section brief should include as a minimum:

1. Check in/check out points and altitudes.
2. Approach and departure routes.
3. Tactical routing and major CP's for air defense and itinerant aircraft.
4. RTP routing and procedures.
5. Traffic section communications (ground-to-air, ground-to-ground, and internal).
6. Location/status of NAVAIDS.
7. Military and nonmilitary airspace considerations, (operating areas, civil airways, VFR/IFR flight regulations, et al)
8. Tanker tracks/altitudes and joining procedures.
9. Handover/takeover procedures (internal and external)
10. Emergency procedures.
11. SAR procedures.
12. Known safety of flight hazards.

13. Casualty procedures.

Note: If the above information is coordinated to be briefed by another Section during the main operations brief, it may be omitted from the traffic section portion, provided it is covered in adequate detail.

TRAFFIC INFORMATION

Traffic information is considered to be any information which might bear upon the safe and tactical conduct of flight operations. Any changes to routing, altitudes, RTF procedures, NAVAIDS, or airfield weather/status which might impinge on safe mission accomplishment must be passed to controllers and aircrews expeditiously.

EMERGENCY PROCEDURES

In an emergency situation, the following steps are recommended:

1. Verify emergency status after pilot has completed his NATOPS procedures and has decided on a course of action.
2. Determine location, course, speed, and altitude.
3. Request aircraft squawk MODE III code 7700. Change to guard frequency (243.0) if required.
4. Determine pilot intentions, call sign, type aircraft, position, and emergency status. Notify TACC/TADC.
5. Determine if it is a controlled or uncontrolled emergency.
6. Verify weather (IMC or VMC) at the intended landing site.
7. Determine if transmissions "In the Blind" are received. (Pilot may acknowledge, e.g., identification turns, or SIF/IFF response.)
8. Steer aircraft to nearest recovery airfield, if possible.
9. Assist in SAR as requested.
10. Join up other aircraft for escort, if possible.
11. Determine if another aircraft is required to relieve the escort (if applicable).
12. Direct other aircraft to orbit, observe, and act as communications relay.
13. Coordinate a positive control entry for IMC recovery with the appropriate air traffic control agency, and transfer control of the aircraft to terminal control agency when possible.
14. For VMC recovery, direct a straight in approach, coordinate, and pass control to appropriate airfield tower.
15. For an uncontrolled aircraft emergency pass all data to TACC/TADC.
16. Restrict transmissions to those essential to safe recovery of the aircraft.

SAR CODE WORDS

CODE WORD	DEFINITION
Ark	Rescue ship
Bird Dog	Rescue ship
Davey Jones	Survivor in sea without life jacket
Ditch	Forced landing at sea
Dumbo	Amphibious aircraft or seaplane used for search and rescue
Evergreen	Dye markers in the water
Goodyear	Life raft

Lifeguard	Submarines
Mayday	Distress call
Pedro	Search and rescue helicopter
Pan	Urgency call

#### SAR COORDINATION/ASSISTANCE

The actual procedures used by any unit of the armed services are prescribed in its SOP and should be learned by controllers when they join their respective units. Search and Rescue Net (SAR). The SAR net will be used to coordinate aircraft involved in the search for, and the rescue of downed aircraft. The SAR net will also be used to monitor the progress of the SAR mission. A SAR incident involving an aircraft is considered imminent or actual when any of the following conditions exist:

1. The position of an aircraft raises doubt as to its safety.
2. Reports indicate that the operating efficiency of an aircraft is so impaired that forced landing may be necessary.
3. The aircrew is reported to have abandoned an aircraft or is about to do so.
4. A request for assistance has been received or distress is apparent.
5. A radar is painting an aircraft flying a left-hand or right-hand triangular pattern (indicates aircraft with lost communications/NORDO).

#### SITUATIONAL AWARENESS

The dynamics of MAGTF airspace management require initial and continuous situational awareness information from the TAOC to aircraft. This tactical information should be in sufficient detail to build a picture (real time) for the aircrews to what is taking place in the airspace, as well as add to the offensive capability of the aircrew. An example list of information is provided:

1. Air defense warning conditions.
2. Active/inactive weapons engagement zones.
3. Weapons release conditions.
4. Threat warning.
5. Available tankers.
6. Intelligence updates.
7. RIP.
8. Operating frequencies.
9. Weather.
10. Airfield information.

#### AIRCRAFT RECOVERY

Friendly/allied aircraft transiting MAGTF airspace through an integrated air defense system will be required to follow return to force procedures. These aircraft recovering are under the control (positive or procedural) of the traffic or weapons section and therefore require close crew coordination. Additionally, this coordination will build situational awareness for ground units and aircrew as friendly/allied aircraft follow RIP through active weapons engagement zones. This will substantially decrease the chance of fratricide.

DIRECTING AIRCRAFT TO TERMINAL CONTROLLER

Information provided in the ATO is required to expedite routing/deconfliction of aircraft through the airspace to the assigned terminal controller and frequency. As the guiding directive, the information provided in the ATO may not always be up to date (i.e., frequencies, routing, CF's), and the verification of ATO information is a continuing process to insure the aircrew has the correct information to continue the mission assigned. This has application in the situational awareness areas also.

---

TASK: 8B.4.3 CONDUCT ENGAGEMENT CONTROL

CONDITION(S): The TACC is ashore, established and fully operational. The mission includes providing engagement control (weapons system control) against hostile aircraft or missiles with available AAW assets within the designated sector of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ A task organized weapons section comprised of a Senior Weapons Director (SWD), Missile Controller (MC), Weapons Controllers (WC's), and assistants as required are assigned.
- .2 \_\_\_\_\_ SWD receives a specific briefing from the SAAWC/SAD which augments the general guidance already provided in the operations order.
- .3 \_\_\_\_\_ SWD prepares and delivers a weapons briefing during assigned crew briefs. (KI)
- .4 \_\_\_\_\_ SWD closely monitors Status of weapons engagement zones and makes recommendations on utilization of assets to SAAWC/SAD.
- .5 \_\_\_\_\_ SWD closely monitors the air situation in order to evaluate the threat and optimize fire discipline and target assignment among weapons platforms. (KI)
- .6 \_\_\_\_\_ SWD maintains close coordination with the traffic section in order to expedite transfer of control of air defense aircraft between sections.
- .7 \_\_\_\_\_ SWD/WC maintains situational awareness (SA) with the EW/C(s).
- .8 \_\_\_\_\_ SWD and WC's fully understand friendly weapons platforms capabilities, limitations and employment. (KI)
- .9 \_\_\_\_\_ SWD implements positive/procedural control measures for all weapons systems as required. (KI)
- .10 \_\_\_\_\_ SWD and WC's understand threat weapons systems/platforms and likely employment. (KI)
- .11 \_\_\_\_\_ SWD fully understands and demonstrates the association between air defense warning conditions and weapons release conditions. (KI)
- .12 \_\_\_\_\_ Weapons Section monitors and obtains regular updates of operational status of weapons platforms under control and ensures changes are promptly passed to the SAAWC plotters and the SAD. (KI)
- .13 \_\_\_\_\_ Weapons Section crew maintains collective situational awareness through proper coordination and use of the intercommunications System (ICS).
- .14 \_\_\_\_\_ MC prepares specific briefing items associated with surface-to-air weapons (SAW) units. (KI)
- .15 \_\_\_\_\_ MC fully understands and demonstrates the use of associated communications/data links available in automated and degraded mode of operations. (KI)
- .16 \_\_\_\_\_ MC maintained situational awareness with SAW units assigned. (KI)
- .17 \_\_\_\_\_ MC maintains two way information flow of intelligence and combat information between SAW units and higher command elements.
- .18 \_\_\_\_\_ MC understands, and upon direction correctly implements, the radiation control (RADCON) measures. (KI)

- .19 \_\_\_\_\_ MC fully understands capabilities/limitations of LAAM/LAAD systems. (KI)
- .20 \_\_\_\_\_ MC reinforces fire control discipline among SAW units under TAOS control.
- .21 \_\_\_\_\_ WC's provide when required specific task briefing to assistants and provide direct supervision of their performance. (KI)
- .22 \_\_\_\_\_ WC's correctly employ ground-to-air communications in ECM and non-ECM environment. (KI)
- .23 \_\_\_\_\_ WC's establish and maintain accurate tracking of aircraft under control.
- .24 \_\_\_\_\_ WC's pass timely and accurate information on all tracks in and adjacent to their FEZ's. (KI)
- .25 \_\_\_\_\_ WC's commit fighters positively against targets when directed, to include initial intercept vector and target information calls (BRA, track, strength and ID).
- .26 \_\_\_\_\_ WC's provide timely, accurate target information and positive control until completion of the engagement. (KI)
- .27 \_\_\_\_\_ WC's demonstrate effective tactical control of fighters, using close or broadcast control as required until completion of the engagement. (KI)
- .28 \_\_\_\_\_ WC's demonstrate tactical awareness of airframe performance and weapons system capabilities and limitations. (KI)
- .29 \_\_\_\_\_ WC's demonstrate a full understanding of the hostile air and ground threat, and have received intelligence updates. (KI)
- .30 \_\_\_\_\_ WC's correctly employ ADP functions for engagement pairings, intercept computation and data exchange. (KI)
- .31 \_\_\_\_\_ WC's ensure safe conduct of flight for aircraft under their control. (KI)
- .32 \_\_\_\_\_ WC's fully understand and apply, if required, procedures to assist aircraft declaring an emergency.
- .33 \_\_\_\_\_ WC's demonstrate control techniques in an ECM environment. (KI)
- .34 \_\_\_\_\_ WC's obtain state checks and engagement reports for relay to SWD and SAAWC upon completion of engagements. (KI)

EVALUATOR INSTRUCTIONS: The evaluator should obtain details of aggressor aircraft raid plans (routes, altitudes, speeds, and strengths) to qualitatively assess the performance of the weapons section during key times throughout the exercise. The evaluator will not attempt to provide minutely detailed assessments for the engagement of every target, but to make objective assessments as to the overall effectiveness of the weapons section in performing its mission. If complete raid plans cannot be obtained, the evaluators must make every effort to acquire as much information as possible to assist in his objective evaluation.

KEY INDICATORS:

#### WEAPONS BRIEFING

The weapons section requires, at a minimum, the following items to be briefed:

1. Air defense assets in the sector under TAOC control to include alert/readiness states, fuel, weapons, loadouts and locations.

- Fighter A/C (radar, visual).  
Tanker A/C.
- SAW units.
- Relief plan for aircraft, likely friendly tactics to be employed (e.g., section, division, T- bone) and FEZ manning priority.

2. Radar contracts with radar fighters.
3. Air defense priorities.
4. Utilization of weapons engagement zones (MEZ, FEZ) to include a casualty plan. (SAD/SAAWC shall provide guidance and priorities)
5. Weapons release conditions and BVR criteria.
6. Communications (e.g., secure communications, brevity, communications cadence, authentication/gingerbread procedures, assignment procedures, internal communications discipline).
7. HAWK primary target lines (PTL)
8. Emergency actions to be taken by:
  - Aircraft.
  - Surface-to-air weapons units.
  - Internal weapons section personnel (requires SAD/SAAWC approval).
9. Fire control orders.
10. Routing within the integrated air defense system (IADS).
11. Information flow requirements.
  - Critical.
  - Noncritical.
12. Air defense warning and weapons release conditions.
13. Air raid warning procedures.
14. Positive and procedural control measures.
15. Alternate and supplemental sites for SAW units.
16. Casualty procedures.

Note: Only those items in the above list which are relevant to surveillance and traffic should be briefed at the mass crew briefing.

#### FIRE DISCIPLINE AND TARGET ASSIGNMENT

The purpose of good fire discipline and correct target assignments is to bring weapons to bear on hostile aircraft in appropriate numbers and at the earliest possible time, thus maximizing attrition while simultaneously reducing mutual interference and the risk of fratricide. To achieve this, the SWD must have a thorough knowledge of the capabilities and limitations of the weapons platforms at his disposal, supplemented with up-to-date information on their immediate engagement status. The decision to assign specific weapons platforms to targets demands sound judgment based on many factors. The following are examples:

1. Nature of threat (strength, speed, altitude, formation, possible mission, fighter sweep or strikes).
2. Range, bearing and track relative to defensive fighters/SAW's.
3. Earliest opportunity for engagement, anticipated point of intercept, and subsequent defense in depth.
4. Intelligence/early warning of follow-on threats.
5. Likely target of threat vs. air defense priorities.
6. Reaction time available (pop-up targets).

#### SAW BRIEFING

The MC will prepare the SAW portion of the weapons brief and will include the following essential items at a minimum:

1. SAW unit locations.
2. SAW equipment status.
3. MEZ activation.
4. Ready to use missiles on hand.
5. Resupply availability and times.
6. Communications needlines/data link status.
7. Weapons release conditions in force.
8. HAWK scram procedures.

#### MISSILE CONTROLLER COORDINATION AND COMMUNICATION

The MC is required to demonstrate control/coordination of LAAM fire units using all fire control orders in automated and degraded mode of operations. ATDL-1, and the AAC, AAI, and/or CI/D nets are used. However, emphasis should not be based solely on the MC's ability to use appropriate switch actions in the automated mode. The MC should be judged on ability to orchestrate effective fires of assigned units verbally including coordination of cross boundary firing, should that become necessary. Success as an MC absolutely depends on maintaining SA in regards to current capabilities/limitations of assigned fire units and ensuring those fire units are continuously updated on current friendly and enemy situation. Key items of importance are:

1. Hot missile inventory/missiles available for reload.
2. Status of resupply.
3. Friendly aircraft operating adjacent to MEZ's.
4. Degradation of LAAM systems.
5. Degradation of TAOC systems.
6. Weapons release conditions.
7. MEZ activation/deactivation.

#### POSITIVE AND PROCEDURAL CONTROL MEASURES

Although it is preferable to exercise positive control over air defense weapons systems and itinerant air traffic, the inherent limitations of the equipment needed to perform positive control (especially vulnerability to enemy actions) may dictate procedural control. The operations order should include the positive and procedural control measures to be employed. The SWD has a specified responsibility to gauge when a reversion to procedural control is required. For example, ECM against TAOC radars and communications may preclude the weapons crew from providing close control to the fighters or effective control of SAW units. The SWD should be alert to the need to order "broadcast" control on the FAD's, or place the SAW units under autonomous control. The aim is to ensure a coordinated transition to procedural control, or resumption of positive control when the conditions allow.

#### AIR DEFENSE WARNING CONDITIONS/WEAPONS RELEASE CONDITIONS

Air defense warning conditions (Red, Yellow, White) are disseminated throughout the force to warn of the immediacy of any likely air attacks. Weapons release conditions (Free, Tight, Hold) specify the freedom of a particular weapons system to engage targets per identification criteria and the overall ROE. While ordinarily a high threat situation will be accompanied by a less restrictive weapons release condition,

there is no direct coupling between the two sets of conditions. For example, "white" should not automatically imply "weapons tight"; if friendly aircraft activity is minimal but the possibility of a sneak attack exists, then a "weapons free" condition would speed the reaction of the defense to engage short-notice or pop-up hostiles. The SWD must be cognizant at all times of the reaction capability of his allocated weapons to cope with pop-up threats.

#### OPERATIONAL STATUS OF WEAPONS PLATFORMS

The ability of the SAAWC to perform effective management of his available assets is directly affected by the currency and accuracy of the information he receives on operational status, fighter fuel and weapons states, SAM unit ready-use missile counts, and control system serviceability. While each controller has the responsibility to obtain frequent updates on these states, the SWD has overall responsibility. Without it, the SWD cannot effectively assign weapons to targets, nor can the SAAWC anticipate the need for replacing assets with the degree of timeliness required. It is imperative that these status updates be passed to the SAAWC plotters for rapid display on the status boards.

#### LAAM/TAOC COMMUNICATIONS AND DATA LINK OPERATIONS

To effectively control the HAWK distribution of fires and provide adequate cuing of inbound targets, the MC must be thoroughly conversant with the key action formats, symbology, and ATDL-1. Additionally, the MC should be capable of passing accurate and timely voice commands/track information over the AAC/AAI nets as a back-up. It is especially important when the LAAM units are operating under strict radiation control measures which may deny them situational awareness from their own sensors.

#### RADIATION CONTROL MEASURES (RADCON)

The severity of the potential ARM threat will be accounted for in the operational planning phase and suitable RADCON measures designed to counter the threat. The MC must demonstrate a thorough knowledge of the RADCON plan with particular emphasis on its impact on surveillance of the MAGTF AOR and MEZ's. The MC must also be ready with recommendations for modifying the RADCON plan to ensure adequate surveillance should a number of LAAM sensors become casualties or experience system failures for other reasons. The MC will be required to relay changes in RADCOM measures to the LAAM units and obtain acknowledgment; moreover, the MC must fully understand the implications of the plan and assist the TCO's/TO's in maintaining situational awareness at all times.

#### HAWK SYSTEM CAPABILITIES AND LIMITATIONS

The MC must have a sound understanding of the HAWK system to include the following:

1. CWAR and PAR detection ranges and altitude coverage.
2. HPIR tracking ranges/beam dimensions/search patterns.
3. TAS range capabilities and optical limitations.
4. Missile max/min ranges and ceiling.
5. Basic operator actions required throughout acquisition and engagement sequence.
6. Crew functions.
7. Tactical displays and identification procedures.
8. Typical engagement tactics (e.g., shoot-look-shoot, salvo, LASHE, etc.).

#### TASK BRIEFING FOR ASSISTANTS

Items for consideration include:

1. Track initiation and symbology maintenance.

2. Manual or ADP-assisted intercept computation (including TADIL C).
3. Surveillance of FEZ's and adjacent areas.
4. Information flow (fuel/weapons states, engagement reports, etc).
5. Identification criteria and ROE.
6. Internal and external communications utilization.

#### GROUND-TO-AIR COMMUNICATION

WC's must demonstrate the ability to communicate effectively with aircraft using recognized terminology and procedures. When available, and directed, maximum use will be made of secure communications. All voice transmissions must follow the principles of clarity, brevity, and COMSEC. Brevity codes (AC? 165E) and operations specific codewords must be known and employed whenever applicable.

#### TARGET INFORMATION

The WC's must pass timely and accurate target information to fighter aircraft under control. BRA information should be enhanced with formation calls and perceived threat tactics whenever possible. This is particularly vital in multi-bogey engagements. If radar contracts have not yet been established in advance, consideration should be given to briefing them on the FAD in use. It is not necessary for WC's to pass information every radar sweep; communications cadence requires shared radio time between controllers and the fighter crews. Controllers should show an awareness of the aircrews comprehension of the tactical situation and pass only changes to target information or updates which assist the fighters with their radar sort. The ability to listen and learn is a desirable controller skill

#### TACTICAL CONTROL OF FIGHTERS

Tactical control of fighters embraces more than the "school book" geometrical solution to setting up and finalizing an intercept. The evaluator should consider the following:

1. Maintenance of aircrew situational awareness; e.g., all targets in possible AI scan called and identified.
2. Early decision to cover targets, followed as required with positive commands to commit to engagement (with clear instructions to engage, VID, etc.).
3. Positive control attack headings; good initial cut-off headings, conversion to final attack profile and reaction to target evasion. Minimized target penetration.
4. Awareness of sun position/elevation, contrails and local area cloud cover. Maximum tactical use made of the sun/clouds during the attack.
5. Harmony with aircrews; established controllers' authority and contributed positively to mission performance.

#### FLIGHT SAFETY

WC's follow prescribed procedures to ensure the safe conduct of flight for aircraft under their control. The evaluator should observe the following:

1. Timely and accurate "stranger" calls passed, with altitude of the conflicting traffic whenever possible.
2. Positive controller action taken to ensure minimum separation distances maintained.
3. "Check fuel" calls passed in ACM engagements, with necessary time of engagement and altitude checks.
4. Positive controller action taken to prevent encroachment in prohibited areas/airspace.
5. Aircrews warned of weather changes at bases and divert fields and any other factors likely to affect recovery or diversion.

#### ECM CONTROL TECHNIQUES

Optimum adjustments of radar scopes gain levels are used to reduce the effects of jamming and "spoke-riding" technical to direct fighter aircraft to the targets. Additionally, commjam counters should be evaluated, i.e., how did the WC cope with deception and noise jamming. Understanding of burn-through principles and not allowing commjam to detract from his efforts are also evaluated. BCI is employed if dictated by severe ECM. WC's select the least affected radar video for control purposes.

#### POST-ENGAGEMENT REPORTS

Timely post-engagement reports are required to determine the results and update the status of engaged weapons systems. WC's should request details of kills, "leakers" and revised fighter fuel/weapons states, then ensure the information received is relayed to the SWD and SAAWC. Vectors to CAP or tanker will be given, or fighters ordered to RTE if states dictate. MC'S will obtain spot engagement reports and pass these to the SWD and SAAWC. Full HAWK engagement reports will normally be passed separately to avoid cluttering the AAC/AAI nets.

#### WEAPONS PLATFORM CAPABILITIES

The SWD and weapons controllers are required to have a full and detailed knowledge of the friendly and threat weapons platform capabilities. Specific aspects to be evaluated will include.

##### 1. Friendly Platforms.

- Fuel and weapons loadout.
- AI radar characteristics (detection ranges, azimuth/elevation scan limits, acquisition and track capability).
- NAVAIDS.
- Air-to-air missile envelopes (max/mm ranges, launch limitations).
- Airframe performance (agility, ceiling, speeds).
- Fuel burn rates/endurance (CAP loiter or high threat/cruise and afterburner).
- SAW detection/acquisition/engagement envelopes (range and altitude).
- Aircraft turn around times.

##### 2. Threat Platforms.

- Combat radius (lo-lo-lo, hi-lo-hi).
- Combat ceiling.
- Speed (max dash; max sustained, high and low altitude).
- Typical weapons loadout ("dumb"/"smart" munitions; ASM's; AAM's).
- Typical weapons release parameters (altitude, stand off range).
- Fighters AI radar characteristics (detection ranges, look-down/shoot-down capable).
- Threat SAM coverage in AOR (engagement envelopes).
- Threat GCI coverage in AOR.
- Threat tactics (formations, fighter/striker mix, sweeps, altitude splits, offensive and defensive tactics).

TASK: 8B.4.4 CONDUCT DATA TRANSFER AND MANAGEMENT

CONDITION(S): The TAOC is ashore and fully operational. As integral part of the TAOC mission is to effect data transfer and coordination with all other MACCS agencies within the assigned sector and those other agencies required.

STANDARDS: EVAL: Y;: N; NE

- .1 \_\_\_ Establish required voice communications. (KI)
- .2 \_\_\_ Implement current TECH/TAC OPDAT messages.
- .3 \_\_\_ Establishes all data links with appropriate agencies.
- .4 \_\_\_ Coordinates cross-tell procedures and execution with appropriate agencies. (KI)
- .5 \_\_\_ Establishes means/methods to broadcast air raid warnings. (KI)
- .6 \_\_\_ Required reports are passed in a timely fashion.
- .7 \_\_\_ All pertinent data is entered on all air tracks and special points.
- .8 \_\_\_ Devises and briefs the plan detailing the requirements for, and implementation of a succession of data link configurations.

EVALUATOR INSTRUCTIONS: In the absence of higher echelon planning, the squadron will develop data link operational casualty plans. The evaluator will review all documentation dealing with back-up plans and determine if the crews have been thoroughly briefed by questioning crew members. The evaluator is free to declare major equipment items and key crew members casualties in order to fully test the planning and execution. Safety considerations may dictate personnel and equipment remaining operational or in a standby monitor mode.

KEY INDICATORS:

VOICE COMMUNICATIONS

Required voice communications will vary depending upon the scenario and command relationships. For evaluation purposes, required voice communications will be those delineated in annex K of the Op plan and those internal TAOC voice links necessary to implement all portions of the mission (e.g.; the SID's ability to directly control the activities of the ECCM operators located in each radar. A yes evaluation will be given if the TAOC has established all required communications links or, because of communications failure or casualties, has maintained required need lines through alternate paths for 95 percent of the operational time.

DATA LINKS

The specific links the TAOC will participate in are situation dependent and are generally specified by higher authority. The TAOC should be prepared to modify its link configuration to accommodate changes in situation such as assuming NCS for TADIL A or switch from TADIL B to TADIL A should there be a failure in TADIL B communications. For evaluation purposes, a YES will be given if data link information is available 95 percent of the time the TAOC is operational.

CROSSTELL PROCEDURES

Personnel and task assignments are specifically identified prior to any need to implement crosstell procedures. Type of reference system to be used (GEOREF, Polar coordinates, Cartesian coordinates) is established. There should be a track numbering system devised should the automated capability become a casualty.

AIR RAID WARNINGS

Procedures outlined in the operations plan/order Should not be limited to alerting other MACCS or adjacent air defense units. Consideration must be given to alert those units in the vicinity of the TAOC which may not be directly associated with the MACCS (e.g., CSSD) and its' own maintenance and support personnel.

---

TASK: 83.4.5 TRANSFER OF CONTROL TO TAOC FROM AFLOAT

CONDITION(S): The CATF has determined that the AAW area will be divided into separate but adjacent sectors. One sector is the responsibility of the CLF, usually identified as the landward sector, with responsibility delegated to the TAC and exercised by the SMWC. The MACCS has been declared functional and the TAC has requested control of antiair warfare in the designated sector in a preplanned sequence. The afloat agencies are relieved of responsibility but continue to monitor the appropriate communications nets. The afloat agencies will remain prepared to act as a backup or alternate agencies until required to displace out of the area.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Procedures are delineated in the operation order/directives for the phasing of control ashore.
- .2 \_\_\_ Checklists are adequate and utilized to ensure there is no interruption of sustaining ground operations while transferring control of antair warfare ashore.
- .3 \_\_\_ Total operational crew is on hand and briefed concerning duties for passage of control.
- .4 \_\_\_ Equipment is in place and operators are monitoring all communication nets required by the operations order.
- .5 \_\_\_ SAD has reviewed the procedures delineated in the Op order/other directives for the phasing of control ashore and keeps the SAAWC informed of current status.
- .6 \_\_\_ Updated intelligence information, to include the friendly and enemy order of battle and current ATO, are on hand and posted.
- .7 \_\_\_ Exchanges of air defense warnings, weapons release conditions, antiair warfare intelligence, and other pertinent data has been made prior to the transfer of control taking place with the TACC (afloat).
- .8 \_\_\_ SAD ensures all requirements have been met and then advises the SAAWC and TADC/TACC that TAOC is prepared for the phasing of control of MW for the landward sector.
- .9 \_\_\_ As directed, the preplanned sequence of phasing control of AAW ashore is completed and the SAD acknowledges/produces any reports required.
- .10 \_\_\_ Upon completion of transfer of control of AAW ashore, the SAD advises the SAAWC and TACC (afloat)/TADC (ashore) that the TAOC now has control referencing date/time (local).
- .11 \_\_\_ SAD ensures continuous coordination with adjacent and higher agencies during preparation for and transfer of AAW control ashore.
- .12 \_\_\_ SAD ensures all adjacent agencies are notified when transfer of control is completed.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

8B.5 EW/C EXECUTION

TASK. 8B.5.1 CONDUCT SURVEILLANCE

CONDITION(S): An EW/C is deployed ashore to supplement the surveillance for the main TAOC site, and to provide for limited control of fighters and/or SAW units. The mission includes the conduct of integrated surveillance of the designated sector of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Establishes surveillance section comprised of SO/ECCM operator.
- .2 \_\_\_ EW/C commander receives operational briefing from the SAD and SID which augments general guidance obtained from the operations order detailing surveillance taskings.
- .3 \_\_\_ EW/C commander insures preparation and delivery of the surveillance brief during assigned crew briefs.
- .4 \_\_\_ EW/C commander specifies SO areas of responsibility, identification procedures to be employed and closely supervises the SO on position.
- .5 \_\_\_ EW/C commander specifies ECCM actions to be taken when ECM is experienced and supervises that activity.
- .6 \_\_\_ EW/C commander prioritizes the use of surveillance communications.
- .7 \_\_\_ EW/C commander ensures surveillance information is effectively integrated and passed in a timely manner.
- .8 \_\_\_ SO correctly applies the briefed identification criteria to identify and classify all targets detected.
- .9 \_\_\_ SO correctly employs prescribed communications to exchange surveillance data with external agencies and adjacent SAW units.
- .10 \_\_\_ SO demonstrates practical knowledge of formats, and switch actions when an operational facility is associated with the EW/C.
- .11 \_\_\_ SO demonstrates operational knowledge of the radar console operations.
- .12 \_\_\_ SO/ECCM demonstrates operational knowledge of all radar ECCM features and applies them appropriately to minimize the effects of jamming.
- .13 \_\_\_ SO takes correct action in response to changes in EMCON measures, including relay to adjacent HAWK units.
- .14 \_\_\_ EW/C commander ensures MIJI/FIR reports are forwarded to the appropriate command element.
- .15 \_\_\_ Establishes a remote radar video transmission to the TAOC site when required.

EVALUATOR INSTRUCTIONS: The evaluator must determine the exact mission assigned to the EW/C . The configuration of the EW/C equipment should be weighed against the mission to determine whether or not the letter is reasonable with the given T/E. Additionally, crew manning and personnel qualifications will be mission related. For example, if minimal weapons control is anticipated then a qualified SWD may not be required on crew. However, if the weapons control loading takes precedence over surveillance, an SWD is desirable. The evaluator must allow for the reduced capability of the EW/C over the main TAOC when evaluating surveillance performance, especially if the weapons control task load is significant. The EW/C should contribute timely and accurate surveillance of its assigned area to supplement the overall air picture compiled by the TAOC or higher agencies.

KEY INDICATORS: None.

TASK: 8B.5.2 CONDUCT ENGAGEMENT CONTROL

CONDITION(S): An EW/C is deployed ashore to supplement the surveillance for the main TAOC site, and to provide for limited control of fighters and or SAW units. The mission includes conducting engagement control (weapons system control) against hostile aircraft and missiles with available AAW assets within the designated sector of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ EW/C commander receives a operational briefing from the SAD and SWD which augments the general guidance already provided in the operations order detailing weapons engagement procedures.
- .2 \_\_\_ EW/C commander insures preparation and delivery of a weapons briefing during assigned crew briefs.
- .3 \_\_\_ EW/C commander closely monitors the status of weapon engagement zones in and around his area of responsibility/surveillance area.
- .4 \_\_\_ EW/C commander establishes communications and coordination with nearby SAW units in order to expedite early warning information passage.
- .5 \_\_\_ EW/C commander establishes communications and coordination with the tactical air control agencies in the region (i.e, TAOC, TACC (afloat), AEW aircraft, etc.).
- .6 \_\_\_ EW/C commander fully understands assigned friendly weapons platforms capabilities, limitations, and employment.
- .7 \_\_\_ EW/C commander implements positive procedural control measures for all weapons systems assigned for his control.
- .8 \_\_\_ EW/C commander demonstrates knowledge of threat weapons systems and platforms and their likely employment.
- .9 \_\_\_ EW/C commander fully understands the association between air defense warning conditions and weapons release conditions.
- .10 \_\_\_ EW/C monitors and obtains regular updates of the operational Status of weapons platforms under its control and ensures changes are promptly passed to the appropriate agency.
- .11 \_\_\_ EW/C maintains situational awareness with SAW units assigned.
- .12 \_\_\_ EW/C maintained two way information flow of intelligence and combat information between SAW units and higher command element.
- .13 \_\_\_ Crew members understand the capabilities/limitations of the HAWK and STINGER missile systems.
- .14 \_\_\_ EW/C understands and upon direction correctly implements the emission control (EMCON) measures and passes the EMCON conditions to adjacent/subordinate SAW units.
- .15 \_\_\_ EW/C understands the concept of fire control discipline and its role in engagement by SAW units.
- .16 \_\_\_ EW/C correctly employs communications in the ECM environment.
- .17 \_\_\_ EW/C establishes and maintains accurate tracking of aircraft under its control.
- .18 \_\_\_ EW/C passes to aircraft and SAW units timely and accurate information on all tracks in and adjacent to active weapons engagement zones (MEZ's and FEZ's).
- .19 \_\_\_ EW/C commits fighters positively against targets when directed or identified within ROE, to include initial intercept vector, and target information calls (BRA, track, speed, strength, and ID).

- .20 \_\_\_\_\_ EW/C provides timely, accurate target information and positive control until completion of the engagement.
- .21 \_\_\_\_\_ EW/C demonstrates effective tactical control of fighters, using close or broadcast control as required until completion of the engagement.
- .22 \_\_\_\_\_ EW/C demonstrates tactical awareness of aircraft performance and weapons systems capabilities/limitations.
- .23 \_\_\_\_\_ EW/C ensures safe conduct of flight for aircraft under control.
- .24 \_\_\_\_\_ EW/C fully understands and applies, if required, procedures to assist aircraft declaring an emergency.
- .25 \_\_\_\_\_ EW/C demonstrates control techniques in an ECH environment.
- .26 \_\_\_\_\_ EW/C demonstrates a full understanding of the hostile air and ground threat.
- .27 \_\_\_\_\_ EW/C completion of engagement, EW/C obtains state checks and engagement reports for relay to the SAAWC or higher authority.

EVALUATOR INSTRUCTIONS: Refer to TASK 8B.4.3 and TASK 8B.5.1.

KEY INDICATORS: None.

TASK: 8B.5.3 CONDUCT AIRSPACE MANAGEMENT AND CONTROL

CONDITION(S): An EW/C is deployed ashore to supplement the surveillance for the main TAOC site, and to provide for limited control of fighters and or SAW units. The mission includes conducting airspace management and control of aircraft operating in its area of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ EW/C commander receives an operational briefing from the SAD and STD which augments general guidance obtained from the operations order detailing airspace management control procedures.
- .2 \_\_\_\_\_ EW/C commander ensures preparation and delivery of the traffic control and airspace management brief during the main crew briefs.
- .3 \_\_\_\_\_ EW/C commander prioritizes communications for traffic control.
- .4 \_\_\_\_\_ EW/C commander ensures traffic management and control procedures are adhered to by controllers.
- .5 \_\_\_\_\_ EW/C ensures all traffic information is effectively integrated and disseminated in a timely manner.
- .6 \_\_\_\_\_ EW/C remains cognizant of the status of all pertinent NAVAIDS, airfield approach/departure routes and other airfield facilities effecting flight.
- .7 \_\_\_\_\_ EW/C provides enroute control to itinerant traffic, correctly employing applicable CP's and routes from the operations orders/SPINS.
- .8 \_\_\_\_\_ EW/C maintains continuous coordination with air traffic control units or higher command elements for departure and recovery of friendly/allied aircraft.
- .9 \_\_\_\_\_ EW/C provides a situational awareness update to all aircraft that RIO through the EW/C.
- .13. \_\_\_\_\_ EW/C provides navigational assistance to tanker aircraft and facilitates join-ups using correct RT procedures.
- .11 \_\_\_\_\_ EW/C monitors tanker fuel give-away of those aircraft assigned to it and passes timely updates to the TAOC or higher command element as required.

- 12 \_\_\_\_\_ EW/C maintains close coordination with other MACCS agencies (ATC, TAOC, DASC, ASRT) and conducts radar/procedural handovers of aircraft expeditiously.
- .13 \_\_\_\_\_ EW/C maintains close coordination with nearby SAW units to assist in the identification of aircraft recovering through MEZ's/FEZ's in RTF corridors.
- .14 \_\_\_\_\_ EW/C maintains RIO log and relays airborne times of aircraft to higher command element if required.
- 15 \_\_\_\_\_ EW/C ensures that any information pertaining to flight safety hazards is made available to external agencies; e.g., DASC, ASRT, or higher command elements.
- .16 \_\_\_\_\_ EW/C assists in the safe recovery of aircraft in distress.
- .17 \_\_\_\_\_ EW/C directs aircraft to the appropriate frequency/terminal controller as per the ATO or changes as passed.
- .18 \_\_\_\_\_ EW/C provides timely and accurate "stranger" information to aircraft under its' control.
- .19 \_\_\_\_\_ EW/C remains cognizant of emergency procedures, SAR plan, end brevity code words.
- .20 \_\_\_\_\_ The EW/C has prepared and briefed the response to a TAOC casualty.

EVALUATOR INSTRUCTIONS: Refer to TASK 8B.4.2.

KEY INDICATORS: None.

---

TASK: 8B.5.4 TRANSFER OF CONTROL IF SUPERSEDED BY A TAOC

CONDITION(S): An EW/C is deployed ashore to supplement the surveillance for the main TAOC site, and to provide for limited control of fighters and or SAW units. The operation has progressed to the point where sufficient lift to bring the full TAOC ashore has been accomplished, and that agency is now established and ready to start assuming mission functions in the area of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ TAOC equipment is in place and operators are monitoring all communications nets required by the operations order.
- .2 \_\_\_\_\_ EW/C operational crew integrity is maintained until newly arrived personnel have been thoroughly briefed.
- .3 \_\_\_\_\_ Updated situation briefs are provided to the SAD by the EW/C commander.
- .4 \_\_\_\_\_ Status of air defense warning conditions, weapons release conditions, antiair warfare intelligence, and other pertinent data is passed between the active EW/C and the TAOC end continues through the transfer.
- .5 \_\_\_\_\_ Current ATO, required intelligence information and updated procedural information is verified prior to transfer of control.
- .6 \_\_\_\_\_ Transition is conducted function by function until complete.
- .7 \_\_\_\_\_ Notification is made upon completion of the transfer of control to the TACC, the SAAWC/SAD advises the TACC (afloat) or TADC ashore that the TAOC has relieved the EW/C referencing date/time (local).

EVALUATOR INSTRUCTIONS: The interruption of operations should not occur as a result of the transfer of control to the full TAOC from the EW/C. It is preferred that the EW/C remain a separate agency until the transfer is completed.

KEY INDICATORS: None.

---

#### 8B.6 COMMAND, ADMINISTRATION, LOGISTICS, AND CONTINUING ACTION OF MARINES

##### TASK: 8B.6.1 DISCIPLINE

CONDITION(S): The squadron has deployed the TAOC to its tactical site and is operating in an area where enemy small units are active. These units have the ability to probe perimeters, snipe, and to bring smart arms and mortars to bear against friendly positions.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Squadron discipline is demonstrated by individual members being in control of themselves and contributing to mission accomplishment.
- .2 \_\_\_\_ Marines take care to safeguard and clean their weapons, both individual and crew-served, daily.
- .3 \_\_\_\_ Vehicles, generators, etc., are given regular maintenance by the Marines assigned to operate them.
- .4 \_\_\_\_ Marines do not waste or abuse unit supplies or material.
- .5 \_\_\_\_ Supplies are safeguarded from the enemy, from the weather and are not scattered as litter on the terrain.
- .6 \_\_\_\_ Equipment noise reduction measures are taken to reduce detection probability by the enemy.
- .7 \_\_\_\_ The unit maintains good light discipline and cannot be detected by its use of individual or equipment lights.
- .8 \_\_\_\_ Measures to reduce the infrared signature of operating equipment are used to reduce the probability of detection by the enemy.
- .9 \_\_\_\_ Marines wear the prescribed uniform at all times including individual weapon, body armor, helmet, and first aid kit. (KI)
- .10 \_\_\_\_ Leaders actively promote field sanitation and personal hygiene by policing the area, inspecting feet and for body sores, enforcing use of designated heads and good personal health habits.

EVALUATOR INSTRUCTIONS: With exceptions, evaluators will use the 90 percent rule (90 percent of the Marines 90 percent of the time) to determine whether the requirements are being met. The exceptions will be noise and light discipline. These standards will stand literally. If the unit can be located or observed as a result of noise or light, the standard cannot be considered met. This task will be evaluated over the entire exercise and evaluators will note efforts of unit leaders to maintain and correct discipline. If there is improvement by the unit throughout the exercise so that standards are consistently met, the unit may receive a "yes" marking.

KEY INDICATORS:

#### INDIVIDUAL EQUIPMENT IN ELECTRONIC SHELTERS

The wearing of individual "782" equipment while working on or in electronic shelters is not always a safe practice from the standpoint of damage to the equipment or injury to the individual. Individual equipment and weapons are required in the tactical and exercise environment. A prudent approach to what individual equipment is permitted in the electronic shelters by operations and maintenance personnel should be taken.

with provisions made for temporary individual equipment storage (empty embark boxes, etc,) outside the shelters for personnel on crew.

---

TASK: 8B.6.2 USE OF CAMOUFLAGE ADD CONCEALMENT

COINDITION(S): The squadron has deployed the TAOC to its tactical site and is operating in an area where enemy small units are active. These enemy units have the ability to probe perimeters, snipe and bring small arms and mortars to bear against friendly positions.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Ensures that the principles of camouflage siting, discipline, and construction are employed continuously throughout the operation.
- .2 \_\_\_\_ Uses natural materials and camouflage screen support systems to conceal positions and vehicles from enemy ground observation to a distance of 200 meters.
- .3 \_\_\_\_ Camouflages all positions to prevent identification by enemy aircraft by employing soil, fresh foliage, and netting.

EVALUATOR INSTRUCTIONS: The cutting of foliage and digging in some operating areas is not always permitted for environmental reasons. The use of natural cover and concealment coupled with camouflage screening to the extent permitted by environmental restrictions must be evaluated to determine camouflage effectiveness. Environmental restrictions will not preclude a "yes" evaluation.

KEY INDICATORS: None.

TASK: 8B.6.3 ESTABLISH A COMMAND POST (CP)

CONDITION(S): The TAOC has occupied its tactical position and is prepared to conduct the AAW mission. Command administrative and logistics activities must be monitored and coordinated to sustain combat capability. Site security and defense plans are developed and implemented.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Organizes and operates the CP per prescribed procedures contained in the unit SOP.
- .2 \_\_\_\_ Staffs the CP with the executive staff, necessary special staff members, liaison personnel and supporting personnel.
- .3 \_\_\_\_ Organizes the CP to operate on a 24 hour a day basis.
- .4 \_\_\_\_ Eases the CP location on egress/ingress routes, communication requirements, space required, cover and concealment, and ground/perimeter security.
- .5 \_\_\_\_ Identifies alternate CP locations in the event the CP must be displaced rapidly.
- .6 \_\_\_\_ Prepares plans for the establishment of alternate CP's per procedures contained in the unit SOP.
- .7 \_\_\_\_ Employs both active and passive Security measures, e.g., use of local security patrols, natural cover and concealment, supplementary camouflage, etc.
- .8 \_\_\_\_ Restricts movement and access to the CP.
- .9 \_\_\_\_ Remotes radio antennas away from the CP to reduce the probability of detection by hostile forces using direction finding equipment.
- .10 \_\_\_\_ Uses directional field expedient antennas whenever practical.

- .11 \_\_\_ Properly grounds radios and other electronic equipment to reduce susceptibility to noise generating sources.
- .12 \_\_\_ Establishes message handling procedures which provide for message accountability and quick distribution
- .13 \_\_\_ Demonstrates the ability to react to a small unit ground attack.
- .14 \_\_\_ Locates dismount points, message drops, and pick-up points within defended areas.
- .15 \_\_\_ Positions supply and medical facilities to ensure constant communications with the CP.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8B.6.4 OPERATE A COMMAND POST

CONDITION(S): The TAOC has established its tactical position and is prepared to conduct its AAW mission. To facilitate field operations and the coordination of administrative and logistics requirements, a command post has been established.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Conducts a detailed briefing for oncoming watch standers prior to relief.
- .2 \_\_\_ Manages information within the CP to ensure required action is taken in a timely, coordinated, and thorough manner.
- .3 \_\_\_ Maintains close and continuous coordination with higher command elements.
- .4 \_\_\_ Responds to direction by higher echelon commands or control agencies as prescribed in the operations order.
- .5 \_\_\_ Maintains covered communications on those nets so designated in the CEOI.
- .6 \_\_\_ Demonstrates the ability to use other communications paths or means to pass critical traffic when the primary path or means fails.
- .7 \_\_\_ Submits routine reports per the operations order in a timely manner.
- .8 \_\_\_ Ensures around security personnel are briefed fully on enemy situation and capabilities.
- .9 \_\_\_ Ensures air raid/NBC/ground attack alarm is sounded in sufficient time for defensive measures to be taken.

EVALUATOR INSTRUCTIONS: Manning and configuration of the squadron CF is not fixed. However, the facility should have personnel, communications and equipment sufficient to effectively execute all required command support functions.

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

TASK: 8B.6.5 CONDUCT MAINTENANCE/REPAIR OF EQUIPMENT

CONDITION(S): The TACC has occupied its tactical position and is prepared to conduct the AAW mission. Maintenance and repair of TAOC equipment must be monitored and coordinated to sustain combat capability.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Identifies any nonorganic repair or calibration services required to support the TAOC and other equipment to the supporting CSSE.
- 2 \_\_\_\_ Calculates pre-expended bin items and quantities based upon rates of consumption and expected resupply rates to support operational requirements.
- 3 \_\_\_\_ Ensures adequate critical low density parts are available within deployment packups as well as intermediate facilities.
- .4 \_\_\_\_ Identifies special test and support equipment required to support electronic systems.
- .5 \_\_\_\_ Ensures current status of supported equipment is readily available.
- .6 \_\_\_\_ Ensures organizational level maintenance personnel correct all equipment deficiencies within their capabilities per established procedures.
- 7 \_\_\_\_ Ensures maintenance personnel are thoroughly familiar with unit SOP procedures to evacuate equipment to higher echelon maintenance facilities when required.
- 8 \_\_\_\_ Replaces deadlined equipment with maintenance float assets to ensure maximum operational support when required.
- .9 \_\_\_\_ Coordinates equipment evacuation when required.
- 10 \_\_\_\_ Coordinates equipment maintenance records and reports at the organizational level per unit SOP and applicable orders.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 83.6.6 CONDUCT SUPPLY OPERATIONS

CONDITION(S): The squadron has been deployed in support of MAGTF operations. Essential to mission accomplishment is the ability to maintain adequate stock levels for all classes of supply. A MAGTF CSSE is located within the local area of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Ensures initial adequate supply support planning (all classes) is made to accomplish the mission.
- .2 \_\_\_\_ Ensures adequate food, water, diesel fuel and other supplies are distributed at each site.
- .3 \_\_\_\_ Establishes resupply procedures/priorities for food, water, and fuel with higher command element.
- .4 \_\_\_\_ Establishes procedures for obtaining additional spare parts, ORF exchange, and depot items if required.
- .5 \_\_\_\_ Ensures that supply personnel know the location of supply points for all classes of supply to include POL, ordnance and repair parts.

VIII-B-40

ENCLOSURE (1)

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8B 6.7 CONDUCT ADMINISTRATIVE OPERATIONS

CONDITION(S): The squadron has been deployed in support of MAGTF operations. Essential to mission accomplishment is the ability to affect personnel and administrative matters in the field. A MAGTF CSSE is located within the local area of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Requests personnel assets beyond the squadron capability from the higher command element if required.
- .2 \_\_\_ Processes incoming replacements with minimum delay, and completes their assignment to the squadron.
- .3 \_\_\_ Processes personal mail in accordance with postal regulations.
- .4 \_\_\_ Coordinates regular mail delivery to tactical sites.
- .5 \_\_\_ Coordinates morale and welfare activities, to include pay, for all personnel.
- .6 \_\_\_ Submits reports as required to the ACE/MACG S-1 for personnel accountability, administrative, and casualty matters.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8B.6.8 ESTABLISH AND MAINTAIN SITE SECURITY

CONDITION(S): The unit has arrived at the designated site and equipment has been emplaced. The enemy ground situation is such that ground attack by small lightly armed forces must be protected against.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Prepares a ground defense plan with due regard for the ROE and the duty to protect noncombatants.
- .2 \_\_\_ Positions ground surveillance radars to cover likely avenues of approach per the ground defense plan.
- .3 \_\_\_ Emplaces ground anti-intrusion devices (mines, concertina, boobytraps, and engineering stakes) per the ground defense plan.
- .4 \_\_\_ Emplaces M2 (.50 cal) and/or M60 (7.62) MG'S with overlapping fields of fire per the ground defense plan.
- .5 \_\_\_ Establishes control measures and communications to coordinate and control site defenses from one location to include communications between the operational facility and CP.
- .6 \_\_\_ Coordinates with higher command element and adjacent units to integrate security with friendly forces; i.e., local security patrols, artillery support, etc.
- .7 \_\_\_ Requests ground security augmentation forces if site cannot be protected with organic resources.

- .8 \_\_\_\_\_ Designates a reaction force to repel threats to perimeter security.
- .9 \_\_\_\_\_ Establishes reliable communications among ground defense elements and reaction forces/outside units who are providing support.
- .10 \_\_\_\_\_ Establishes observation/listening posts beyond the site perimeter consistent with resources available.
- .11 \_\_\_\_\_ Develops plans for equipment destruction in the event of emergency site abandonment.
- .12 \_\_\_\_\_ Ensures explosives are available for emergency equipment destruction.
- .13 \_\_\_\_\_ Prepares a ground defense map and posts it in the CF.
- .14 \_\_\_\_\_ Briefs ground defense plan to all supervisory personnel. (KI)
- .15 \_\_\_\_\_ Continuously evaluates and improves perimeter security positions and camouflage.

EVALUATOR INSTRUCTIONS: The unit ground security can be tested using a small aggressor force to probe, snipe or otherwise harass the unit as it establishes the site and after all ground security measures have been taken. The scope and intensity of this action should be generally commensurate with intelligence estimates and within the units capability to defend itself.

KEY INDICATORS:

GROUND DEFENSE MAP

Should include the applicable elements of the following:

1. Tactical Site Layout.
2. Bunkers.
3. Location of Forces.
4. Foxholes/fighting positions.
5. Fields of Fire.
6. Barbed Wire.
7. Mines.

CONTINUING OPERATIONS PLAN

A plan should be developed to allow for continued AAW operations as alert conditions increase in response to the ground threat. Areas to be considered should include:

1. Defining TAOC AAW functions to continue through ground defense operations based on alert requirements or posture.
2. TADC crew minimal manning procedures.
3. TADC AAW operations termination point.
4. TACC AAW operations restoration plan.

TASK: 8B.6.9 OPERATE AN AID STATION

CONDITION(S): The squadron has deployed in support of MAGTF operations. Essential to the health care of squadron personnel is the immediate treatment of casualties and routine medical support. A field hospital is located within the area of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Ensures appropriate numbers of medical personnel are available to staff the aid station(s) for extended operations.
- 2 \_\_\_\_ Ensures medical supplies and equipment are available at the aid station(s) to provide health care and to process casualties.
- .3 \_\_\_\_ Requests medical information for assigned personnel to include location of additional military and civilian facilities and any special problems or diseases expected in the operational area.
- .4 \_\_\_\_ Disseminates location of aid station(s) to higher command echelons.
- .5 \_\_\_\_ Provides preventive medicine measures for the control of disease.
- .6 \_\_\_\_ Provides emergency treatment of casualties.
- .7 \_\_\_\_ Conducts TRIAGE when required.
- .8 \_\_\_\_ Prepares patients, establishes priorities, and arranges for rearward evacuation if required.
- .9 \_\_\_\_ Coordinates the communications support for assigned medical elements.
- .10 \_\_\_\_ Coordinates casualty reporting procedures with all appropriate command elements.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8B.6.10 PROCESS ENEMY PRISONERS OF WAR (POW'S)

CONDITION(S): Small enemy units are active in the vicinity of the TADC site. These units are armed with a variety of shoulder fired weapons and have the ability to target both personnel and equipment. Local activity has been increasing. Attempts have been made to penetrate the perimeter security. The ACE/MACG has designated a POW collection point.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ The squadron has, and uses, an SOP for POW's.
- .2 \_\_\_\_ Individual Marines handling POW's segregate them by type and sex; officers, NCO's, troops, civilian combatants, etc.
- .3 \_\_\_\_ POW'S are searched immediately after capture; weapons and items of potential intelligence value are tagged and evacuated at the same time as the POW; personal items and protective clothing are returned to the POW.
- .4 \_\_\_\_ POW's are required to remain silent and are not permitted to converse among themselves.
- .5 \_\_\_\_ POW's are processed with speed to obtain maximum intelligence benefits.
- .6 \_\_\_\_ Marines guarding POW's ensure that they are safe-guarded from abuse and from the hazards of enemy fire.
- .7 \_\_\_\_ Perishable information obtained from POW's is reported immediately to higher command elements.

MCO 3501.9B  
5 JUN 1991

- .8 \_\_\_\_\_ Enemy casualties receive the same medical care and MEDEVAC priorities as unit casualties with any difference in treatment based solely on medical reasons.
- .9 \_\_\_\_\_ POW's are escorted under guard to the designated collection point as soon as possible.
- .10 \_\_\_\_\_ POW's and all recovered equipment/documents are transferred to higher command elements as soon as possible.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

#### 8B.7 NBC OPERATIONS

TASK: 8B.7.1 PREPARE FOR NBC OPERATIONS

CONDITION(S): Threat forces have been reported to be capable of employing NBC munitions in the area where the TAOC is located. Due to the threat, passive and active defense measures must be used for survival of the unit.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Possesses an SOP which outlines procedures for enemy NBC strikes and reports required.
- .2 \_\_\_\_\_ Ensures individual NBC defense equipment authorized by the unit table of equipment (T/E) is serviceable and issued to each individual.
- .3 \_\_\_\_\_ Ensures unit NBC defense equipment (including mops, brooms, shovels, rags, etc.) authorized by unit T/E is operationally ready and distributed to designated and trained/knowledgeable operators.
- .4 \_\_\_\_\_ Ensures decontamination equipment and bulk decontaminates authorized by T/E's are available and ready for transport to a decontamination area.
- .5 \_\_\_\_\_ Ensures M11 decontamination equipment units are filled (water used for training).
- .6 \_\_\_\_\_ Ensures NBC trained personnel are available on a 24-hour a day basis.
- .7 \_\_\_\_\_ Ensures personnel thoroughly understand mission oriented protective posture (MOPP) for the control of exposure of personnel to NBC hazards.
- .8 \_\_\_\_\_ Establishes MOPP level, and personnel are at or above the required MOPP level.
- .9 \_\_\_\_\_ Marines properly identify NATO or threat NBC contamination markers.
- .10 \_\_\_\_\_ Emplaces equipment to maximize utilization of terrain features for cover, concealment, and topographic shielding from NBC attacks.
- .11 \_\_\_\_\_ Establishes a control center collocated with the TAOC.

EVALUATOR INSTRUCTIONS: Provide the unit information to expect an imminent nuclear attack by the enemy, and integrate NBC scenarios with normal operational assignments. Evaluator(s) should be school trained in the area of NBC Defense (MOS 57XX) or be thoroughly trained in this area as part of Evaluators' School.

VIII-B-44

ENCLOSURE (1)

KEY INDICATORS: None.

---

TASK: 8B.7.2 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): TAOC is informed that nuclear attack is imminent. SOP's and/or operation orders are onhand to provide checklists, sequence of actions, and guidance.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Identifies backup/alternate command, control, and communications procedures.
- .2 \_\_\_ Alerts subordinate/displaced elements.
- 3 \_\_\_ Unit continues mission while implementing actions to minimize casualties and damage.
- .4 \_\_\_ Protects vehicles and equipment by emplacing behind masking terrain.
- .5 \_\_\_ Initiates periodic monitoring using available survey instruments.
- .6 \_\_\_ Identifies/prepares shelters for defense against heat, blast, and radiation.
- .7 \_\_\_ Personnel minimize exposure possibilities by rolling down sleeves, buttoning collars, and wearing any additional clothing equal to a two-layered uniform.
- .8 \_\_\_ Secures/protects loose items, flammable/explosive items, food, and water from heat, blast, and radiation.
- .9 \_\_\_ Demonstrates proficiency in standard first aid procedures to provide self/buddy aid for nuclear blast, and thermal effects.

EVALUATOR INSTRUCTIONS: Commander is informed that nuclear weapons have been used in the area.

KEY INDICATORS: None.

---

TASK: 8B.7.3 RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator, or by other appropriate means.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Personnel take immediate action, upon recognizing the attack, to shield themselves from blast, heat of detonations by taking cover in fighting holes, bunkers, culverts, caves, tunnels, etc.
- .2 \_\_\_ Maintains or re-establishes chain of command and communications, Resumes mission if possible.
- 3 \_\_\_ Submits NBC-1 initial and follow-up reports to higher command. Reports are rapidly forwarded, by secure means, when possible.
- .4 \_\_\_ Administers first aid to casualties and evacuates to a medical treatment station as the mission permits.
- .5 \_\_\_ Submits damage assessment by secure means to higher/supported command element per SOP.
- .6 \_\_\_ Continues monitoring using available survey instruments.

MCO 3501.9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast, heat, dazzle, radiation, and electromagnetic pulse (EMP). Communications Systems (antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle) during the simulated nuclear detonations, will be assessed as EMP casualties.

KEY INDICATORS: None.

TASK. 8B.7.4 RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): A nuclear detonation has occurred. The TAOC/EW/C location is within the predicted fallout zone. An M5A2 radiological fallout predictor, or Substitute, is available. The unit gets effective downwind messages at least once every 3 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit; NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Performs mission concurrently with all other actions.
- .2 \_\_\_ Advises supervisors, and notifies subordinate elements of estimated time of fallout arrival.
- .3 \_\_\_ Maintains monitoring using available survey instruments.
- .4 \_\_\_ Protects equipment, munitions, POL, food, and water from fallout.
- .5 \_\_\_ Takes individual protective measures to minimize fallout effects as mission permits.
- .6 \_\_\_ Forwards NRC-4 reports, as required, to the higher command element.
- .7 \_\_\_ Records unit total dose information and reports this information to higher command elements, using available secure means.
- .8 \_\_\_ Minimizes exposure while commanding officer determines if relocation to a clean area is necessary or possible. Calculates optimum time of exit.
- .9 \_\_\_ Handles casualties and provides first aid treatment in a nuclear environment.
- .10 \_\_\_ Assesses impact of casualties on unit mission.

EVALUATOR INSTRUCTIONS: Commander is advised of estimated time of fallout arrival.

KEY INDICATORS: None.

TASK: 8B.7.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time and tactical situation permit decontamination.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Establishes decontamination priorities.
- .2 \_\_\_ Establishes decontamination point.
- .3 \_\_\_ Ensures decontamination personnel wear appropriate protective clothing, and equipment

VIII-B-46

ENCLOSURE (1)

- .4 \_\_\_\_ Decontaminates equipment, personnel, and individual weapons using appropriate decontamination equipment.
- .5 \_\_\_\_ Decontaminates unit equipment and vehicles using appropriate expedient devices.
- .6 \_\_\_\_ Marks contaminated areas with NATO standard NBC markers.
- .7 \_\_\_\_ Determines adequacy of decontamination using available personnel and equipment monitoring instruments.
- .8 \_\_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provides location to the higher command element.
- .9 \_\_\_\_ Decontaminates decontamination personnel as necessary.
- .10 \_\_\_\_ Remains within operational exposure guidance (OEG).
- .11 \_\_\_\_ Records total dose information and reports to the higher command element.

EVALUATOR INSTRUCTIONS: FM 3-5 provides guidelines for the decontamination procedures.

KEY INDICATORS. None.

TASK: 8B.7.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): Tactical situation forces the TAOC/EW/C to cross a radiological contaminated area while moving to a new site. Unit receives a NBC-S report or contamination overlay from the higher command element.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Posts NBC-S report and/or contamination overlay to situation map and determines route.
- .2 \_\_\_\_ Obtains route clearance and approval, if necessary.
- .3 \_\_\_\_ Provides turn back dose and dose rate to advance party and/or reconnaissance team.
- .4 \_\_\_\_ Ensures vehicles receive additional shielding and personnel are provided all available protection from dust.
- .5 \_\_\_\_ Dispatches advance party and/or reconnaissance team to reconnoiter new areas.
- .6 \_\_\_\_ Crosses contaminated area while employing contamination avoidance techniques.
- .7 \_\_\_\_ Operates within operational exposure guidance.
- .8 \_\_\_\_ Determines the degree of personnel and equipment contamination after clearing the contaminated area, using monitoring instruments.
- .9 \_\_\_\_ Establishes and follows decontamination priorities.
- .10. \_\_\_\_ Records unit total dose information, using available total dose instruments, and reports to higher command element.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8B.7.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): Unit receives a friendly nuclear STRIKWARN per FM 3-3, appendix G. The TAOC/EW/C is located within minimum safe distance (MSD) zones 2 to 3.

STANDARDS: EVAL: Y; N; NE

- .1  Applies the STRIKWARN accurately and completely to the situation map within 5 minutes after message receipt.
- .2  Makes pertinent information regarding the planned detonation (time of burst, ground zero, rail-out coverage, MSD, etc.) available to the commanding officer.
- .3  Advises commanding officer on the vulnerability of the unit to the burst and residual contamination.
- .4  Advises commanding officer of the measures needed to prevent casualties, damage, and extended interference with the mission.
- .5  Implements protective measures, as directed by higher command element, consistent with the mission.
- .6  Increases MOPP level consistent with mission, temperature, work rate, and guidance.
- .7  Places vehicles behind masking terrain.
- .8  Turns off duplicate electronic devices; disassembles erected antennas; ties down antennas, flare minimum radio equipment remains erected.
- .9  Places all loose items (small weapons, tools, etc.) and highly flammable/explosive items (POL), propellants, missiles, etc.) in vehicles or shelters.
- .10  Acknowledges the warning before the expected time of burst. All Subordinate units have been warned and protective measures implemented. (KI)
- .11  Ensures personnel take cover in foxholes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, etc.), or lie prone on open ground.

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to unprotected personnel and equipment.

KEY INDICATORS:

WARNING

TAOC should warn subordinate/detached elements of an impending nuclear detonation by using one of the following methods:

1. Using a code word or brevity code from the CEOI to indicate the message is a nuclear strike warning.
  2. A brief, prearranged message that directs the receiver to implement specific protective measures.
  3. Encoded message with expected time of burst, sent most expedient means of communication.
-

TASK: 8B.7.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S): TAOC is informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Implements the chemical defense SOP which addresses chemical defense/decontamination procedures.
- .2 \_\_\_ Increases MOPP level consistent with mission, temperature, and work rate.
- .3 \_\_\_ Identifies unit tasks requiring a high degree of manual dexterity, strength, and difficulty while in MOPP 4.
- .4 \_\_\_ Plans personnel rotation, or assigning additional personnel while in MOPP 4.
- .5 \_\_\_ Marines demonstrate the capabilities for donning the protective mask and chemical protective ensemble.
- .6 \_\_\_ Uses the buddy system to facilitate individual monitoring/treatment for chemical agent poisoning and emergency decontamination.
- .7 \_\_\_ Continues mission while implementing all actions to minimize casualties and damage.
- .8 \_\_\_ Covers essential equipment, munitions, POL, food, and water supplies that cannot be placed in a shelter with readily decontaminated tarps, ponchos, etc.
- .9 \_\_\_ Ensures that M11's are filled and there is an available uncontaminated water source with a supporting road network.
- .10 \_\_\_ Reports potential decontamination sites to the higher command element.
- .11 \_\_\_ Erects and monitors available chemical agent alarms.
- .12 \_\_\_ Uses protective NBC equipment and supplies properly and maintains equipment in a high state of serviceability.
- .13 \_\_\_ Demonstrates a knowledge of chemical agent symptoms.

EVALUATOR INSTRUCTIONS: Unit is informed that chemical weapons have been used, and that attack is imminent.

KEY INDICATORS: None.

TASK: 8B.7.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): TAOC/EWIC is subjected to a chemical agent attack. Site should support the type of activities being conducted and permit the safe use of simulators and devices.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Responds to a chemical alarm by taking immediate protective measures followed by treatment/decontamination of casualties. (KI)
- .2 \_\_\_ Personnel mask automatically upon notification of any enemy artillery, rocket, or air attack/overflight.
- .3 \_\_\_ Personnel mask automatically upon perceiving a suspicious odor, airborne droplets/mist, or smoke from unknown source.
- .4 \_\_\_ Marines unmask only when authorized. (KI)

- .5 \_\_\_\_ Performs mission for at least 4 hours while in MOPP
- .6 \_\_\_\_ Identifies type of chemical agent using available detector kit.  
If persistent agent:
- .7 \_\_\_\_ Locates and marks with NATO standard markers persistent agent contamination areas.
- .8 \_\_\_\_ Reports location and type of contamination to the higher command element, and plots the location per FM 3-3.
- .9 \_\_\_\_ Determines if immediate relocation to a clean area is necessary or possible and advises the higher command element.
- .10 \_\_\_\_ Determines decontamination priorities and requests decontamination support if required.
- .11 \_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns medical treatment facility.
- .12 \_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns graves registration collection point.  
If nonpersistent agent:
- .13 \_\_\_\_ Follows unmasking procedures. (KI)
- .14 \_\_\_\_ Evacuates WIA's to the medical treatment facility as mission permits.
- .15 \_\_\_\_ Evacuates WIA's to the graves registration collection point as mission permits.
- .16 \_\_\_\_ Services detector units and returns them to operation.
- .17 \_\_\_\_ Replaces expended chemical defense items as, required.
- .18 \_\_\_\_ Adjusts MOPP level, as required.
- .19 \_\_\_\_ Plans and provides first aid treatment to casualties in a chemical environment.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat designated casualties". Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator. Ninety percent of the personnel must successfully accomplish the tasks for the unit to receive a "yes" evaluation.

KEY INDICATORS:

CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach, without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.

MCO 3501.9B  
5 JUN 1991

2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it.
2. Then they clear their masks, reestablish the seal, and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and rascal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

---

TASK: 8B.7.10 PERFORM HASTY DECONTAMINATION

CONIDITION(S): Personnel and equipment have been contaminated by a chemical agent. Time is not available for complete decontamination. The hazard is such that hasty decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Decontaminates individual weapons and TADC equipment using appropriate decontamination kits.
- .2 \_\_\_\_ Determines extent of decontamination and establishes decontamination priorities.
- .3 \_\_\_\_ Removes contaminated protective covers and decontaminates, or discards.
- .4 \_\_\_\_ Uses appropriate decontamination procedures for items being decontaminated. (KI)
- .5 \_\_\_\_ Decontaminates equipment and vehicles using appropriate expedient devices.
- .6 \_\_\_\_ Determines adequacy of decontamination.
- .7 \_\_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provides locations to higher command element.
- .8 \_\_\_\_ Reduces MOPP level, if required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### DECONTAMINATION PROCEDURES

1. If support is not available for conducting hasty decontamination, initial decontamination of unit equipment, vehicles and weapons may be accomplished by:
  1. Removing all gross liquid contamination with sticks or other improvised devices, which are buried after use.
  2. Utilizing M11 decontamination apparatus filled with DS2 to spray areas frequently used or touched (water is used to simulate DSZ in a training environment).

Contaminated items that may need special decontamination treatment are:

MCO 3501.9B  
5 JUN 1991

1. POL, food, and water containers and munitions. These are washed with soapy water, rinsed, and thoroughly air dried.
2. Communications equipment, electronic vans, and other electronic equipment are decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (water is used for training purposes).
3. Optical instruments are blotted with rags and then wiped with lens cleaning solution or organic solvent.

Adequacy of decontamination is determined using the chemical agent detector kit. If contamination is still present, procedures can be repeated. Decontamination support can be requested or the risk of using the equipment can be accepted.

---

TASK: 8B.7.11 COORDINATE FOR DELIBERATE DECONTAMINATION EQUIPMENT

CONDITION(S): Equipment has been contaminated by a chemical agent. Hasty decontamination has been accomplished. Time is available for complete decontamination. Decontamination support from a decontamination unit is available upon request.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Coordinates with decontamination unit for arrival time, location, supplies, equipment, and personnel support to be furnished and estimated time of completion.
- .2 \_\_\_ Dispatches advance party following receipt of route clearance to personnel/equipment decontamination stations (PDS/EDS) assembly area.
- .3 \_\_\_ Moves main body to PDS/EDS assembly area and organizes for processing.
- .4 \_\_\_ Begins decontamination as scheduled.
- .5 \_\_\_ Reorganizes squadron personnel in a clean area upwind of residual effects for the resumption of their mission.
- .6 \_\_\_ Adjusts MOPP level, as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8B.7.12 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S) The protective clothing is contaminated and a suitable uncontaminated area is available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Removes contaminated clothing without transfer of contamination.
- .2 \_\_\_ Changes to new protective clothing.

EVALUATOR INSTRUCTIONS: None.

VIII-B-52

ENCLOSURE (1)

KEY INDICATORS: None.

TASK: 8B.7.13 SCORE THE NBC EXAM

CONDITION(S): Classroom Atmosphere, An exam not to exceed 30 minutes, will be prepared at the wing/group level. All available personnel will take the exam.

STANDARD: EVAL: Y; N; NE

- .1 \_\_\_\_ Unit averaged 10 percent or higher.
- .2 \_\_\_\_ Unit averaged 20 percent or higher.
- .3 \_\_\_\_ Unit averaged 30 percent or higher.
- .4 \_\_\_\_ Unit averaged 40 percent or higher.
- .5 \_\_\_\_ Unit averaged 50 percent or higher.
- .6 \_\_\_\_ Unit averaged 60 percent or higher.
- .7 \_\_\_\_ Unit averaged 70 percent or higher.
- .8 \_\_\_\_ Unit averaged 80 percent or higher.
- .9 \_\_\_\_ Unit averaged 90 percent or higher.
- .10 \_\_\_\_ Unit averaged 100 percent.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N, as appropriate. As an example, if the team average was 76 percent. Task 8B.7.13.1 through BB.7.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA:

- 1. Number of personnel in unit: \_\_\_\_
- 2. Number of personnel taking exam: \_\_\_\_
- 3. Unit average: \_\_\_\_

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

SECTION 8C  
DIRECT AIR SUPPORT CENTER (DASC)

ENCLOSURE (1)

TABLE OF CONTENTS

	PAGE
MPS 8C.1 - PHASING DIRECT AIR SUPPORT CONTROL ASHORE	
TASK 8C.1.1 CONDUCT INITIAL PLANNING	VIII-C-1
TASK 8C.1.2..... CONDUCT INTELLIGENCE PLANNING	VIII-C-2
TASK 8C.1.3..... CONDUCT AIR SUPPORT SPECIFIC PLANNING	VIII-C-3
TASK 8C.1.4 CONDUCT ELECTRONIC WARFARE PLANNING	VIII-C-5
TASK 8C.1.5 CONDUCT DASC SITE SELECTION PLANNING	VIII-C-5
TASK 8C.1.6..... CONDUCT LOGISTICS PLANNING	VIII-C-7
MPS 8C.2 - COORDINATION AND CONTROL OF PREPLANNED DIRECT AIR SUPPORT	
TASK 8C.2.1. .... CONDUCT RECONNAISSANCE, SELECTION AND OCCUPATION OF POSITION (RSOP)	VIII-C-8
TASK 8C.2.2. .... ESTABLISH THE DASC AND COMMUNICATIONS	VIII-C-10
MPS 8C.3 - COORDINATION AND CONTROL OF IMMEDIATE AIR SUPPORT	
TASK 8C.3.1 ..... CONDUCT DASC CREW BRIEF	VIII-C-11
TASK 8C.3.2..... CONTROL TO DASC FROM AFLOAT	VIII-C-16
TASK 8C.3.3..... CONTROL OF PREPLANNED DIRECT AIR SUPPORT	VIII-C-18
TASK 8C.3.4..... CONTROL OF IMMEDIATE DIRECT AIR SUPPORT	VIII-C-22
TASK 8C.3.5..... CONDUCT AIR DEFENSE MEASURES AND COORDINATION	VIII-C-25
TASK 8C.3.6 ..... CONDUCT INFORMATION/DATA TRANSFER AND COORDINATION	VIII-C-26
TASK 8C.3.7..... COORDINATE AIR SPACE MANAGEMENT WITH TWO DASC'S	VIII-C-26
MPS 8C.4 - AIR DEFENSE MEASURES	
TASK 8C.4.1 ..... INDIVIDUAL ACTIONS BY MARINES	VIII-C-28
TASK 8C.4.2 ..... IMPLEMENT UNIT CAMOUFLAGE AND CONCEALMENT MEASURES	VIII-C-29
TASK 8C.4.3..... ESTABLISHMENT AND OPERATION OF TACTICAL SITE	VIII-C-30
TASK 8C.4.4..... CONDUCT MAINTENANCE/REPAIR OF EQUIPMENT	VIII-C-31
TASK 8C.4.5..... CONDUCT SUPPLY OPERATIONS	VIII-C-32
TASK 8C.4.6..... CONDUCT ADMINISTRATIVE OPERATIONS	VIII-C-32
TASK 8C.4.7..... ESTABLISH AND MAINTAIN SITE SECURITY	VIII-C-33
TASK 8C.4.8..... CONDUCT MEDICAL SUPPORT	VIII-C-34
TASK 8C.4.9..... PROCESS ENEMY PRISONERS OF WAR (POW's)	VIII-C-34

MPS 8C.5 - NBC OPERATIONS

TASK 8C.5.1	PLANNING OPERATIONS	VIII-C-36
TASK 8C.5.2	PREPARE FOR NUCLEAR ATTACK	VIII-C-37
TASK 8C.5.3	RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	VIII-C-37
TASK 8C.5.4	RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK	VIII-C-38
TASK 8C.5.5	PERFORM RADIOLOGICAL DECONTAMINATION	VIII-C-38
TASK 8C.5.6	CROSS A RADIOLOGICAL CONTAMINATED AREA	VIII-C-39
TASK 8C.5.7	PREPARE FOR A FRIENDLY NUCLEAR STRIKE	VIII-C-40
TASK 8C.5.8	PREPARE FOR A CHEMICAL AGENT ATTACK	VIII-C-41
TASK 8C.5.9	RESPOND TO A CHEMICAL AGENT ATTACK	VIII-C-41
TASK 8C.5.10	PERFORM HASTY DECONTAMINATION	VIII-C-43
TASK 8C.5.11	COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT	VIII-C-44
TASK 8C.5.12	EXCHANGE PROTECTIVE CLOTHING	VIII-C-44
TASK 8C.5.13	SCORE THE NBC EXAM	VIII-C-44

8C.1 PHASING DIRECT AIR SUPPORT CONTROL ASRORE

TASK: 8C.1.1 CONDUCT INITIAL PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The Aviation Combat Element (ACE) has been constituted and staff planning has begun. The MASS commander has been assigned to provide a Direct Air Support Center to the MAGTF. A planning staff to support the MACGACE planning staff in preparing the Air Operations annex to the ACE Operations Order (operation plan) has been organized.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Uses an established SOP for planning.
- .2 \_\_\_ Establishes early coordination with ATF and/or joint force command aviation planners and control agencies for all relevant phases of operations.
- .3 \_\_\_ Provides air support and aircraft control input to the aviation estimates of supportability for all operations assigned, and identifies any limitations or problem areas. (KI)
- .4 \_\_\_ Coordinates all relevant communication requirements for subordinate, adjacent and higher level circuits with the MACG/ACE communications planners.
- .5 \_\_\_ Establishes liaison with higher, adjacent, and subordinate units throughout the planning phase/or as directed by the MACG/ACE planning staff.
- .6 \_\_\_ Issues directives, memorandums or outline plans, and hosts or attends staff conferences or informal briefings as required or as directed by the MACG/ACE planning staff.
- .7 \_\_\_ Establishes coordination with local Rear Area Security Commander in accordance with the Rear Area Security Plan or operation plan.
- .8 \_\_\_ Reviews initial force list and/or MACG/ACE planning guidance to determine the role of UAV's in the operation.
- .9 \_\_\_ Recommends to the MACG/ACE planning staff required UAV mission data and format as it should appear on the ATO.
- .10 \_\_\_ Ensures air support requirements are coordinated with planned air defense measures as directed by the MACG/ACE planning staffs.

EVALUATOR INSTRUCTIONS: Evaluator examines planning documents to ensure that the above requirements were accomplished during planning.

KEY INDICATORS:

AVIATION ESTIMATE OF SUPPORTABILITY (8C.1.1.3)

The Aviation Planning Instructional Pamphlets and FMFM 3-1 Appendix A, provide a sample format. The purpose is to summarize significant aviation aspects of the situation as they might influence any courses of action proposed, and to evaluate and determine how aviation units can best be employed to support the contemplated landing force courses of action. The estimate is prepared by the Tactical Air Commander (TAC) assisted by his staff and subordinate elements. The estimate, at a minimum, provides the following:

1. Which course(s) of action can best be supported by the ACE.
2. The disadvantages of less desirable courses of action.
3. Significant aviation (to include C3) limitations and problems of an operational or logistical nature.
4. Measures that can be taken to resolve aviation problems to include requesting additional theater assets.

MCO 3501.9B  
5 JUN 1991

See FMFM 3-1. Appendix A for detailed format and informational requirements.

---

TASK: 8C.1.2 CONDUCT INTELLIGENCE PLANNING

CONDITION(S): A MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious landing and/or subsequent operations ashore. The embarked ACE is capable of supporting all aviation functions and the DASC requires updated and complete intelligence information to carry out its support efforts. An S-2 element has been established within the support provided to the DASC.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Obtains a preliminary aviation intelligence estimate upon receipt of the initiating directive.
- .2 \_\_\_\_ Requests a detailed aviation intelligence estimate. (KI)
- .3 \_\_\_\_ Develops and forwards EE1's to the MACG/ACE G/S-2. (KI)
4. \_\_\_\_ Determines requirements for maps, charts, photographs and other related products.
- .5 \_\_\_\_ Records information in the journal/workbook for ease of study and comparison and sends information to command and other requesting elements.
- .6 \_\_\_\_ Obtains and maintains a complete Enemy Order of Battle (EOB) which includes information on missiles, aviation assets, EN, ground forces, and space assets.
- .7 \_\_\_\_ Determines and interprets information of significance to the DASC and forms logical conclusions which can serve as the basis for determining the effects on air support operations.
- .8 \_\_\_\_ Establishes procedures for intelligence dissemination i.e., timeliness, usability of form, pertinence, and security of gathered information in concert with MACG/ACE G/S-2 personnel.
- .9 \_\_\_\_ Follows established transmission paths for aviation intelligence information gathered.
- .10 \_\_\_\_ Requests information to prepare a detailed rear area threat assessment for the MASS detachment and provides updates as information becomes available.
- .11 \_\_\_\_ Provides information to the commander which will aid in the development of the site around defense plan.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

INTELLIGENCE ESTIMATE (8C.1.2.2)

Estimating intelligence is a continuous process that begins immediately after receipt of the initiating directive and continues throughout all phases of the operation. Initial aspects of this estimate are concerned with characteristics of the terrain in the objective area; anticipated weather and conditions at the time projected for the operation; the location, characteristics and composition of available landing sites; the general strength, disposition, and composition of enemy forces in the objective area; and the location of civilian population concentrations and places protected by the law of war. This estimate must also be concerned with the following five basic intelligence tasks:

1. Determination of requirements (continuous process).
2. Preparation of collection plans.
3. Processing techniques.
4. Collection of confirmatory information.

VIII-C-2

ENCLOSURE (1)

5. Dissemination of updated intelligence information.

The intelligence estimate is normally written if planning time allows. The subsequent estimates are made as the operation progresses and are generally called for on short notice. Normally based on such a small amount of new material, the estimate is presented orally, and may be supported by a situation map and notes. However, these changes are incorporated into the basic continuing estimate as soon as possible.

ESSENTIAL ELEMENTS OF INFORMATION (8C.1.2.3)

EEI's should take the form of simple, concise requests consisting of three parts; positive requests, qualifying questions and statements, and prioritization of submitted requests.

---

TASK: 8C.1.3 CONDUCT AIR SUPPORT SPECIFIC PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The Aviation Combat Element has been constituted and staff planning has begun. The MASS commander and his staff are supporting the MACG/ACE planning staff in preparing the air support portions of the operations order. The MAGTF commander has given guidance to the TAC on the apportionment of ACE assets to the air support mission. The MACG/ACE G/S-2 has provided the latest intelligence on the objective area of the enemy forces. Preliminary site selection planning has occurred.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Provides input to the preparation of the MACG/ACE communications plan to include DASC communications required for effective coordination and control of all direct support aircraft, encryption hardware/software, and authentication materials. (KI)
- .2 \_\_\_\_\_ Recommends air support control measures; e.g., control points, RTF etc. in accordance with FMFM 5-4A or guidance set forth by the MACG/ACE planning staff.
- .3 \_\_\_\_\_ Remains cognizant of all planning and coordination involved in establishing airspace management/control procedures.
- .4 \_\_\_\_\_ Plans for the tactical redeployment of the DASC and ASRT(s) to alternate sites in response to changes in the MAGTF requirements, the threat, or the ground force positions in conjunction with the Ground Combat Element Fire Support Coordination Center.
- .5 \_\_\_\_\_ Recommends UAV control measures for deconfliction/integration with direct air support aircraft and other supporting arms; i.e., ACA's, control points, etc.
- .6 \_\_\_\_\_ Determines communications paths required with the Ground Control Station (GCS) of the UAV units.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

REQUIRED COMMUNICATIONS (8C.1.3.1)

The communications requirements for the DASC are functionally oriented and will vary depending upon the requirements to phase control ashore and communications status of the other agencies the DASC coordinates with. The communications paths used by the DASC may involve the use of either dedicated or consolidated nets, and/or the use of hard wire. The communications capabilities of other agencies and the intended method to provide those capabilities should not be a factor in evaluating the DASC's ability to perform the required functions. The communications means used by the DASC are dictated by the tactical situation. The question the evaluator should ask is, "Can the DASC communicate with the necessary external agencies in order to perform the mission?" Listed below are the typical agencies the DASC must communicate with to perform its mission:

1. TACC/TADIC (ashore or afloat).

MCO 3501.9B  
5 JUN 1991

2. TAOC.
3. SACC (afloat).
4. FSCC.
5. HDC (afloat).
6. TACP/FAC(A).
7. TAC(A)/HC(A)/DASC(A).
8. Ground Control Station (GCS) of the UAV units.
9. ASRT.
10. LAAD element.
11. Forward sited aircraft.
12. Direct air support aircraft.
13. Units requesting immediate direct air support.

The subordinate ASRT communicates with the below listed agencies to perform its mission:

1. DASC (required).
2. Direct air support aircraft (required).
3. TAC(A)/HC(A) (as required).
4. Supported units (5 required).
5. TADC
6. Forward sited aviation assets (as required).

The communications requirements for the DASC are developed by addressing the breakdown of operational functions required. The following functional areas require specific planning for DAS operations.

1. Tactical air command and information exchange.
2. Tactical air traffic control.
3. Terminal control/coordination of aircraft.
4. Requests/coordination for immediate direct air support.
5. MACCS agency coordination/handover of aircraft.
6. Air defense information exchange and coordination.
7. Coordination of aircraft use with other supporting arms.
8. Specific mission assignments (i. e., SAR, TRAP and Photo Recon, etc.).
9. Intelligence information exchange.
10. Communications control/coordination.

TASK: 8C.1.4 CONDUCT ELECTRONIC WARFARE PLANNING

CONDITION(S): The enemy has a known electronic warfare (EW) and signals intelligence (SIGINT) capability. All MAGTF assets are susceptible to enemy collection, location, targeting, and disruption efforts, and must plan accordingly.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Requests detailed intelligence assessment of enemy EW EOB from MACG/ACE/MAGTF G/S-2 and/or Electronic Warfare Officer (EWO).
- .2 \_\_\_\_\_ Develops an EMCON plan supporting the MACG/ACE ECON plan. (KI)
- .3 \_\_\_\_\_ Develops and submits a radar emissions control (RADCON) plan for the ASRT(s) appropriate to the ARM threat in accordance with the MACG/ACE RADCON plan.
- .4 \_\_\_\_\_ Determines the locations of radios and radio antenna farms after considering the SIGINT/EW threat.
- .5 \_\_\_\_\_ Provides input to the MAGTF C3CM deception plan when requested through the operational chain of command.
- .6 \_\_\_\_\_ Plans for maximum employment of secure communications.
- .7 \_\_\_\_\_ Briefs planners, operators, and users of electronic equipment on the EW threat, and the EMCON procedures/ECCN techniques used to counter.

EVALUATOR INSTRUCTIONS: In the absence of higher command participation in the planning process, personnel in the DASC may demonstrate the required EW planning process through direct questioning by the evaluator.

KEY INDICATORS:

EMCON MEASURES (8C.1.4.2)

The MACG/ACE planning staff will be responsible for the EMCON plan, with the DASC personnel providing input. Factors to consider are:

1. MINCOM/NOCOM procedures.
2. Use of brevity codes and authentication tables.
3. Use of COMSEC materials.
4. Delegation of EMCON control authority.
5. Signals security.
6. Circuit discipline.

---

TASK: 8C.1.5 CONDUCT DASC SITE SELECTION PLANNING

CONDITION(S): The MAGTF commander has directed that aviation command and control facilities will be established ashore. The fire support control timeline has been coordinated with the MACG/ACE and stipulates an initial operations requirement for a DASC capability. The further possible use of an echelon DASC to support displaced operations has also been identified.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Conducts coordination with the FSCC to ensure DASC siting considerations are included in selecting initial position ashore.
- .2 \_\_\_\_\_ Conducts map survey to determine suitable DAS/FSCC sites. (KI)
- .3 \_\_\_\_\_ Ensures that the DASC locations(s) support continuous communications conductivity with the FSCC supported units, and supporting aircraft.
- .4 \_\_\_\_\_ Plans for the establishment of alternate operational sites per procedures contained in the unit SOP.
- .5 \_\_\_\_\_ Bases requirements for equipment on supportability of the MAGTF scheme of maneuver ashore and projected location of MACCS agencies/terminal control facilities. (KI)
- .6 \_\_\_\_\_ Establishes priorities for emplacement of equipment.
- .7 \_\_\_\_\_ Designates advance party personnel to recon DASC positions); jointly with FSCC personnel if possible. (KI)
- .8 \_\_\_\_\_ Suggests to the MACG/ACE/MAGTF potential sites for air and/or ground radio relay/radio retransmission sites required to support DASC Operations.
- .9 \_\_\_\_\_ Requests TAMPS, ECAC, or PROPHET studies of potential sites.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

MAP SURVEY (8C.1.5.2)

The following considerations are given priority in site selection for the DASC position ashore in the following order:

1. Communications. The DASC must communicate with agencies and assets across the entire MAGTF battlefield. Operational sites will offer many compromises effecting the DASC's ability to communicate across a wide spectrum of distances and frequencies. The following considerations should be addressed when selecting an operational site:
  - Antenna siting and remoting requirements.
  - Distances of antenna from power source and DASC.
  - Ground wave propagation and equipment grounding requirements.
  - Terrain masking and effects on communications.
2. Cover and Concealment. While important, covered locations can preclude or reduce effective communications. The requirement to communicate must be given the higher priority. Every attempt should be made to camouflage to the maximum extent possible consistent with the mission requirement to communicate. The capabilities to remote radios must be considered as an alternative to exposing the DASC and protecting by camouflage.
3. Trafficability. The site should be accessible in all weather conditions. Road network should be adequate to support initial emplacement and resupply activities.
4. Physical Layout. The site should provide adequate space to tactically deploy the DASC and attendant support equipment to include:
  - Communications.
  - Mobile electric power.
  - Field sanitation.

- Billeting.
- Local security.

EQUIPMENT REQUIREMENTS (8C.1.5.5)

The following should be given consideration in planning numbers and types of equipment required by the MASS detachment:

1. Estimated duration of operations.
2. Number of nets required.
3. Secure voice requirements.
4. Size of operation to be supported.
5. Echeloning requirements.
6. Mobility requirements.
7. Scheme of maneuver ashore (i.e., detached operations, airborne DASC, etc.).
8. Air and/or ground radio relay/radio retransmission requirements.
9. DASC(A) requirements.
10. TAC(A)/HC(A) requirements.

ADVANCE PARTY/RSOP TEAM (8C.1.5.7)

The advance party should be manned and equipped to properly site the DASC. Vehicle security during the convoy and site security upon arrival at the operational site must be fulfilled by the advance party. Composition of the advance party will be dependent upon the urgency of attaining operational readiness and current threat, and should consider NBC, EOD, Engineer Support, and enemy air and ground activity as well as communications conductivity with supporting aircraft and the FSCC.

---

TASK: 8C.1.6 CONDUCT LOGISTICS PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The Aviation Combat Element and Combat Service Support Element have been constituted and staff planning has begun. The MASS commander has been assigned to provide a DASC to the MAGTF. Within the MASS staff, an S-4 element has been established. Point(s) of Embarkation (POE) for the MASS detachment's DASC has been designated.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Determines Table of Equipment (T/E) based on supportability requirements in accordance with unit SOP and provides T/E data to S-4. (KI)
- .2 \_\_\_\_\_ Gathers pertinent embarkation data for all major end items.
- .3 \_\_\_\_\_ Identifies requirements for non-organic Motor Transport (MT) to move equipment to POE.
- .4 \_\_\_\_\_ Identifies requirements for non-organic Material Handling Equipment (MHE) to load equipment on motor transport.
- .5 \_\_\_\_\_ Conducts liaison with MACG/ACE S-A and/or CSSE operations to identify MASS detachment MT and MHE shortfalls and to schedule movement dates and the necessary support required by the DASC.
- .6 \_\_\_\_\_ Conducts liaison with MACG/ACE S-A to secure MT and MHE assets to support the DASC at its point of debarkation.

- .7 \_\_\_\_\_ Identifies the logistic needs required by the DASC to support operations ashore when it is established.
- .8 \_\_\_\_\_ Reviews the packup/spares kits for equipment being deployed.
- .9 \_\_\_\_\_ Makes liaison/coordination with the supporting unit providing resupply for MRE's, fuel, et al.

EVALUATOR INSTRUCTIONS: Movement of the DASC from a static position to a new tactical position or from garrison to a POE for amphibious/air embarkation is a collective effort of the squadron S-4 and the MASS detachment. This effort encompasses many actions which must be effectively coordinated for mission success particularly in light of the limited organic MT/MHE capability of the MASS and MASS detachments. Logistics planning/coordination must be successfully accomplished to effectively embark/disembark the DASC to support the MAGTF. Further liaison and coordination with supporting units prior to the operation should preclude disruptions and delays in required support.

KEY INDICATORS:

S-3 DETERMINES T/E (8C.1.6.1)

S-3/detachment OIC, in concert with the CEO, determines the T/E necessary for support of the DASC and forwards the T/E to the squadron S-4 for embarkation planning/coordination.

---

8C.2 COORDINATION AND CONTROL OF PREPLANNED DIRECT AIR SUPPORT

TASK: 8C.2.1 CONDUCT RECONNAISSANCE, SELECTION AND OCCUPATION OF POSITION (ISOP)

CONDITION(S): The MAGTF (MEF/MEB) ACE has assigned the MACG detachment DASC a mission and has identified airspace control requirements for the Amphibious Objective Area (AOA). Movement to the general area of operation has been completed. Initial map reconnaissance and coordination with the FSCC has taken place to select candidate sites. The higher command element has approved the candidate site(s) and has ordered the DASC site physical reconnaissance to commence. The MEF/MEB ACE has directed the MACG detachment to establish a DASC capability ashore at the primary site proximate to the FSCC location. The MACG detachment tasks the MASS detachment to initiate RSOP preparation and operations as part of the buildup of air control capability ashore.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ The MASS detachment commander briefs RSOP team on its mission and provides essential elements of friendly and enemy information. (KI)
- .2 \_\_\_\_\_ Reconnoiters and marks RSCP team and main body convoy routes when feasible.
- .3 \_\_\_\_\_ Briefs convoy drivers on the primary and/or alternate routes and provides security for each vehicle.
- .4 \_\_\_\_\_ Deploys RSOP team to primary site using tactical convoy or helo procedures.
- .5 \_\_\_\_\_ Maintains communications between RSOP team and the main body.
- .6 \_\_\_\_\_ Occupies site, marks ground defense positions in accordance with the ground defense plan, and establishes security prior to proceeding with other RSOP activities.
- .7 \_\_\_\_\_ Provides for site security during RSOP.
- .8 \_\_\_\_\_ Deploys RSOP team to primary site with appropriate NBC protective equipment.
- .9 \_\_\_\_\_ Conducts sweep of the position for NBC contaminants.
- .10 \_\_\_\_\_ Sweeps the position for mines, anti-personnel devices, and unexploded ordnance.

- .11 \_\_\_\_ Marks equipment positions for follow on emplacement.
- .12 \_\_\_\_ Designates halo landing areas for MEDEVAC and logistic purposes.
- .13 \_\_\_\_ Selects storage area for small arms ammunition and other explosives.
- .14 \_\_\_\_ Designates billeting and support areas. (KI)
- .15 \_\_\_\_ RSOP party members serve as guides for equipment placement upon arrival on site.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

RSOP TEAM BRIEF (8C.2.1.1)

Plans addressing quick reaction by the unit should be drawn up and briefed to squadron personnel as required. The following considerations are discussed:

1. NBC.
2. Air/ground attacks (to include rules of engagement).
3. Distribution/dispersion of critical personnel.
4. Communications (visual, radio).
5. Security during movement and stops.
6. Alternate routing.
7. Convoy speed and separation.
8. MEDEVAC procedures.
9. Withdrawal Plan

HELICOPTER LANDING AREA (8C.2.1.12)

Helicopter landing areas should be a sufficient distance from operational equipment/billeting area to prevent interruption of operations or injury to personnel. They should be free of Foreign Object Damage (FOD) materials. Area dimensions should be as specified in OH 5-3A or as otherwise directed in the ACE operations order.

BILLETING/SUPPORT AREAS (8C.2.1.14)

Billeting, supply, motor transport and other support areas are located in a terrain masked position. Maximum advantage of natural cover is taken to enhance the effectiveness of and reduce the amount of camouflage needed to conceal the area profile.

TASK: 8C.2.2 ESTABLISH THE DASC AND COMMUNICATIONS

CONDITION(S): The build up of air control facilities ashore continues. The MAGTF is preparing to phase the control of supporting arms ashore. The DASC is ordered ashore to assume the mission of landward control and coordination of direct air support operations. The DASC advance party and leading elements of the FSCC are ordered ashore concurrently.

STANDARDS. EVAL: Y; N; NE

- .1 \_\_\_ Receives mission tasking and provides appropriate briefings to subordinates.
- .2 \_\_\_ Task organizes personnel to move and set up equipment. (KI)
- 3 \_\_\_ The MASS detachment commander briefs personnel on the ground defense plan, encompassing rules of engagement and land/air threat existence.
- .4 \_\_\_ Advises and updates higher command element of equipment status and operational capability as set up work continues.
- 5 \_\_\_ Directs movement and emplacement of DASC equipment and personnel.
- .6 \_\_\_ Emplaces DASC equipment, to include support equipment, tentage, radio antennae and vehicles to take full advantage of cover provided by natural terrain features.
- .7 \_\_\_ Emplaces DASC AN/TSQ-155 system and is ready to commence operational communication checks within 3 hours of arrival of equipment on site.
- .8 \_\_\_ Emplaces DASC AN/UYQ-3A in the ground mode and is ready to commence operational communication checks within 1 hour of arrival of equipment on site. (KI)
- .9 \_\_\_ Emplaces airmobile DASC AN/UYQ-3A system in a suitably configured KC-130 aircraft within 1 hour after start of loading operations.
- .10 \_\_\_ Establishes communication connectivity with PSCC.
- .11 \_\_\_ Attains full mission capability as prescribed by the TAC/MACG commander.
- .12 \_\_\_ Attains full communications capability with all required agencies prescribed in the communications plan including the Ground Control Station (GCS) of RPV units. (KI)
- .13 \_\_\_ Implements passive air defense measures; i.e., camouflage, deceptive measures.

EVALUATOR INSTRUCTIONS: The evaluator will ensure that any communications initiated are per the published communications plan.

KEY INDICATORS:

PERSONNEL TASK ORGANIZATION (8C.2.2.2)

Personnel require specific individual tasking to ensure that mission essential functions can be carried out concurrently, e.g., antenna erection, control checks, communications checks, cabling, etc.

OPERATIONAL STATUS (8C.2.2.7-9)

Required operational Status will vary dependent on the mission(s) assigned to the DASC by the TAC/MACG Commander. For evaluation purposes, the DASC will be considered as achieving operational status when it is capable of performing its doctrinal functions of control of direct air support aircraft in Support of the MAGTF. Time allotted to achieve operational status will commence upon arrival of the Last item of mission essential equipment. Operational status is achieved with the successful completion of operational communication checks.

MINIMUM MISSION ESSENTIAL COMMUNICATIONS (8C.2.2.12)

Communications requirements are mission dependent and will differ contingent upon whether control is afloat or ashore. Additionally, functional requirements will vary the net requirements used by the DASC. The below communications nets are provided as a suggested minimum:

1. Control Afloat
  - Tactical Air Command (TAC).
  - Tactical Air Request (TAR) (initially joined with the Helicopter Request (HR)).
  - Tactical Air Direction (TAD).
  - Halo Direction (HD).
  - Guard (normally satisfied with Guard override radios).
  - Tactical Air Traffic Control (TATC).
2. Control Ashore
  - Tactical Air Command (TAC).
  - Tactical Air Request (TAR)/Helicopter Request (HR).
  - Tactical Air Direction (TAD).
  - Halo Direction (HD).
  - FSCC coordination (may be satisfied by wire).
  - Guard (normally satisfied with Guard override radios).
  - Combat Information and Detection (CIID).
  - Direct air support.
  - Tactical Air Traffic Control (TATC).

---

8C.3 COORDINATION AND CONTROL OF IMMEDIATE AIR SUPPORT

TASK: 8C.3.1 CONDUCT DASC CREW BRIEF

CONDITION(S): The DASC is ashore, established and fully operational. The mission includes the ability to provide area airspace procedural control for aircraft operating in the designated area of responsibility.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ DASC personnel task organized along functional lines to include but not be limited to a Senior Air Director (SAD), a Tactical Air Director (TAD), a Halo Director (HD), Crew Chief (CC), Tactical Air Request (TAR) net operator(s), Tactical Air Command/Direct Air Support (TACmd/DAS).
- .2 \_\_\_\_\_ DASC OIC provides initial briefing to the SAD's which supplements general guidance obtained from the operations order.
- .3 \_\_\_\_\_ DASC OIC/SAD specifies special control procedures to be employed by the Tactical Air Director and Halo Director.
- .4 \_\_\_\_\_ Directors review ECCM procedures with net operators.
- .5 \_\_\_\_\_ DASC OIC prioritizes communication nets in the DASC.

- .6 \_\_\_\_ DASC OIC specifies information flow procedures and priorities.
- .7 \_\_\_\_ DASC OIC specifies special support unit information flow procedures and priorities, i.e.. UAV's, RECON, TRAP.
- .8 \_\_\_\_ SAD's prepare and deliver the DASC crew briefs and debriefs to disseminate and collect current information. (KI)
- .9 \_\_\_\_ DASC crew, members prepare and maintain status boards in a current and accurate manner. (KI)
- .10 \_\_\_\_ DASC net operators prepare and maintain operator logs in accordance with local SOP.
- .11 \_\_\_\_ DASC crew members conduct complete turnover crew brief. (KI)

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

DASC CREW BRIEF/DEBRIEF (8C.3.1.8)

Each DASC crew member must be properly briefed to ensure mission completion. The Senior Air Director should gather his crew together a minimum of one-half hour prior to the beginning of their watch to ensure the personnel have situation awareness prior to assuming their positions. Crew briefs and debriefs are divided into three distinct phases: pre-watch, brief, crew change brief, and post-watch debrief. The following information will aid the SAD and Crew Chief in determining necessary brief/debrief topics:

Phase 1. Pre-Watch Brief

1. Review the internal and external information flow between crew positions that will be expected during the watch.
2. Review Air Control Procedures to include:
  - Initial Points. Contact Points.
  - Helicopter Lanes, check points enroute, enroute control.
  - Safety of flight routing to include safe corridor through the MEZ for RTF procedures.
  - Maximum and minimum altitudes for F/W and R/W aircraft.
  - Procedural control practices of all itinerant aircraft (area/AOA dependent).
  - MEDEVAC procedures. (both exercise simulated and actual if operating during a training exercise).
  - Divert and launch authority for immediate requests.
  - Location of aircraft (helo/AVB) forward sites to include communications means available for launch.
  - Location of ASLT's to include communications means available for coordination.
  - UAV control procedures.
3. Review the required nets that will be in operation during the watch and what information is likely to be transmitted and/or received on each specific net.
4. Update all information received prior to going on watch, i.e., frequency changes, existing fragmentary order changes, communications plans changes, etc.
5. Intelligence update.
6. Update ground scheme of maneuver/air support requirements.

7. Discuss/review all pre-planned major evolutions that are likely to occur while the crew is on watch and provide the crew with a series of "what if" situations to ensure proper action/reaction will be taken as the situation arises.
8. Communications restoration priority.

KNOWN STATUS INFORMATION (8C.3.1.9)

The following information is gathered from the appropriate operations order and transcribed on to the DASC plotting boards:

1. Situation Map
  - Known enemy positions/SAM positions size, (type).
  - Friendly unit locations.
  - Boundaries,
  - Fire Support Coordination Line (FSCL).
  - No Fire Areas (NFA/restricted Fire Area (RFA)).
  - Reconnaissance Areas of Operations (RAG).
  - Forward Line of Troops (FLOT)/Forward Edge of Battle Area (FEBA).
  - Airspace Coordination Areas (ACA's).
  - Location of friendly air assets.
  - All known navigation aids (control points, TACAN's, etc.).
  - CATF and CLF objectives.
  - Overlay of ground scheme of maneuver.
  - Any special fire support coordination considerations.
  - Air defense control measures.
- 2.. Status Boards
  - Other agency designations and call signs.
  - Planned air tasking order.
  - Communications status board.
  - Equipment report status.
  - Weather information and forecast.

BRIEF FOR CREW CHANGE (8C.3.1.11)

A standardized crew relief sequence provides for an orderly transition and ensures continuation of effective operations. The following method is offered as a suggested means:

Order of Relief

- Communications personnel.
- Plotters.
- ASRI Control net operator.

MCO 3501.9B  
6 JUN 1991

- Fire Support Safety Net operator.
- Tactical Air Traffic Control net operator(s).
- Tactical Air Director(s).
- Helicopter Director(s).
- Tactical Air Command net operator.
- Tactical Air Request net operator(s).
- Crew Chief.
- Senior Air Director.

Phase 2. Crew Change Brief. Information exchanged between the off-going and on-coming crew should include at least the following:

1. Communications Personnel.
  - Status of all comm links.
  - Equipment problems experienced.
  - Suspected Equipment, failure..
  - Frequency disparity.
  - Cryptologic changes, if required.
2. Plotters. All pertinent information involving plotting.
3. ASRT Control net operators.
  - ASRT equipment status, last update, next update due.
  - ASRT target list information.
  - Information concerning current missions.
  - Passage of weather, winds aloft, last update.
4. Fire Support Safety net operators. Current net status, and latest requests for updated information.
5. Tactical Air Traffic Control net operator.
  - Review ATO and missions that are airborne, on alert status, late for launch or TOT, etc.
  - Advise on-going operator of any changes to pertinent traffic control measures or other data effecting safety of flight.
6. Tactical Air Director.
  - Status of fixed-wing aircraft airborne, on alert, diverted; status on all pre-planned/immediate missions.
  - Status of diverted aircraft, if any.
  - Call signs of all terminal controllers which are working the aircraft already airborne.
  - Location of TAC(A), FAC(A), if any.
  - Next TAR number.
  - Air Defense Condition and Weapons Condition.
  - Safety of flight information (SAM/AAAM RTF, etc.).

VIII-C-14

ENCLOSURE (1)

- UAV Location(s).
  - 9-line CAS briefs to be passed.
  - CIFS briefs to be passed.
  - FSC measures in effect.
  - ASRT status.
7. Helicopter Director.
- Status of helicopters airborne, on alert, diverted; status on all preplanned/immediate missions.
  - Status of on-going MEDEVAC/ASR.
  - Location of HC(A), if any.
  - Any changes in routing procedures.
  - Safety of flight information (SAM/AAA, RTF, etc.).
  - Known location of all aircraft in LZ's.
  - Location of TRAP/MEDAVAC packages).
  - CIFS briefs to be passed.
  - ASRT status.
  - Air Defense Condition and Weapons Condition.
- a. Tactical Air Command net operators.
- Air Defense Condition and Weapons Condition.
  - Pending responses concerning aircraft updates.
  - Weather update.
9. Tactical Air Request net operators.
- Next TAR, ASR, MEDAVAC number to be assigned.
  - Status of any on going TAR, ASR, MEDEVAC missions.
  - Status of any incomplete requests for information.
  - Unite on flat to include call signs.
10. Crew Chief. All information pertaining to on-going missions, all data expected to be received/transmitted pertinent to the watch; etc.
- Outstanding JTARS, 9-line CAS briefs, CIFS briefs, ASR, MEDEVAC.
  - Changes/updates of all FSC measures/intel.  
Comm support/equipment status.
  - Changes of radio/net positions due to equipment/radio problems.
  - Significant events.
11. Senior Air Director.
- Outstanding JTAR'S/nine line CAS briefs, CJFS briefs, ASR, MEDEVAC.
  - Comm support/equipment status.

- ATO information.
- Late aircraft (10 minutes).
- Aircraft assignments upcoming, diverted aircraft, strip alert status, etc.
- MIJI reports, applicable net operators informed.
- ASRT target list/ASRT Status.
- Downed/distressed aircraft.
- Any significant event past, present, or future that could impact the new crew.

---

TASK: 8C.3.2 CONTROL TO DASC FROM AFLOAT

CONDITION(S): The buildup of forces ashore has continued to the point where the control of naval gunfire and artillery has been transferred to the FSCC ashore. The CATF/CLF have agreed that sufficient forces are ashore to transfer control of Offensive Air Support/Assault Support COAS/AS). The DASC is directed to initiate the transfer of direct air support control. The afloat agencies will remain prepared to act as backup or alternate agencies until required to displace. Procedures have been established for the transfer of control in the operation order/directives for the phasing of control ashore.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Checklists for the transfer of control ashore are on hand and are utilized. (KI)
- .2 \_\_\_ SAD review's the procedures delineated in the operation plan/other directives for the phasing of control ashore and keeps the TACC Informed of current status. (KI)
- .3 \_\_\_ SAD briefs the operational crew concerning their duties for passage of control.
- .4 \_\_\_ All communication nets required by the operation plan are operational.
- .5 \_\_\_ Updated intelligence information, to include the friendly and enemy order of battle and current ATO, is on hand and posted.
- .6 \_\_\_ Current status of air defense warnings, weapons conditions, anti-air warfare intelligence, and other pertinent data is updated prior to the transfer of control taking place.
- .7 \_\_\_ Current status of all fixed-wing aircraft to include scheduled events, alert aircraft, and airborne aircraft is verified. (KI)
- .8 \_\_\_ Current status of all helicopter and assault support aircraft to include scheduled events, alert aircraft, airborne aircraft, MEDEVAC aircraft, and SAR aircraft is verified. (KI)
- .9 \_\_\_ Status of all Tactical Air and Assault Support Requests are plotted and on hand.
- .10 \_\_\_ SAD verifies with the FSCC the locations of friendly artillery and active Fire Support Areas (FSA's) for naval gunfire assets. (KI)
- .11 \_\_\_ SAD ensures all requirements have been met and then advises the TACC (afloat) and FSCC that DASC is prepared for the phasing of control of OAS/AS ashore.
- .12 \_\_\_ As directed, the preplanned sequence of phasing control of OAS/AS ashore is completed and the SAD acknowledges/produces any reports required. (KI)
- .13 \_\_\_ SAD advises the TACC (afloat)/TADC (ashore) and FSCC that the DASC now has control referencing date and time (local).
- .14 \_\_\_ The DASC maintains continuous coordination with adjacent and higher agencies during preparation for and transfer of CAS/AS control ashore, if required.

- .15 \_\_\_\_\_ SAD notifies all adjacent agencies when transfer of control is completed.
- .16 \_\_\_\_\_ DASC/SACC liaison team provides any further updates of information upon arrival at DASC site. (KI)

EVALUATOR INSTRUCTIONS: The transfer of offensive/assault support control ashore can only be conducted when the listed requirements have been accomplished. Control may be passed in segments, i.e. helicopters, then fixed-wing, or vice versa, or it can be passed simultaneously.

KEY INDICATORS:

DASC NOTIFIES TACC (8C.3.2.1-2)

Any prearranged procedures, or delivery of completed checklists, should be specified in the operation plan and the DASC must comply with the specific requirements.

TAD AND HD LOGS (8C.3.2.7 - 8)

The below listed information is suggested to be entered in the TAD and no logs. This information is normally formatted on a preprinted, locally produced form. Changes and log updates will be recorded as necessary.

1. Mission number.
2. Call sign.
3. Number and type aircraft.
4. Mission.
5. Ordnance.
6. Estimated Time of Arrival (ETA).
7. Actual Time of Arrival (ATA).
8. Estimated Time of Return (ETR).
9. Actual Time of Return (ATR).
10. Terminal control agency.
11. Terminal control agency frequency.
12. UAV flight data.
13. Remarks.

FSCC DATA UPDATE/TARGET LIST UPDATE (8C.3.2.10)

Liaison with the FSCC is conducted to update existing data and record additional fire support coordination data required to assume control of offensive air ashore.

1. Active fire support for Naval gunfire.
2. Situation map comparison and update.
3. Changes in ground unit scheme of maneuver.
4. Obtain ASRY target list and updates to that list.
5. Status of pending/progress of Tactical Air Requests

SEQUENCE OF CONTROL PASSAGE (8C.3.2.12)

The below listed sequence of voice transmissions or bard copy messages will normally be employed in amphibious operations to transfer control of direct air support ashore unless otherwise specified in the operation plan or other directives.

1. DASC advises CLF by voice radio or telephone transmission that they are ready to assume control of all or a portion of OAS/AS ashore (specify which portion) at a specified date and time.
2. CLF advises CATF by voice message that the DASC is ready to assume control of OAS/AS (or a portion thereof) and request transfer of same at a specified date and time.
3. CATF advises CLF by voice message, followed by hard copy message of conditions and effective time of transfer.
4. CLF advises DASC by voice message of conditions and effective time of transfer.
5. DASC advises by voice message that control has been transferred and the date/time group that transfer was accomplished.
6. CLF advises CATF by voice message, followed by bard copy message that the DASC has assumed control of OAS/AS or portion thereof ashore with the date/time group that transfer was accomplished.

DASC LIAISON TEAM FROM SACC (8C.3.2.16)

When the DASC moves ashore it is joined shortly thereafter by its liaison team from the SACC afloat. They bring with them information which does not lend itself to passage by radio transmissions. This information is transcribed on the appropriate situation maps and boards in the DASC.

1. Situation map updated.
2. Target lists updates.
3. Support ship position information (i.e., CVA, LPH, LHA).
4. Preplanned supporting arms fire updates.
5. USH/USMC UAV mission assignment updates.

---

TASK: 8C.3.3 CONTROL OF PREPLAENED DIRECT AIR SUPPORT

CONDITION(S): The DASC is ashore and fully operational. Fire support coordination has been passed ashore to the FSCC and control of Offensive Air Support/Assault Support has been passed to the DASC. A portion of the mission of the DASC is the control and coordination of the execution of preplanned direct air support.

STARDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Reviews the ATO for clarity, conflicts, and completeness. (KI)
- .2 \_\_\_ Resolves any conflicts with the appropriate agency(ies) (i.e., TACC, FSCC, SAAC, etc.).
- .3 \_\_\_ Checks with the TACC/SACC (afloat) sir support section and the HCS/HDC for late ATO's and ATO updates.
- .4 \_\_\_ Transfers required ATO information to the Tactical Air Director's (TAD) and Helicopter Director's (HD) logs/worksheets.
- .5 \_\_\_ Ensures plotters transfer appropriate information from HD/TAD logs/worksheets to the plotting boards.
- .6 \_\_\_ Plots UAV launch and control sites.

- .7 \_\_\_ Plots UAV operating areas.
- .8 \_\_\_ Implements UAV control and coordination procedures in accordance with OH 2-2, local SOP, and/or operations order.
- .9 \_\_\_ Coordinates with the FSCC to establish appropriate control measures.
- .10 \_\_\_ Confirms operational status of terminal control agencies.
- .11 \_\_\_ Advises the Air Officer in the FSCC/terminal control agency of any changes to the ATO.
- .12 \_\_\_ Provides information on the ATO to terminal control agency on request.
- .13 \_\_\_ Updates logs and plotting boards as events or changes occur.
- .14 \_\_\_ Receives or requests required reporting information from OAS/AS aircraft. (KI)
- .15 \_\_\_ Notifies TACC of all assigned aircraft that fail to report within 10 minutes of ETA.
- .16 \_\_\_ Utilizes modified RIO procedures as directed by the operation plan.
- .17 \_\_\_ Provides an aircrew brief, as applicable. (KI)
- .18 \_\_\_ Preplans routes for preplanned, on-call aircraft when possible.
- .19 \_\_\_ Selects shortest route to handoff point consistent with safety of flight end least disruption to other supporting arms fires.
- .20 \_\_\_ Provides routing to, or the location of a Control Point CCP) on request. (KI)
- .21 \_\_\_ Provides helicopter routing instructions. (KI)
- .22 \_\_\_ Directs aircraft to switch to the frequency of final controller.
- .23 \_\_\_ Receives or requests required reporting out information from DAS/AS aircraft. (KI)
- .24 \_\_\_ Institutes procedures to determine status of aircraft that do not report out within 10 minutes of ETR as directed in the operations order.
- .25 \_\_\_ Directs aircraft to contact DASC upon completion of mission.
- .26 \_\_\_ Receives BDA/mission assessments/enemy intelligence (In Flight Reports) (SAM/AA/sitings of enemy units or equipment) from mission complete aircraft, UAV, or the supported unit. (KI)
- .27 \_\_\_ Receives BOA/mission assessments from the terminal control agency, UAV, or the supported unit.
- .28 \_\_\_ Passes updated BDA information to aircrew if received from the supported unit/terminal controller prior to mission aircraft checking out.

EVALUATOR INSTRUCTIONS: The operation plan should specify the time of publishing and receipt of the ATO by using units. The information listed in XI 8C.3.3.1 is the minimum information which the DASC must have to process and execute the ATO. If the information is missing, then the air element evaluator should be notified or the DASC should be marked "N/A" and a major exercise discrepancy should be written.

KEY INDICATORS:

AIR TASKING ORDER (8C.3.3.1)

The ATO should contain the below information for fixed-wing and helicopter aircraft:

1. Mission number.
2. Number and type aircraft.
3. Type mission.

4. Quantity and type of ordnance.
5. Estimated time of departure.
6. Estimated time of return.
7. Terminal controller call sign.
8. Terminal controller primary and secondary frequencies.
9. Amplifying information, i.e., control points, airborne controllers in support of specific ground units, etc.
10. Unit request number for reference. Helo missions may provide support for more than one request and should be noted.

FSCC COORDINATION FOR FIRE SUPPORT CONTROL MEASURES (8C.3.3.9)

The DASC will coordinate, if necessary, with regards to ASRT mission, and any other special missions that may require sterile airspace for mission accomplishment. The special mission category could include those JTAR's/ASR's which do not originate from a terminal control agency or FSCC; i.e., photo recon and aerial observation/missions originated by the tactical air commander, G-2, or G-3 of the ground or command elements.

REPORTING IN (8C.3.3.14)

Aircraft reporting into the DASC will give only essential information such as:

1. Call sign.
2. Mission number.
3. Time on station.
4. Position.
5. Any exceptions to information listed in the ATO.

When the pilot has completed his transmission, the OAS/AS will provide the GAS/AS aircraft with the aircrew brief information.

AIRCREW BRIEF (8C.3.3.17)

The DASC provides CAS briefs and Close In Fire Support (CIFS) briefs in accordance with FMFM 5-4A or the operation plan and provides ASR/MEDEVAC briefs in accordance with local SOP or operations order. For preplanned scheduled GAS or helicopter missions, only information not included on the ATO which involves the safety of flight and enroute traffic control will be provided unless requested by the aircrew or as changes have occurred to the information provided in the current ATO. Examples of additional information may be:

1. Contact point for terminal control.
2. Enemy SAM information.
3. RIO instructions.
4. Other friendly aircraft activity in assigned area.
5. No communication with terminal control agency procedures.
6. ACA or hazardous airspace information.
7. CAS briefs, CIFS briefs, ASR briefs, MEDEVAC briefs.
8. Assigned approach and retirement lanes/routes.

DASC PREPLANNED ROUTES (8C.3.3.18)

Upon receipt of the ATO, the DASC determines the control point assignments and altitudes for handoff to a terminal controller. Additionally, a review of other scheduled air strikes, helicopter lifts, UAV's, and other supporting arms should be conducted to evaluate the potential for conflicts and ensure deconflictions with other aircraft working in close proximity.

ROUTING CONSIDERATIONS (8C.3.3.20 & .21)

DASC selects shortest and safest routes based on the following:

1. Pick-up/drop zones.
2. Helicopter lanes.
3. Control points.
4. Supporting arms.
5. NGF location.
6. Artillery location.
7. FSC measures.
8. Other air traffic.
9. Enemy air and surface threats.
10. UAV missions.
11. Air defense measures in effect.
12. Other information as required; i.e., MEDEVAC's, location of doctor, terrain hazards.

REPORTING OUT (8C.3.3.23)

Reporting out information required must include Bomb Damage Assessments and In flight intelligence reports, and include the DASC personnel must understand their requirements to ensure gathered information is passed to senior agencies G/S-2 staff members expeditiously.

BDA RECEIVED FROM AIRCRAFT/UAV/SUPPORTED UNIT (8C.3.3.26)

OAS aircraft relay mission results including ordnance expended and BDA. Aircraft are released for return to force if fuel and ordnance status preclude other mission assignments. Fuel and ordnance permitting, aircraft are utilized on another mission or assigned to an orbit point to hold for possible employment. Similarly, helicopters are released to return to base or are assigned other missions if fuel status or crew time permits. Other aircraft (air reconnaissance flights, UAV's) and supported units also report completed mission information to the DASC as required. BDA is reported in the following format:

1. Target coordinates or mission event number/request number.
2. Time on and off target.
3. Percent of hits on target over percent of target destroyed.
4. Damage.
  - Structures damaged or destroyed.
  - Enemy casualties.
  - Vehicles (land or waterborne) damaged or destroyed.
  - Weapons or radar positions damaged or destroyed.

- Bridges or roads/trails damaged or destroyed.  
Supply caches (by type) damaged or destroyed.
  - Area coverage.
  - General effect an target.
  - Unit Supported (not required if shown on the ATO)
- 

TASK: 8C.3.4 CONTROL OF IMMEDIATE DIRECT AIR SUPPORT

CONIDIION(S): The DASC is ashore and fully operational. Fire Support Coordination has been passed ashore to the FSCC and control of Offensive Air Support/Assault Support has been passed to the DASC. A portion of the mission of the DASC is the processing, control and coordination of requests for immediate direct air support.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ DASC uses proper JTAR/ASR forms to record the required information.
- .2 \_\_\_ TAR net operator assigns a time received and request number. (KI)
- .3 \_\_\_ TAR net operator completes decoding of encoded portions of the JTAR/ASR if encryption is used.
- .4 \_\_\_ JTAR/ASR checked for Completeness by the TAR/HR net operator to include receipt time.
- 5 \_\_\_ TAR net operator advises ground unit of their request number.
- .6 \_\_\_ ASC informs requesting unit of Status of their request in a timely basis.
- .7 \_\_\_ The plotters transcribe information onto situation map for use by the entire crew.
- .8 \_\_\_ Crew Chief reviews the JTAR/ASR for accuracy and completeness.
- .9 \_\_\_ Crew Chief reviews the situation map for possible conflicts and passes JTAR/ASR to SAD.
- .10 \_\_\_ SAD checks the situation map and JTAR/ASR for possible conflict or unsafe condition.
- .11 \_\_\_ SAD reviews availability of aircraft to satisfy JTAR/ASR. (KI)
- .12 \_\_\_ SAD coordinates with FSCC to validate requirement if request was not received over the TAR/HR net. (KI)
- .13 \_\_\_ SAD coordinates with FSCC to determine selection or recommendation for aircraft allocation. (KI)
- .14 \_\_\_ SAD coordinates with FSCC to establish appropriate airspace control measures.
- .15 \_\_\_ Coordinates with the FSCC for shortest route selection for UAV movement to its working area.
- .16 \_\_\_ DASC crew completes the processing of the request and selection of aircraft for assignment in 5 minutes or less.
- .17 \_\_\_ DASC completes the launch order within 8 minutes after processing completed. If the request for the launch is to the TACC (ashore) or to a forward site, the time allowed after processing is 2 minutes.
- .18 \_\_\_ SAD notifies TACC of aircraft assigned to JTAR, if required. (KI)
- .19 \_\_\_ TAD/HD notifies appropriate terminal control agencies/requesting unit of aircraft assignment. (KI)
- .20 \_\_\_ TAD/HD receives required reporting in information from aircraft.

- .21 \_\_\_\_ TAO/HD utilizes modified RIO procedures as directed by the operation plan.
- .22 \_\_\_\_ TAD/HD provides an aircrew briefing, as applicable.
- .23 \_\_\_\_ TAR net operator provides brief to terminal control agency.
- .24 \_\_\_\_ TAO/HD selects shortest route to handoff point or pickup/drop zones consistent with safety of flight and least disruption to other supporting arms.
- .25 \_\_\_\_ TAD/HD provides routing to or location of a control point on request.
- .26 \_\_\_\_ TAD/HD directs aircraft to switch to the frequency for the terminal controller.
- .27 \_\_\_\_ TAD/HD receives or requests required reporting out information from OAS/AS aircraft.
- 28 \_\_\_\_ TAD/HD directs aircraft to contact DASC upon completion of mission.
- .29 \_\_\_\_ TAD/HD receives BOA/mission assessments from mission aircraft.
- .30 \_\_\_\_ TAR net operator receives BDA/mission assessments from the terminal control agency.
- .31 \_\_\_\_ TAD/HD passes updated BDA information from the supported unit/terminal controller to aircrew if known prior to mission aircraft checking out.

EVALUATOR INSTRUCTIONS: JTAR/ASR may be received by the DASC in one of several ways; however, for evaluation purposes they can be divided into two categories. The first are those received over TAR/HR net and the second includes all other methods; i.e., other nets, hand delivered, etc. The method of receipt will influence the processing and coordination required and will impact the response time to fill the request. Several factors increase response time for requests not received over the TAR/HR net. The requirement exists to coordinate the JTAR/ASR with the FSCC, as they may not have knowledge of the request, and this will increase the processing time required to ensure proper coordination is completed (JTAR/ASR's originated outside normal channels historically have proven to be incomplete). In the course of an evaluation there will normally be opportunities to examine both methods of processing. The evaluator must establish a procedure to ensure that times recorded accurately reflect the time to perform the required processing. It is not required to time all JTAR/ASR's processed by the DASC, but the evaluator should evaluate and record time for a representative portion of requests received by the DASC. Start times for all categories of receipt, processing, and coordination and assignment will be upon acknowledgment of the request by the DASC. Stop times for JTAR/ASR processing occurs when aircraft assignment is completed. BDA /mission assessment/enemy intelligence may be obtained from the aircraft and/or terminal control agency. The DASC then compiles BDA/mission assessment/enemy intelligence/In Flight Reports and forwards it to the FSCC and TACC/TAOC. The DASC should be aggressive in attempting to compile and pass BDA assessments/enemy intelligence. If BOA or mission assessment is unknown it should be so stated by aircrew/terminal control agencies.

KEY INDICATORS:

REQUEST NUMBER (8C.3.4.2)

Immediate Joint Tactical Air Strike Requests are numbered by the day of the month followed by an odd number, i.e., 10-1, 10-3, 10-5, etc. Immediate Assault Support Requests are numbered by the day of the month followed by an even number, i.e., 10-2, 10-4, 10-6, etc. MEDEVAC'S are numbered by the day of the month followed by a letter, i.e., 10-A, 10-B, 10 C. etc. The DASC will number all requests sequentially in order of receipt for a given day. The request number given by the DASC is the receipting acknowledgment to the requesting unit for the request.

AVAILABILITY OF ASSETS (8C.3.4.11)

The DASC must have a system to ensure that the most readily available aircraft with the proper mission configurations are identified and assigned in the shortest time, when more than one outstanding immediate JTAR/ASR is received with the same mission priority, coordination must be made with the FSCC for correct prioritization. Items that should be considered are:

1. Fixed-wing.

- Type ordnance or configuration required.
- Availability of on-station aircraft with proper ordnance load, configuration, or time-on-station.
- Status of on-going preplanned aircraft missions which could satisfy the TAR by utilizing divert aircraft if authorized.
- Status of strip alert aircraft/forwarded sited aircraft to include ordnance/configuration load.
- Airborne refueler availability.
- Time delays for an aircraft to be configured and assigned by the TACC with proper ordnance.

2. Helicopter.

- Availability of on-station helicopters that are compatible with mission requirements.
- Status of on-going preplanned helicopter mission to satisfy the ASR by utilizing divert authority.
- Type of load/weight to include internal or external capabilities
- Status of the FARP.
- Any other special considerations; i.e., lifting slings, Helicopter Support Team (HST), etc.
- Status of ground alert helicopters considering alert time, mission configuration, ability to accomplish the mission, and elapsed time from launch to pickup and delivery.
- Time delays for a helicopter to be configured and assigned by the TACC to fulfill the requested requirements.

When the request was not received over the TAR/HR net, the SAD must coordinate with the FSC to determine if aircraft are required to satisfy the request as the request may have circumvented the "silence is consent" rule. If the JTAR/ASR is disapproved, the DASC advises the requesting agency. If the request is approved by the FSCC, then the DASC presents the options contained in KI DASC/FSCC Coordination of Aircraft Allocation (BC.3.4.13).

DASC/FSCC COORDINATION OF AIRCRAFT ALLOCATION (8C.3.4.13)

There are three options that could be available to satisfy a JTAR/ASR.

1. On-Station. If available, the SAD could assign the on-station aircraft to the JTAR/ASR and notify the TACC of assignment so that reconstitution could be effected.
2. Initiate request for launch of strip alert aircraft, requesting reconstitution, if required.
3. TACC STRIP ALERT LAUNCH. Procedures would be the same as for DASC strip alert launch which have been provided for that purpose. Information required by the TACC is a local procedure and does not require evaluation, unless it contributes to delaying response time. If the request is disapproved by the TACC or any other agency in the MACCS because of weather minimum, aircraft availability, or other reasons the DASC must notify the FSCC and requesting agency/terminal control facility.

COORDINATION AND ASSIGNMENT OF AIRCRAFT. The time required to coordinate and assign aircraft to satisfy JTAR/ASR's is the most important function performed by the DASC. It is not required to time all JTAR/ASR's processed by the DASC, but the evaluator should evaluate and record time for at least one-third of the JTAR/ASR's received by the DASC. It is important that the evaluators accurately record the JTAR/ASR's number and the time to satisfy the requirement. Stop times for TAR/ASR processing occurs when aircraft assignment is completed. In the case of an airborne aircraft, that time is when the TAD/HD attempts to contact the aircraft with the intent to assign and brief the aircraft on the immediate request. In the case where the DASC has strip alert launch authority, the time stops when the net operator attempts to transmit the launch order. In those cases where the DASC does not have divert or launch authority, the time will stop when the net operator attempts to contact the agency having this authority.

AIRCRAFT ASSIGNMENTS (8C.3.4.18)

When an on-station aircraft is utilized to satisfy a JTAR/ASR, the DASC must notify the TACC to accomplish reconstitution. If the tempo of operations is such that additional assets will be required immediately, the TACC is notified concurrently with the assignment; however, if this is not possible because of higher priority activities on going in the DASC it can be accomplished after the assignment.

TERMINAL AIR CONTROL AGENCY BRIEF BY DASC (8C.3.4.19)

The DASC will brief the requesting agency on the status of their request (using the appropriate request number) stating:

1. If disapproved, Section II, lines 12 through 14 of the 3TAR form, NWP 22-Z, Revision A.
2. If approved, Section III, lines 20 through 26 of the JTAR form, NWP 22-2, Revision A.
3. Per FMFM 5-4A for CAS and CIFS aircraft. ASR and MEDEVAC briefs per local SOP or the operations plan.

---

TASK: 8C.3.5 CONDUCT AIR DEFENSE MEASURES AND COORDINATION

CONDITION(S): The DASC is ashore and fully operational. The mission includes the requirement to execute air defense measures and coordinate with air defense agencies to ensure friendly aircraft safety.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Reports friendly aircraft status when requested by other air control agencies. (KI)
- .2 \_\_\_ Provides friendly aircraft position information within ninety seconds.
- .3 \_\_\_ Establishes communication connectivity to LAAD) command element.
- .4 \_\_\_ Provides LAAD representative with air defense information to include RTF procedures received from TACC/TAOC or other agencies. (KI)
- .5 \_\_\_ Relays LAAD air defense information to appropriate MACCS agencies when requested.
- .6 \_\_\_ Reports visual sighting of hostile aircraft by ground units to LAAD command element.
- .7 \_\_\_ Retransmits LAAD hostile aircraft sightings to appropriate agencies, as appropriate.

EVALUATOR INSTRUCTIONS: A LAAD representative may be collocated with the DASC. Wire communications with the DASC may be required to pass air defense information received by the DASC from other MACCS agencies, end to receive air defense information from the LAAD representative for retransmission to TAOC or other appropriate agencies. The operations order should specify requirements.

KEY INDICATORS:

DASC REPORTING AIRCRAFT POSITION (8C.3.5.1)

When specific mission information is requested the DASC will provide the following:

1. Mission number.
2. Call sign.
3. Final controller.
4. Frequency to which assigned.

5. Position/working area of aircraft.

AIR DEFENSE INFORMATION PROVIDED TO LAAD BY DASC (8C.3.5.4)

The types of information received by the DASC that may be provided to the LAAD, BIC/ elements, if required, are as follows:

1. Air defense alert conditions.
2. Early warning information.
3. Weapons conditions.
4. Rules of engagement or changes.
5. RTF procedures.
6. UAV operations.
7. Special instructions for LAAD employment.

---

TASK: 8C.3.6 CONDUCT INFORMATION TRANSFER AND COORDINATION

CONDITION(S): The DASC is ashore and fully operational. A portion of the mission is to pass and coordinate information between other MAGTF elements and the ACE. The nature of the information relates to operations and intelligence.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Passes combat information gathered from incident sightings reported by aircraft (In Flight Reports) under its control to the TACC within 1 minute after receiving the report.
- .2 \_\_\_\_\_ Provides time sensitive combat information/In Flight reports to the ACE/TACC/)MACG G/S-2 in accordance with operations order directed time limitations.
- .3 \_\_\_\_\_ Requests and/or forwards TACC/FSCC friendly/enemy ground/air situation information needed to make accurate judgments in the safe conduct of air operations.
- .4 \_\_\_\_\_ Complies with EMCON conditions specified in operation plan or by higher headquarters.
- .5 \_\_\_\_\_ Uses a predeveloped plan/SOP to implement ECON measures when so directed.
- .6 \_\_\_\_\_ Reports all MIJI/FIR encounters (KI).
- .7 \_\_\_\_\_ Continues to function in accordance with the operation order while undergoing active communications jamming.
- .8 \_\_\_\_\_ Receives or requests an ASRT target list and active targets from the FSCC (KI).
- .9 \_\_\_\_\_ Receives updated weather information from TACC at least every hour.
- .10 \_\_\_\_\_ Plots ASRT targets on situation board.
- .11 \_\_\_\_\_ Passes FSCC approved targets to ASRY(s).
- .12 \_\_\_\_\_ Reports BOA/mission assessment to FSCC and TACC/TADC.
- .13 \_\_\_\_\_ Coordinates UAV positioning with FSCC/GCS.
- .14 \_\_\_\_\_ Coordinates and disseminates changes in FSC measures.

- .15 \_\_\_\_\_ Plots, verifies and disseminates to the ACE/FSCC direct air support requests in support of rear area security.

EVALUATOR INSTRUCTIONS: Evaluator must review appropriate operation plan, communications plan, COI, and local SOP's to determine data transfer/EMCON requirement imposed on the DASC and the additional requirements to report enemy ECM or ECCM efforts. The ASRT target list is normally received from the supported FSCC. However, in cases of special missions or direction from higher headquarters, i.e., MEB or MEF, the target list might not come from the supported FSCC. In these cases it is imperative that the DASC coordinates with the supported FSCC to ensure any possible conflicts are resolved prior to the execution of ASRT missions.

KEY INDICATORS:

MIJI ENCOUNTERED (8C.3.6.6)

When suspected disruption occurs on any net the following actions should occur:

1. Net operator notifies SAD/crew chief of interference when he first becomes aware of a problem on the net, including recording time and nature of interference.
2. SAD/crew chief monitors net to verify problem. If the problem is determined to be meaconing, intrusion, jamming or interference, the SAD/Crew Chief will direct the net operator to complete a MIJI Report in accordance with the operation plan.

ASRT TARGET LIST (8C.3.6.8)

The ASRT target list will be provided to the DASC daily by the supported FSCC. Updates, additions, and deletions may be received at any time. If the ASRT target list becomes outdated (24 hours or more) then it must be verified by the supported FSCC through the DASC. The target list will consist of the following items of information:

1. Target precedence
2. Target number.
3. Mission type.
4. Target description.
5. Target coordinates.
6. Desired coverage.
7. Cleared from (time).
8. Cleared to (time).
9. Restrictive heading (if required)
10. Supported unit.
11. Remarks (if required).

MCO 3501.9B  
5 JUN 1991

TASK: 8C.3.7 COORDINATE AIR SPACE MANAGEMENT WITH TWO DASC'S

CONDITIONS(S): The amphibious operation is progressing to the MEF level. Two MEB tactical areas of responsibility (TAOR) are established. The operational tempo dictates the coordination of fire support zones until the MEF is fully established. Independent and mutually supported air space management and communication plans are developed for each DASC/TAOR. A DASC is located proximate to each regimental FSCC. Compositing of the MEF has yet to take place.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Delineates procedures for the handover of aircraft between TAOR'S in the operations orders. (KI)
- .2 \_\_\_\_\_ Establishes a casualty plan and communications requirements to cover catastrophic loss of one DASC or the other.
- .3 \_\_\_\_\_ Establishes communications between DASC'S for coordination of handovers and exchange of fire support information.
- .4 \_\_\_\_\_ Develops situational awareness and continuity of effort through periodic air support information update between DASC'S.
- .5 \_\_\_\_\_ Plans are developed for compositing the two MEB DASC'S into a MEF level DASC.
- .6 \_\_\_\_\_ Identifies frequency deconfliction between TAOR'a; i.e., TAR/HR, TATC, TAD's, and HD's

EVALUATOR INSTRUCTIONS: None

KEY INDICATORS:

#### AIRCRAFT HANDOVERS (8C.3.7.1)

Crossover points must be established between the DASC'S for both fixed-wing and helicopters. They should fit into the overall airspace management plan along optimum routes of flight within the operational area. They should also be located along the common boundary to facilitate expeditious crossing coordination as well as reduce deconfliction problems in air defense operations; i.e., away from missile and fighter engagement zones (MEZ'S and FEZ'S). Communications between agencies is a requirement to effectively manage and maintain situational awareness concerning itinerant traffic and cross tasked assets. This is particularly critical when aircraft are based in one zone and tasked for missions in the other zone. Return to force (RTF) procedures must be specific and detailed. Whenever possible, an agency-to-agency handover is preferred over aircraft-to-agency handovers in an ECM environment.

---

#### 8C AIR DEFENSE MEASURES

TASK: 8C.4.1 INDIVIDUAL ACTIONS BY MARINES

CONDITION(S): The MASS detachment has deployed the DASC to its tactical site and it is operational. The individual Marine:

STARDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Demonstrates discipline by being in control of himself, displaying positive acceptance of orders, and contributing to mission accomplishment.
- .2 \_\_\_\_\_ Safeguards and cleans weapons, both individual and crew served, daily.
- .3 \_\_\_\_\_ Performs regular maintenance on radios, vehicles, generators, etc, when assigned to operate them.
- .4 \_\_\_\_\_ Does not waste or abuse unit supplies or material.

- .5 \_\_\_ Safeguards unit supplies from the enemy and the weather and does not scatter as litter on the terrain.
- .6 \_\_\_ Observes noise reduction procedures to reduce detection probability by the enemy.
- .7 \_\_\_ Keeps light use to a minimum consistent with accomplishment of assigned missions.
- .8 \_\_\_ Implements measures to reduce radio transmission time with unnecessary message traffic and enforces the use of standard prowords.
- 9. \_\_\_ Wears prescribed uniform at all times.
- .10 \_\_\_ Promotes field sanitation and personal hygiene by policing the area for trash, garbage, or debris which may create health hazards.
- .11 \_\_\_ Utilizes dispersion tactics by not gathering in groups when maneuvering, when waiting in assembly areas, or when deployed in the defense.
- .12 \_\_\_ Places tentage, equipment, vehicles, and radios with appropriate space to reduce vulnerability to bursting munitions.
- .13 \_\_\_ Uses covered routes and covered positions where practicable.
- .14 \_\_\_ Does not remain in exposed locales when halted but moves immediately into nearest cover (during unit movement).
- .15 \_\_\_ Utilizes alarm system to warn of air attack.
- .16 \_\_\_ Takes cover when attack alarm is sounded or moves immediately to assigned battle positions.
- .17 \_\_\_ Engages enemy aircraft when under attack with individual/unit crew served weapons.
- .18 \_\_\_ Demonstrates ability to concentrate small arms fire against attacking aircraft.
- .19 \_\_\_ Reports attack by enemy air to command element.

EVALUATOR INSTRUCTIONS: With exceptions, evaluators will use the 90 percent rule (90 percent of the Marines 90 percent of the time) to determine whether the requirements are being met. The exceptions will be noise and light discipline. These standards will stand literally. If the unit can be located or observed as a result of noise or light, the standard cannot be considered as having been met. This task will be evaluated over the entire exercise and evaluators will note efforts of unit leaders to maintain and correct discipline. If there is improvement by the unit throughout the exercise so that standards are consistently met, the unit may receive a "yes" marking. Environmental restrictions will not preclude a "yes" evaluation.

KEY INDICATORS: None.

---

TASK: 8C. 4.2 IMPLEMENT UNIT CAMOUFLAGE AND CONCEALMENT MEASURES

CONDITION(S): The MASS detachment has deployed the DASC to its tactical site and it is operating in an area where enemy activity is possible. Detachment OIC/NCOIC is to ensure proper camouflage discipline is enforced.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Ensures principles of camouflage siting, discipline, and construction are employed continuously throughout the operation.
- .2 \_\_\_ Uses natural materials and camouflage screen support systems to conceal positions and vehicles from ground and air observation.
- .3 \_\_\_ Selects sites for emplacement of equipment, tentage, radios, and vehicle parking areas to take advantage of cover provided by natural terrain features.

- .4 \_\_\_\_ Selects individual and crew' served weapon firing positions in area, that permit use of natural cover.
- .5 \_\_\_\_ Utilizes radar transparent and radar scattering camouflage netting where appropriate.

EVALUATOR INSTRUCTIONS: The cutting of foliage and digging in some operating areas is not always permitted for environmental reasons. The use of natural cover and concealment coupled with camouflage screening to the extent permitted by environmental restrictions must be evaluated to determine camouflage effectiveness. Environmental restrictions will not preclude a "yes" evaluation.

KEY INDICATORS: None.

TASK: 8C.4.3 ESTABLISHMENT AND OPERATION OF TACTICAL SITE

CONDITION(S): The MASS detachment has occupied its tactical position and is prepared to conduct air support control operations from the DASC. Command, administrative, and logistics activities must be monitored and coordinated to sustain combat capability. If the detachment is collocated with another element (GCE, ACE, CSSE) all standards reflect coordination with the senior element. If the site is independent, all standards must be organically accomplished.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Organizes and operates the tactical site in accordance with the prescribed procedures contained in the appropriate SOP.
- .2 \_\_\_\_ Staffs the site with the necessary liaison and supporting personnel.
- .3 \_\_\_\_ Organizes personnel, equipment, and vehicles to operate on a 24 hour a day basis.
- .4 \_\_\_\_ Selects site location based on egress/ingress routes, communication requirements, space required, cover and concealment, and ground/perimeter security.
- .5 \_\_\_\_ Identifies alternate site locations in the event the operational site must be displaced rapidly.
- .6 \_\_\_\_ Employs both active and passive security, if required.
- .7 \_\_\_\_ Restricts movement and access to the operational site.
- .8 \_\_\_\_ Grounds barbed wire placed around the operational site and other systems containing communications equipment to shunt induced voltages to ground in order to reduce Electromagnetic Interference (EMI).
- .9 \_\_\_\_ Remotes radio antennas away from the operational site to reduce the probability of detection by hostile forces using direction finding equipment.
- .10 \_\_\_\_ Uses directional field expedient antennas whenever practical.
- .11 \_\_\_\_ Grounds radios and other electronic equipment in all environmental conditions to reduce susceptibility to noise generating sources.
- .12 \_\_\_\_ Employs the use of alternate communications paths with higher, adjacent and subordinate units to pass critical information when the primary path or means fail.
- .13 \_\_\_\_ Maintains covered communications on those nets so designated in the CEOI.
- .14 \_\_\_\_ Submits routine reports per the operation plan in a timely manner.
- .15 \_\_\_\_ Briefs personnel fully on enemy situation and capabilities.
- .16 \_\_\_\_ Locates dismount points and pick-up points within defended areas.

- .17 \_\_\_\_\_ Positions supply and medical facilities to ensure constant communications with the operational site.
- .18 \_\_\_\_\_ Responds to intelligence information as related to rear area security in a timely, coordinated, and thorough manner.
- .19 \_\_\_\_\_ Maintains close and continuous coordination with higher, adjacent and subordinate command elements.
- .20 \_\_\_\_\_ Responds to direction by higher echelon commands as prescribed in the operation plan.

EVALUATION INSTRUCTIONS: Manning and configuration of the operational site is not fixed. However, the facility should have personnel, communications and equipment sufficient to effectively execute all required support functions.

KEY INDICATORS: None.

TASK: 8C.4.4 CONDUCT MAINTENANCE/REPAIR OF EQUIPMENT

CONDITION(S): The MASS detachment has emplaced the DASC in its tactical position and is conducting operations. Maintenance and repair of detachment equipment must be monitored and coordinated to sustain combat capability.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Identifies nonorganic repair or calibration services required to support the detachment to the appropriate level maintenance activity.
- .2 \_\_\_\_\_ Calculates pre-expended bin items and quantities based upon rates of consumption and expected resupply rates to support operational requirements.
- .3 \_\_\_\_\_ Ensures adequate critical low density parts are available within deployment packups.
- .4 \_\_\_\_\_ Identifies special test and support equipment required to support electronic systems.
- 5 \_\_\_\_\_ Maintains current status of supported equipment.
- .6 \_\_\_\_\_ Corrects all equipment deficiencies within organizational level maintenance capabilities per established procedures.
- .7 \_\_\_\_\_ Evacuates equipment to higher echelon maintenance facilities in accordance with unit maintenance SOP.
- .8 \_\_\_\_\_ Replaces deadlined equipment with maintenance float assets (if available) to ensure maximum operational support and the least amount of non operational time.
- .9 \_\_\_\_\_ Coordinates equipment evacuation when required.
- .10 \_\_\_\_\_ Maintains requirement maintenance records and reports.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

TASK: 8C.4.5 CONDUCT SUPPLY OPERATIONS

CONDITION(S): The MASS detachment has been deployed in support of MAGTF operations. Essential to mission accomplishment is the ability to maintain adequate stock levels for all classes of supply.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Ensures adequate supply support to accomplish the mission is available.
- 2 \_\_\_\_ Ensures adequate food, water, diesel fuel and other supplies are available at each site.
- .3 \_\_\_\_ Establishes/coordinates resupply procedures/priorities for food, water, and fuel with higher adjacent and subordinate elements.
- .4 \_\_\_\_ Establishes procedures for obtaining additional spare parts, ORF exchange, and depot items if required.
- .5 \_\_\_\_ Ensures supply personnel know the location of supply points for all classes of supply to include POL, ordnance and repair parts.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK 8C.4.6 CONDUCT ADMINISTRATIVE OPERATIONS

CONDITIONS(S): The MASS detachment has been deployed in support of MAGTF operations. Essential to mission accomplishment is the ability to complete personnel and administrative matters in the field.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Requests personnel assets beyond the detachment capability from the higher command element if required.
- .2 \_\_\_\_ Processes incoming replacements with minimum delay.
- .3 \_\_\_\_ Processes personal mail in accordance with postal regulations.
- .4 \_\_\_\_ Coordinates regular mail delivery to tactical sites.
- .5 \_\_\_\_ Provides morale and welfare activities.
- .6 \_\_\_\_ Submits reports as required to the appropriate command element.
- .7 \_\_\_\_ Utilizes accurate casualty reporting procedures.

EVALUATOR ISTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8C.4.7 ESTABLISH AND MAINTAIN SITE SECURITY

CONDITION(S): The MASS detachment has arrived at the designated site and has emplaced the DASC proximate to the MAGTF FSCC. The detachment will normally collocate with another command element and augment their defense plan with personnel and equipment as directed. Standards reflect coordination with a controlling element unless the detachment is independently located.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Implements the ground defense plan developed in accordance with operation order or local SOP.
- .2 \_\_\_ Integrates security with higher and adjacent friendly units to include patrolling.
- .3 \_\_\_ Requests ground security augmentation forces if site cannot be protected with organic resources.
- .4 \_\_\_ Prepares a ground defense plan with due regard for the ROE and the duty to protect civilians from indiscriminate placement of mines and booby traps.
- .5 \_\_\_ Positions ground surveillance devices to cover likely avenues of approach.
- .6 \_\_\_ Emplaces ground anti-intrusion devices (mines, concertina, boobytraps, and engineering stakes) per the ground defense plan.
- .7 \_\_\_ Selects firing positions for crew served weapons maintaining a separation of 30-35 meters as the minimum amount of separation.
- .8 \_\_\_ Emplaces organic crew served weapons with overlapping fields of fire.
- .9 \_\_\_ Establishes control measures and Communications to coordinate and control site defenses from one location.
- .10 \_\_\_ Designates a reaction force to repel threats to perimeter security.
- .11 \_\_\_ Establishes reliable communications with augmented ground defense elements and reaction forces/outside units who are providing support.
- .12 \_\_\_ Reacts properly to ground/air attack.
- .13 \_\_\_ Ensures Air Raid/NPC measures are understood by all and followed.
- .14 \_\_\_ Augments or establishes observation/listening posts beyond the site perimeter consistent with resources available.
- .15 \_\_\_ Develops plans for equipment destruction in the event of emergency site abandonment.
- .16 \_\_\_ Explosives are available for emergency equipment destruction.
- .17 \_\_\_ Prepares a ground defense map and posts it in the operational site.
- .18 \_\_\_ Briefs ground defense plan to all supervisory personnel.

EVALUATOR INSTRUCTIONS: The unit ground security can be tested using a small aggressor force to probe, snipe or otherwise harass the site after all ground security measures have been taken. The scope and intensity of this action should be generally commensurate with intelligence estimates and within the MASS detachment's capability to defend itself.

KEY INDICATORS:

GROUND DEFENSE MAP (8C.4.7.17)

Should include the applicable elements of the following:

1. Tactical Site Layout.

MCO 3501.9B  
5 JUN 1991

- 2 Bunkers.
3. Location of Forces.
4. Fighting holes.
5. Fields of Fire.
6. Barbed Wire.
7. Mines.

---

TASK: 8C.4.8 CONDUCT MEDICAL SUPPORT

CONDITION(S): The MASS detachment has deployed the DASC in support of MAGTF operations. Immediate treatment of casualties and routine medical support is essential to the health care of detachment personnel. This medical support will normally be performed by organic corpsman. Surgical/physician support must be provided by external elements.

STANDARDS: EVAL: Y;N; NE

- .1 \_\_\_ Ensures appropriate numbers of medical personnel are available.
- .2 \_\_\_ Ensures medical supplies and equipment are available to provide health care and to process casualties.
- .3 \_\_\_ Requests medical information for assigned personnel to include location of additional military and civilian facilities and any special problems or diseases expected in the operational area.
- .4 \_\_\_ Disseminates location of nearest aid station(s) to MASS detachment personnel.
- .5 \_\_\_ Provides preventative medicine measures for the control of disease to all personnel.
- .6 \_\_\_ Provides emergency treatment of casualties.
- .7 \_\_\_ Prepares patients, establishes priorities, and arranges for rearward evacuation if required.
- .8 \_\_\_ Coordinates casualty reporting procedures with appropriate command elements.
- .9 \_\_\_ Conducts water tests and purification procedures in accordance with established medical directives.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8C.4.9 PROCESS ENEMY PRISONERS OF WAR (POW's)

CONDITION(S): Small enemy units are active in the vicinity of the MASS detachment's DASC site. These units are armed with a variety of shoulder fired weapons and have the ability to target both personnel and equipment. Local activity has been increasing. Attempts have been made to penetrate the perimeter security. The MACC/ACE has designated a POW collection point.

VIII-C-34

ENCLOSURE (1)

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ The detachment has and uses an SOP for processing POW's.
- .2 \_\_\_ POW's are searched immediately after capture; weapons and items of potential intelligence value are tagged and evacuated at the same time as the POW; personal items and protective clothing and equipment are returned to the POW. (KI)
- .3 \_\_\_ Individual Marines handling POW's segregate them by type (officers, NCO's, unranked, civilian combatants, etc.).
- .4 \_\_\_ POW's are allowed to retain personal protective equipment (e.g., helmet, gas mask, etc.).
- .5 \_\_\_ POW's are required to remain silent and not permitted to converse among themselves.
- .6 \_\_\_ POW's are processed with speed to obtain maximum intelligence benefit.
- .7 \_\_\_ Marines handling POW's ensure that they are safe-guarded from abuse and from hazards of enemy fire. (KI)
- .8 \_\_\_ Perishable information obtained from POW's is reported immediately to higher headquarters.
- .9 \_\_\_ Enemy casualties receive the same medical care and MEDEVAC priority as unit casualties with the same difference in treatment based solely on medical considerations.
- .10 \_\_\_ POW's are escorted under guard to the designated collection point as soon as possible.
- .11 \_\_\_ POW's and all recovered equipment/documents are transferred to higher command element as soon as possible.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### SEARCHING

POW's should be disarmed and searched for concealed weapons, equipment and documents of particular intelligence value immediately upon capture, unless the number of POW's captured, enemy action, or other circumstances make such a search impracticable. Until each POW is searched, Marines must be particularly alert to prevent the use of concealed weapons or the destruction of documents or equipment.

#### SAFEGUARD

The handling of POW's will be as per the 1949 Geneva Convention requirements and they will be safeguarded at all times, while evacuating POW's to the rear, do not let them bunch up, spread too far, or start diversions, Before evacuating a POW, attach a tag to him which reflects date/time of capture, place of capture, capturing unit, and circumstances of capture.

#### PERSONAL EFFECTS

POW's should be permitted to retain protective equipment such as helmets, protective masks, and like items, effects and articles used for clothing or eating, except knives and forks; rations; identification cards or tags; and badges of grade and nationality, when items of equipment issued for personal protection are taken, they must be replaced with equivalent items serving the same purpose. Although money and other valuable items may be taken from POW's as a security measure, they must be receipted for and a record must be maintained.

8C.5 NBC OPERATIONS

TASK: 8C 5.1 PLAN NBC OPERATIONS

CONDITIONS(S): Threat forces have been reported to be capable of employing NBC munitions in the area where the MASS detachment is located. Due to the threat, passive and active defense measures must be taken for survival of the unit.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Possesses an SOP which outlines procedures for enemy NBC strikes and reports required.
- .2 \_\_\_\_ Identifies backup/alternate command, control and communications procedures.
- .3 \_\_\_\_ Ensures individual NBC defense equipment authorized by the unit table or equipment (T/E) is serviceable and available for issue to each individual.
- .4 \_\_\_\_ Ensures unit NBC defense equipment (including excess materials such as mops, brooms, shovels, rags, etc.) authorized by unit T/E is operationally ready and available for distribution to designated and trained/knowledgeable operators.
- .5 \_\_\_\_ Identifies/prepares shelters for defense against heat, blast, and radiation.
- .6 \_\_\_\_ Secures/protects loose, flammable, and explosive items, food and water from heat, blast and radiation fallout.
- .7 \_\_\_\_ Recommends potential decontamination sites to the higher command element.
- .8 \_\_\_\_ Emplaces equipment to maximize utilization of terrain features for cover, concealment, and topographic shielding from NBC attacks.
- .9 \_\_\_\_ Establishes MASS detachment level Control Center, Monitor Survey and Decontamination Teams for employment on 5 24-hour basis.
- .10 \_\_\_\_ Establishes MOPP level, and personnel are at or above the required MOPP level.
- .11 \_\_\_\_ Identifies unit tasks requiring a high degree of manual dexterity, strength, and difficulty while in MOPP 4.
- .12 \_\_\_\_ Plans personnel rotations while in MOPP 4.
- .13 \_\_\_\_ Plans for first aid treatment to casualties in a NBC environment.

EVALUATOR INSTRUCTIONS: Provide the unit with information to expect an imminent nuclear attack by the enemy, and integrate NBC scenarios with normal operational assignments. Evaluator(s) should be school trained in the area of NBC Defense (MOS 57XX) or be thoroughly trained in this area as part of Evaluators' School. Inherent in the capabilities of the MASS detachment is limited control center and decontamination capabilities. Accomplishments of NBC operations is dependent on external agency inputs and Support.

KEY INDICATORS: None.

MCO 3501.95  
5 JUN 1991

TASK: 8C.5.2 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): The MASS detachment is informed that nuclear attack is imminent. SOP's and/or operation orders are onhand to provide checklists, sequence of actions, and guidance

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Implements the nuclear defense SOP which addresses nuclear defense procedures.
- .2 \_\_\_\_ Alerts subordinate/displaced elements.
- .3 \_\_\_\_ Implements actions to minimize casualties and damage while unit continues mission.
- .4 \_\_\_\_ Initiates periodic monitoring using available survey instruments.
- .5 \_\_\_\_ Establishes appropriate MOPP level.

EVALUATOR INSTRUCTIONS: Commander is informed that nuclear weapons have been used in the area.

KEY INDICATORS: None.

TASK: 8C.5.3 RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator, or by other appropriate means.

STARDARDS: EVAL: Y;: N; NE

- .1 \_\_\_\_ Upon recognizing the attack, personnel take immediate action to shield themselves from blast, heat or detonations by taking cover in fighting holes, bunkers, culverts, caves, tunnels, etc.
- .2 \_\_\_\_ Maintains or re-establishes chain of command and communications, Resumes mission if possible.
- .3 \_\_\_\_ Submits NBC-1 initial and follow-up reports to higher command. Reports are rapidly forwarded, by secure means, when possible.
- .4 \_\_\_\_ Administers first aid to casualties and evacuates to a medical treatment station as the mission permits.
- .5 \_\_\_\_ Submits damage assessment by secure means to higher/supported command element per SOP.
- .6 \_\_\_\_ Continues monitoring using available survey instruments.

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast, heat, dazzle, radiation, and Electromagnetic Pulse (EMP). Communications systems (antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle, or properly grounded) during the simulated nuclear detonations, will be assessed as EMP casualties.

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

TASK: 8C.5.4 RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): A surface or subsurface nuclear detonation has occurred. The MASS detachment location is within the predicted fallout zone. An M5A2 radiological fallout predictor, or substitute, is available. The unit gets effective downwind messages at least once every 6 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit; NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Performs mission concurrently with all other actions.
- .2 \_\_\_ Advises supervisors, and notifies subordinate elements of estimated time of fall-out arrival.
- .3 \_\_\_ Determines if relocation to a clean area is necessary or possible.
- .4 \_\_\_ Continues monitoring using available survey instruments.
- .5 \_\_\_ Takes individual protective measures to minimize fallout effects as mission permits.
- .6 \_\_\_ Forwards NBC-4 reports, as required, to the higher command element.
- .7 \_\_\_ Records unit total dose information and reports this information to higher command elements, using available secure means.
- .8 \_\_\_ Assesses impact of casualties on unit mission.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8C.5.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time and tactical situation permit decontamination.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Requests decontamination location from higher headquarters.
- .2 \_\_\_ Requests route to decontamination point.
- .3 \_\_\_ Establishes decontamination priorities.
- .4 \_\_\_ Establishes decontamination point.
- .5 \_\_\_ Ensures decontamination personnel wear appropriate protective clothing, and equipment.
- .6 \_\_\_ Decontaminates equipment, personnel, and individual weapons using appropriate decontamination equipment.
- .7 \_\_\_ Decontaminates unit equipment and vehicles using appropriate expedient devices.
- .8 \_\_\_ Marks contaminated areas with NATO standard NBC markers.
- .9 \_\_\_ Determines adequacy of decontamination using available personnel and equipment monitoring instruments

VIII-C-38

ENCLOSURE (1)

- .10 \_\_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provides location to the higher command element.
- .11 \_\_\_\_ Decontaminates decontamination personnel as necessary.
- .12 \_\_\_\_ Remains within Operational Exposure Guidance (OEG).
- .13 \_\_\_\_ Records total dose information end reports to the higher command element.

EVALUATOR INSTRUCTIONS: FM 3-5 provides guidelines for the decontamination procedures.

KEY INDICATORS: None.

TASK: 8C.5.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): The tactical situation forces the MASS detachment to cross a radiologically contaminated area while moving to a new site. Unit receives a NBC-5 report or contamination overlay from the higher command element.

STANDARDS: EVAL: Y; N;: NE

- .1 \_\_\_\_ Posts NBC-5 report and/or contamination overlay to situation map and determines route.
- .2 \_\_\_\_ Obtains route clearance and approval, if necessary.
- .3 \_\_\_\_ Provides turn back dose and dose rate to advance party and/or reconnaissance team.
- .4 \_\_\_\_ Ensures vehicles receive additional shielding and personnel are provided all available protection from dust.
- .5 \_\_\_\_ Dispatches advance party and/or reconnaissance team to reconnoiter new areas.
- .6 \_\_\_\_ Crosses contaminated area while employing contamination avoidance techniques.
- .7 \_\_\_\_ Operates within operational exposure guidance.
- .8 \_\_\_\_ Determines the degree of personnel and equipment contamination after clearing the contaminated area, using monitoring instruments.
- 9. \_\_\_\_ Establishes and follows decontamination priorities.
- .10 \_\_\_\_ Records unit total dose information, using available total dose instruments, and reports to higher command element.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

TASK: 8C. 5.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): A friendly nuclear STRKWARN per FM 3-3, Appendix G has been received, The MASS detachment is located within Minimum Safe Distance (MSD) zones 2 to 3.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Acknowledges the STRIKEWARN before the expected time of burst. Subordinate units (DASC/ASRT's) have been warned. (KI)
- .2 \_\_\_\_\_ Applies the STRIKEWARN accurately and completely to the situation map within 5 minutes after message receipt.
- .3 \_\_\_\_\_ Makes pertinent information regarding the planned detonation (time of burst, ground zero, fall-out coverage, MSD, etc.) available to the commanding officer.
- .4 \_\_\_\_\_ Advises commanding officer on the vulnerability of the unit to the burst and residual contamination.
- .5 \_\_\_\_\_ Advises commanding officer of the measures needed to prevent casualties, damage and extended interference with the mission.
- .6 \_\_\_\_\_ Turns off duplicate electronic devices: disassembles erected antennas; ties down antennas if mission permits. Bare minimum radio equipment remains erected.
- .7 \_\_\_\_\_ Implements protective measures, consistent with the threat and the mission and/or as directed by higher command element.
- .8 \_\_\_\_\_ Increases MOPP level consistent with mission, temperature, work rate, and guidance
- .9 \_\_\_\_\_ Ensures personnel take cover in fighting holes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, . etc.), or lie prone on open ground.

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator, or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to unprotected personnel and equipment.

KEY INDICATORS:

WARNING (8C.5.7.1)

The MASS detachment should warn subordinate/detached elements of an impending nuclear detonation by secure means or use one of the following methods:

1. Using a code word or brevity code to indicate the message is a nuclear strike warning.
2. A brief, prearranged message that directs the receiver to implement specific protective measures.
3. Encoded message with expected time of burst, sent by most expedient means of communication.

---

ENCLOSURE (1)

VIII-C-40

TASK: 8C.5.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S) The MASS detachment has been informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Implements the chemical defense SOP which addresses chemical defense/decontamination procedures.
- .2 \_\_\_\_ Increases MOPP level consistent with mission, temperature, and work rate.
- .3 \_\_\_\_ Dons the protective mask and chemical protective ensemble correctly.
- .4 \_\_\_\_ Continues mission while implementing all actions to minimize casualties and damage.
- .5 \_\_\_\_ Monitors available chemical agent alarms.

EVALUATOR INSTRUCTIONS: Unit is informed that chemical weapons have been used, and that attack is imminent.

KEY INDICATORS: None.

TASK: 8C.5.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): The DASC is subjected to a chemical agent attack. Site should support the type of activities being conducted and permit the safe use of simulators and devices.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Responds to a chemical alarm by taking immediate protective measures followed by treatment/decontamination of casualties. (KI)
- .2 \_\_\_\_ Masks automatically upon notification of any enemy artillery, rocket, or air attack/overflight.
- .3 \_\_\_\_ Masks automatically upon perceiving a suspicious odor, airborne droplets/mist, or smoke from unknown source.
- .4 \_\_\_\_ Marines unmask only when authorized.
- .5 \_\_\_\_ Performs mission for at least 4 hours while in MOPP 4.
- .6 \_\_\_\_ Identifies type of chemical agent using available detection methods.
- .7 \_\_\_\_ Uses the buddy system to facilitate individual monitoring/treatment for chemical agent poisoning and emergency decontamination. If persistent agent:
- .8 \_\_\_\_ Locates and marks with NATO standard markers persistent agent contamination areas.
- .9 \_\_\_\_ Reports location and type of contamination to the higher command element, and plots the location per FM 3-3.
- .10 \_\_\_\_ Determines if immediate relocation to a clean area is necessary or possible and advises the higher command element.
- .11 \_\_\_\_ Determines decontamination priorities and requests decontamination support if required.
- .12 \_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns medical treatment facility.

MCO 3501.9B  
5 JUN 1991

- .13 \_\_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns graves registration collection point.  
If nonpersistent agent:
- .14 \_\_\_\_\_ Follows unmasking procedures. (KI).
- .15 \_\_\_\_\_ Evacuates WIA's to the medical treatment facility as mission permits.
- .16 \_\_\_\_\_ Evacuates WIA's to the graves registration collection point as mission permits.
- .17 \_\_\_\_\_ Services detector units and returns them to operation.
- .18 \_\_\_\_\_ Replaces expended chemical defense items as, required.
- .19 \_\_\_\_\_ Adjusts MOPP level, as required.

EVALUATOR INSTRUCTIONS: Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator. Ninety percent of the personnel must successfully accomplish tasks for the unit to receive a "yes" evaluation.

KEY INDICATORS:

CHEMICAL CASUALTIES (8C.5.9.1)

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), incorrect use of first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES (8C.5.9.14)

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it, and then break the seal of their mask.
2. Then they re-establish the seal, clear the mask and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and rascal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

TASK: 8C.5.10 PERFORM HASTY DECONTAMINATION

CONDITION(S). Personnel and equipment have been contaminated by a chemical agent. Time is not available for complete decontamination. The hazard is such that hasty decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Determines extent of contamination and establishes decontamination priorities.
- .2 \_\_\_ Decontaminates unit equipment, vehicles, individual and crew served weapons, and personnel using appropriate expedient devices.
- .3 \_\_\_ Removes contaminated protective covers and decontaminates, or discards.
- .4 \_\_\_ Uses appropriate decontamination procedures for items being decontaminated. (KI)
- .5 \_\_\_ Determines adequacy of decontamination.
- .6 \_\_\_ Discards contaminated materials according to tactical SOP marks as contaminated, and provides locations to higher command element.
- .7 \_\_\_ Reduces MOPP level. If required.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat" designated casualties.

KEY INDICATORS:

HASTY DECONTAMINATION PROCEDURES (8C.5.10.4)

If support is not available for conducting hasty decontamination, initial decontamination of unit equipment, vehicles and weapons may be accomplished by:

1. Removing all gross liquid contamination with sticks or other improvised devices, which are buried after use.
2. Utilizing M11 or M13 decontamination apparatus filled with DS2 to spray areas frequently used or touched (water is used to simulate DS2 in a training environment).

Contaminated items that may need special decontamination treatment are:

1. POL, food, and water containers and munitions. These are washed with soapy water, rinsed, and thoroughly air dried.
2. Communications equipment, electronic vans, and other electronic equipment are decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (water is used for training purposes).
3. Optical instruments are blotted with rags and then wiped with lens cleaning solution or organic solvent.

Adequacy of decontamination is determined using the chemical agent detector kit. If contamination is still present, procedures can be repeated, decontamination support can be requested, or the risk of using the equipment can be accepted.

MCO 3501.9B  
5 JUN 1991

TASK: 8C.5.11 COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT

CONDITION(S): DASC equipment has been Contaminated by a chemical agent. Hasty decontamination has been accomplished. Time is available for complete decontamination. Decontamination support from the higher headquarters is available upon request.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Coordinates with higher headquarters NBC section for location, supplies, equipment, and personnel support to be furnished and estimated time of completion.
- .2 \_\_\_ MASS detachment dispatches personnel following receipt of route clearance to the personnel/equipment decontamination stations (PDS/EDS) assembly area.
- .3 \_\_\_ Begins decontamination as scheduled.
- .4 \_\_\_ Reorganizes personnel in a clean area upwind of residual effects for the resumption of their mission.
- .5 \_\_\_ Adjusts MOPP level as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8C.5.12 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S): The protective clothing is contaminated and a suitable uncontaminated area is available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Removes contaminated clothing without transfer of contamination.
- .2 \_\_\_ Changes to new protective clothing.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8C.5.13 SCORE THE NBC EXAM

CONDITION(S): Classroom Atmosphere. An exam not to exceed 30 minutes, will be prepared at the Wing/Group level. All available personnel will take the exam.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Unit averaged 10 percent or higher.
- .2 \_\_\_ Unit averaged 20 percent or higher.
- .3 \_\_\_ Unit averaged 30 percent or higher.
- .4 \_\_\_ Unit averaged 40 percent or higher.
- .5 \_\_\_ Unit averaged 50 percent or higher.

- .6 \_\_\_\_ Unit averaged 60 percent or higher.
- .7 \_\_\_\_ Unit averaged 70 percent or higher.
- .8 \_\_\_\_ Unit averaged 80 percent or higher.
- .9 \_\_\_\_ Unit averaged 90 percent or higher.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N, as appropriate. As an example, if the team average was 76 percent, Task 8C.5.13.7 through 8C.5.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA

1. Number of personnel in unit: \_\_\_\_
2. Number of personnel taking exam: \_\_\_\_
3. Unit average: \_\_\_\_

KEY INDICATORS: None.

MC0 3501.9B  
5 JUN 1991

SECTION 8D  
AIR SUPPORT RADAR TEAM(S) (ASRT)

ENCLOSURE (1)

MCO 3501.9B  
28 MAY 1993

>SECTION 8D

RESERVED FOR FUTURE USE

Enclosure (2)  
Ch 1

\*U.S. GOVERNMENT PRINTING OFFICE: 1993 - 342-054/60208

## TABLE OF CONTENTS

	PAGE
MPS 8E 1 - OPERATIONAL PREPARATIONS	
TASK 8E.1.1 PROVIDES ACE WITH INITIAL PLANNING AND LIAISON	VIII-E-1
TASK 8E.1.2.....SITE SELECTION AND OCCUPATION	VIII-E-2
TASK 8E.1.3.....AUGMENT EXISTING ATC AIRFIELD FACILITIES	VIII-E-3
> TASK 8E.1.4.....ESTABLISH FACILITIES AT FORWARD OPERATING BASES (FOB'S)	VIII-E-3
TASK 8E.1.5.....ESTABLISH ATC FUNCTIONS AT AN AIR POINT/LAGGER SITE/TLZ	VIII-E-4
TASK 8E.1.6.....PUBLISH CONTROL MEASURES FOR AIR TRAFFIC WITHIN THE AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA)	VIII-E-5
TASK 8E.1.7.....ESTABLISH COMMUNICATIONS	VIII-E-7
TASK 8E.1.8.....ISSUE FLIGHT ADVISORIES	VIII-E-8
> MPS 8E 2 - EXPEDITIONARY AIR TRAFFIC CONTROL SERVICES	
TASK 8E.2.1.....PROVIDE RADAR APPROACH CONTROL SERVICE	VIII-E-9
TASK 8E.2.2.....PROVIDE CONTROL TOWER SERVICES	VIII-E-10
TASK 8E.2.3.....PROVIDE PRECISION/SURVEILLANCE RADAR APPROACHES	VIII-E-11
MPS 8E.3 - COORDINATION WITH EXTERNAL AGENCIES	
TASK 8E.3.1.....COORDINATION OF ATC AND GROUND CONTROL INTERCEPT (GCI) HANDOVERS	VIII-E-11
TASK 8E.3.2.....COORDINATE CONTROL OF ALERT AIRCRAFT	VIII-E-13
TASK 8E.3.3.....COORDINATE WITH DASC FOR AIRSPACE COORDINATION AREAS	VIII-E-14
TASK 8E.3.4.....COORDINATE CONTROL OF SAR/TRAP MISSIONS	VIII-E-14
TASK 8E.3.5.....PROVIDE EARLY WARNING AIR DEFENSE INFORMATION	VIII-E-15
MPS 8E.4 ELECTRONIC WARFARE	
TASK 8E.4.1.....OPERATIONS IN AN ELECTRONIC WARFARE ENVIRONMENT	VIII-E-16
MPS 8E.5 - NBC OPERATIONS	
TASK 8E.5.1.....PREPARE FOR NBC OPERATIONS	VIII-E-17
TASK 8E.5.2.....PREPARE FOR NUCLEAR ATTACK	VIII-E-17
TASK 8E.5.3.....RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	VIII-E-18
TASK 8E.5.4.....RESPONSE TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK	VIII-E-18
TASK 8E.5.5.....PERFORM RADIOLOGICAL DECONTAMINATION	VIII-E-19
TASK 8E.5.6.....CROSS A RADIOLOGICAL CONTAMINATED AREA	VIII-E-20
TASK 8E.5.7.....PREPARE FOR A FRIENDLY NUCLEAR STRIKE	VIII-E-20
TASK 8E.5.8.....PREPARE FOR A CHEMICAL AGENT ATTACK	VIII-E-21

	PAGE
TASK 8E.5.9                   RESPOND TO A CHEMICAL AGENT ATTACK	VIII-E-22
TASK.8E.5.10 .....PERFORM PARTIAL DECONTAMINATION	VIII-E-24
TASK 8E.5.11                   COORDINATE FOR COMPLETE DECONTAMINATION OF EQUIPMENT	VIII-E-25
TASK 8E.5.12.....EXCHANGE PROTECTIVE CLOTHING	VIII-E-25
TASK 8E.5.13.....SCORE THE NBC EXAM	VIII-E-25

## 8E. 1 OPERATIONAL PREPARATIONS

TASK: 8E.1.1 PROVIDES ACE WITH INITIAL PLANNING AND LIAISON

CONDITION(S): The ACE requires that an airfield with ATC functions be established. Letters of Agreement (LOA) and Letters of Instruction (LOI) referred to below are an exercise requirement to ensure coordination of airspace utilization. In a combat situation, airspace information/boundaries should be published by the CATF in an Operations Order, with inputs from the airspace coordination agencies of the CLF. The same type of information/requirement exists for both situations but would appear in different documents. Liaison activities, coordination, and airspace functions are all part of the ATC officer's duties.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Advises the MACG commander of projected ATC/airspace requirements to meet MAGTF concept of operations.
- .2 \_\_\_ Lateral and vertical boundaries of the Area of Responsibility (AOR) airspace are identified in the LOA/LOI.
- .3 \_\_\_ Present airspace management authorities of the planned MAGTF Area of Responsibility (AOR) are identified.
- .4 \_\_\_ LOA for the use of the AOR airspace is completed to identify the airspace management authority during the course of the operation.
- .5 \_\_\_ The LOA specifies the exact time and date of the AOR airspace activation, as well as the agencies that aircraft will be handed off to for terminal control.
- .6 \_\_\_ The LOA specifies the time and date of the AOR airspace deactivation.
- .7 \_\_\_ Coordination measures within the AOR airspace are identified in the LOA with respect to Stinger, HAWK, LAV/AD, and UAV employment.
- .3 \_\_\_ Return to force procedures have been coordinated with senior agencies and approved by the ACE.
- .9 \_\_\_ Coordinates ATC communications requirements, and alternatives, with MAGTF/ACE communications planners for incorporation into Annex K of the Op Order.
- .10 \_\_\_ Adjacent friendly airspace management authorities have identified procedures required to handoff aircraft to those agencies.
- .11 \_\_\_ Procedures are established for handling transient friendly aircraft in the AOR.
- .12 \_\_\_ Coordinates for appropriate NOTAM's (Notice to Airmen) identifying impending operations are issued to aviation users to include operating requirements within the AOR.

EVALUATOR INSTRUCTIONS: In foreign countries, ICAO NOTAM's must be issued. Further, Flight Information Regional Boundary Crossing (FIR) notifications may also be required, but the unit should realize that neither may be desired in actual combat to ensure appropriate OPSEC. The evaluator must obtain copies of the LOA/LOI or Op Order to evaluate the above requirements.

KEY INDICATORS: None.

TASK: 8E.1.2 SITE SELECTION AND OCCUPATION

CONDITION(S): Advice has been presented to the ACE, and a desired location has been selected. MATC Detachment proposed equipment siting plan and instrument procedures are available for review. If an existing airfield is used, only selected Site positions of organic MATC Detachment equipment will be evaluated.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Selection of control tower Site should balance the situation with the airspace, terrain, and airfield layout considerations. (KI)
- .2 \_\_\_\_ Selection of radar sites that afford appropriate coverage. (KI)
- .3 \_\_\_\_ Standard instrument procedures are established and approved by a appropriate approval authority. (KI)
- .4 \_\_\_\_ Physical reconnaissance of selected site is conducted by advance party, or at a minimum a map survey, and photo reconnaissance is completed.
- .5 \_\_\_\_ Advance party assists equipment placement upon arrival onsite.
- .6 \_\_\_\_ Radar coverage of the area of Air Traffic Control (ATC) responsibility is determined.
- .7 \_\_\_\_ Selection of NAVAID Site consistent with tactical situation. Equipment must be dispersed to the maximum extent. Site Should allow emplacement, partially below ground level, for operations and maintenance vans.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

CONTROL TOWER

NAVAIR planning standards require 7:1 slope for obstacle clearance from edge of runway. Tactical emplacement may not allow for the optimum due to threat possibilities. The site selected should provide a clear view of the airfield movement surfaces, approach corridors, and place the Visual Flight Rule (VFR) pattern to the front of the local controller. When located in visible or vulnerable areas, the use of sandbags or other protective measures, as well as camouflage, will be employed. An alternate site to provide control tower functions in the event of damage should be planned.

GCA CONSIDERATIONS

NAVSHIPS standards require 100 to 750 feet minimum distance from centerline of runway for placement of precision radar equipment. Again the tactical situation must be considered.

STANDARD INSTRUMENT PROCEDURES

Terrain considerations may require a waiver of standards. Under operational conditions, the Tactical Air Commander may act as approval authority for aircraft instrument approach/departure procedures. (Reference: U.S. Standard Flight Inspection Manual.)

## TASK: 8E.1.3 AUGMENT EXISTING ATC AIRFIELD FACILITIES

CONDITION(S): The ACE has decided that augmentation of equipment/personnel will be provided to an existing airfield to provide complete 24 hour air traffic control service under all weather conditions. Services include tower, GCA, navigational aid(s), and radar approach control. Information must be gathered to determine the extent of ATC equipment which will be required. The augmentation plan is delineated in the Air Annex of the Operations Order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Research is conducted to determine the current equipment/personnel capability of the augmented airfield.
- .2 \_\_\_\_\_ Determination is made as to interface capability of existing onsite equipment and personnel.
- .3 \_\_\_\_\_ Augmentation plan is developed and the required personnel and equipment identified.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: Reliability and/or survivability factors may dictate deployment of equipment to airfields already having an ATC capability.

## TASK: 8E.1.4 ESTABLISH FACILITIES AT FORWARD OPERATING BASES (FOB'S)

CONDITION(S): The ACE desires a phased evolution of ATC services. The ultimate goal will be to provide a complete 24 hour, all weather air traffic control system to include tower, GCA, radar approach control, and a navigational aid (NAVAID).

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Within 15 minutes of arrival at the ATC site, the MATC Oat establishes a Visual Flight Rule (VFR) control capability consisting of radios and NAVAID.
- .2 \_\_\_\_\_ Within 1 hour after arrival at the ATC site, four personnel are capable of conducting continuous operation utilizing the AN/TPC-195,
- .3 \_\_\_\_\_ Within 9 hours after arrival at the ATC site, the MATC net completes assembly of AN/TSQ-131 complex, which includes CCS, AN/TPN-22, AN/TPS-73, and appropriate NAVIDS.
- .4 \_\_\_\_\_ Within 10 hours after arrival at the ATC site, tower personnel are capable of conducting continuous operations utilizing the AN/TSQ-120.
- .5 \_\_\_\_\_ Within 10 hours after arrival at the ATC site, GCA is capable of conducting continuous operations.
- .6 \_\_\_\_\_ Within 12 hours after arrival at the ATC site, radar approach control is capable of continuous operations.
7. \_\_\_\_\_ As dictated by the tactical situation messages and/or NOTAM's are disseminated announcing the opening of the airfield and services available.

EVALUATOR INSTRUCTIONS: The order of listing has been prioritized to indicate recommended priority of offloading and setup to minimize delay in achieving total ATC services. ACE requirements will dictate the final determination of priorities.

KEY INDICATORS: None.

---

TASK: 8E.1.5 ESTABLISH ATC FUNCTIONS AT AN AIR POINT/LAGGER SITE/TLZ

CONDITION(S): The ACE has been assigned a mission which requires a large helicopterborne force to utilize an air point/lagger point on the ingress route to a mission area, additionally, fixed wing aircraft may be required to support the mission. Due to the scope of the operation, on-scene control of aircraft in and around the landing area is required. ATC personnel have been assigned that task, and are constrained in planning time and embarkation space due to the tactical environment.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Participates in the ACE/Squadron planning to establish an air point/lagger point by providing Air Traffic Control (ATC) specific information.
- .2 \_\_\_ Assist planning staff in preparing diagrams and maps for ACE approval which depict arming areas, refueling points, pre and post standby areas, obstacles, dispersion areas, and control positions to include any safety equipment.
- .3 \_\_\_ Assist planning staff in preparing pilot briefing cards for ACE approval which depict air point lighting requirements, aircraft lighting requirements, taxi instructions, timelines, communication methods and frequencies, and code word definitions.
- .4 \_\_\_ Identifies AIC mission essential equipment and personnel required to include ground communications.
- .5 \_\_\_ Brief participating aircrews and all support personnel, and distribute briefing cards.
- .6 \_\_\_ Inspect AIC personnel and equipment to be deployed.
- .7 \_\_\_ Coordinates arrival into the landing area appropriate to the plan. Provides appropriate small unit defense capability and integrates with the defense force established for the site.
- .8 \_\_\_ Within 5 minutes of arrival at the site, establish visual control capability consisting of radios and/or appropriate signaling devices.
- .9 \_\_\_ Within 30 minutes of arrival at ATC Site, establish limited instrument flight rules, control capability consisting of radio's, portable NAVAIDS and portable landing aids as applicable.
- .10 \_\_\_ Provides timely coordination with refueling and arming personnel.
- .11 \_\_\_ Effectively and efficiently assist with completion of air point activities.
- .12 \_\_\_ As appropriate to the plan, coordinate departure from the air point location with the last available transportation out.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8E.1.6 PUBLISH CONTROL MEASURES FOR AIR TRAFFIC WITHIN THE AIR TRAFFIC CONTROL ASSIGNED AIRSPACE (ATCAA)

CONDITION(S): The ACE requires input to the Op Order. Planning input should include all information required for the ATC appendix to the air operations annex to the Oplan; the pilot controller handbooks; and the briefings by ATC personnel. Aircraft Surge Launch and Recovery (ASLAR) procedures will be specified in the ATC appendix.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Airfield(s) name and geographic location are included.
- .2 \_\_\_ All AIC radio frequencies, and COMSEC instructions are included.
- .3 \_\_\_ NAVAID frequencies, channels, and locations are included.
- .4 \_\_\_ Taxi procedures are prescribed. (KI)
- .5 \_\_\_ Takeoff and landing instructions are included, (KI).
- .6 \_\_\_ ATC services are defined. (KI)
- .7 \_\_\_ Airfield diagrams included and local instructions are listed. (KI)
- .8 \_\_\_ Diagram of the air traffic control assigned airspace area is included. (KI)
- .9 \_\_\_ Local obstructions with locations and heights are listed.
- .10 \_\_\_ Instrument approach procedures are included. (KI)
- .11 \_\_\_ Emergency procedures are specified. (KI)
- .12 \_\_\_ ASLAR procedures (normal, MINCOM, or Zip lip) are included.
- .13 \_\_\_ Search and rescue procedures are specified.
- .14 \_\_\_ Alternate/divert airfield data is included.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: The below listed items should be available from unit's SOP. The use of prearranged signals, flashing lights, and absolute MINCOM to prevent enemy interception of radio signals should be encouraged.

#### TAXI PROCEDURES

Taxi procedures include:

- 1. Wind information.
- 2. Any special instructions given by clearance delivery, Ground Control or Local Control.
- 3. Changes to departure control instructions, if tower does not override.

#### TAXEOFF INSTRUCTIONS

Takeoff instructions include:

- 1. Wind direction/intensity.
- 2. Special instructions.

MCO 3501.9B

3. Changes to departure control instructions.
4. Requirements to monitor guard channel, if tower does not have override capabilities.
5. Pertinent information regarding hazards.

#### ATC SERVICES

Defined ATC services may include:

1. Tower arrival/departure control.
2. Approach control service.
3. Dissemination of Pilot reports (PIREP's), significant meteorological conditions (SIGMETS).

#### AIRFIELD DIAGRAM

Airfield diagram should include:

1. Length/width of runway(s).
2. Numbering of runway(s).
3. Length/width of taxiway(s).
4. Joint Terms: Depict tactical control measures and "real world".
5. Fire Support Coordination Measures: assist in defining air space/air control; CFL, FSCL, DBSL.
6. Location and identification of all NAVAID's.
7. Location and height of obstructions.
8. Location of tower.
9. Location and type of arresting gear (if provided).
10. Preferred taxi routes.
11. Type of lighting available.
12. Designated parking areas.
13. Traffic patterns to include:
  - "Break" altitude, if required.
  - Pattern altitude.
  - Touchdown zone elevation.

#### AIRSPACE DIAGRAM

A detailed diagram of ATCAA defining airspace volume to include

1. Restrictive areas.
2. Ingress/egress routes.
3. Reporting points.

## STANDARD INSTRUMENT APPROACH

standard instrument approach plates defining holding fixes; holding altitudes; direction of holding turns; initial, intermediate, and final approach headings; initial, intermediate, and final approach fixes; and categorized minimum should be included.

## EMERGENCY PROCEDURES

The following information should be specified in the ATC appendix:

1. Lost comm procedures.
2. Desired information, if time permits, to be given to the ATC agency by the pilot to include aircraft call sign, number/type of aircraft, position, the nature of the emergency, pilot's intentions, and/or special requests.
3. Actions to be taken by the ATC personnel to notify the appropriate agencies in case of emergency.

## TASK: 8E.1.7 ESTABLISH COMMUNICATIONS

CONDITION(S): A fully capable, IFR airfield has been established. The Op Order requires that the below listed nets/data links be operational, or available for monitoring when required.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Tower Primary (UHF and VHF), and Secondary (VHF or UHF).
- .2 \_\_\_ Ground Control (UHF and VHF).
- .3 \_\_\_ Approach Control (UHF and VHF).
- .4 \_\_\_ Departure Control (UHF and VHF).
- .5 \_\_\_ GCA (UHF and VHF).
- .6 \_\_\_ Guard (UHF and VHF).
- .7 \_\_\_ SAR when directed.
- 8 \_\_\_ GCI/ATC Handover net/Combat Information and Detection (CID) net.
- .9 \_\_\_ Establish appropriate data links as required. (KI)
- .10 \_\_\_ Air Defense Alert net/Tactical Air Command net.
- .11 \_\_\_ Crash Crew Alarm net (wireline or VHF).
- .12 \_\_\_ Appropriate nets are recorded. (KI)

EVALUATOR INSTRUCTIONS: To grade a net as "Yes" for being established and maintained, it must be operational at least 90 percent of the time that it is required to be operational.

KEY INDICATORS:

## TACTICAL DIGITAL INFORMATION LINK

Equipment and composition of this link will be dictated in the Op order. This link will be established to provide the ACE with an integrated data link picture.

RECORDING REQUIREMENTS

Radio Circuits, interphones, and telephones used for the direct control of aircraft or vehicular traffic, including crash phone circuits, shall be recorded continuously during the hours of operation. Position recording shall be used on all operating positions, however, the following frequencies shall be recorded independently.

1. UHF emergency.
2. VHF emergency.
3. Primary local control.
4. Primary approach control.
5. Voice recordings shall be retained for a minimum of 15 days.

---

TASK: 8E.1.8 ISSUE FLIGHT ADVISORIES

CONDITION(S): An airfield control agency has been established, and flight advisory information is required for arriving and departing aircraft. The MATC Det. is either able to electronically obtain weather information, or is augmented by a weather forecaster.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Provides Airspace Coordination Area (ACA)/Restrictive Operations Area (ROA) information as appropriate.
- .2 \_\_\_\_ Provides Significant Meteorological Conditions (SIGMET) to arriving and departing aircraft to include hazards to all categories of aircraft. (KI)
- .3 \_\_\_\_ Provides Airmen's Meteorological Information (AIRMET) reports to arriving and departing aircraft as required.
- .4 \_\_\_\_ Provides aviation weather sequence as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

ARRIVAL/DEPARTURE ADVISORY INFORMATION

Information derived locally by MATC and provided to all aircraft utilizing the main air base or airfield includes:

1. Wind direction and speed.
2. Duty runway.
3. Altimeter setting.
4. Pertinent known traffic.
5. Traffic pattern entry procedures.
6. Hazards to flight from friendly supporting arms (info from TACC/DASC).

## 8E.2 EXPEDITIONARY AIR TRAFFIC CONTROL SERVICES

TASK: 8E.2.1 PROVIDE RADAR APPROACH CONTROL SERVICE

CONDITION(S): Control and coordination procedures are contained in the appropriate letters or agreement or Op Order. A main air base has been established.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Radar equipment utilized is properly aligned and checked by the using controller. (KI)
- .2 \_\_\_ Correct primary and secondary radar identification procedures are utilized.
- .3 \_\_\_ Correct phraseology is utilized.
- .4 \_\_\_ Correct and timely control instructions to ensure separation standards minimum are utilized. (KI)
- .5 \_\_\_ Flight data/progress information is posted. (KI)
- .6 \_\_\_ Correct and timely coordination with internal/external agencies is executed. (KI)
- .7 \_\_\_ Airfield advisory information is forwarded to aircraft and personnel concerned. (KI)
- .8 \_\_\_ Effective procedures to preclude excessive delays are displayed.
- 9 \_\_\_ Aircraft controlled are contained within the required airspace.
- .10 \_\_\_ Speech rate and quality are adequate.
- 11 \_\_\_ Knowledge of equipment use is displayed.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

## ALIGNMENT OF EQUIPMENT

Radar scope alignment and presentation should be checked each time an air traffic controller assumes the responsibility of the position. Constant awareness of video shifts or equipment malfunction is the responsibility of each air traffic controller.

## CORRECT AND TIMELY CONTROL INSTRUCTIONS

Application of approved radar separation criteria for arriving, departing and enroute aircraft, which assures maintenance of minimum separation standards. Proper use of wake turbulence, vectoring and speed adjustment methods can be evaluated by whether they are used to enhance the flow of air traffic, without jeopardizing safety of flight parameters.

## POSTING FLIGHT DATA/PROGRESS INFORMATION

The complete information on posting of flight data/progress should be contained in the ATC SOP. Generally, flight data/progress and pilot requests should be annotated and passed to concerned agencies as soon as they are received.

## COORDINATION WITH INTERNAL/EXTERNAL AGENCIES

Only the information pertinent to the situation need be passed to the appropriate agencies (handover pointouts, restricted area info, etc.) Timeliness can be evaluated by whether a degradation of ATC services was caused by a missed coordination call (i.e., departure delay, unnecessary routing, excessive holding, or a reduction of separation minima).

## AIRFIELD ADVISORY INFORMATION

Airport advisory information that is pertinent to safety of flight (i.e., closed or unsafe portions of the landing or aircraft movement areas, degradation of navigational aids, nonavailability of arrestment facilities, obstructions to flight, etc.) should be passed in a timely manner to provide a safe, and efficient flow of air traffic. This information should not be considered as additional Service.

## TASK: 8E.2.2 PROVIDE CONTROL TOWER SERVICES

CONDITION(S): In support of the ACE, the MATC Det. has established Air Traffic Control Services at a Forward Operating Base. Coordination and control procedures are normally found in the ATC facility SOP, the airfield operations manual, and cognizant letters of agreement between AIC facilities, Diagrams of the airfield and its support facilities are formally found in the airfield operations manual or the ATC SOP. Lacking the existence of these two documents, the information should be found in the Air Operations Annex to the Op Order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Knowledge and utilization of ATC equipment is effectively displayed.
- .2 \_\_\_ Knowledge of the airfield(s) and its supporting facilities is effectively displayed. (KI)
- .3 \_\_\_ Knowledge of the airfield's assigned airspace, airport traffic pattern, and inherent obstructions or restricted areas is effectively displayed.
- .4 \_\_\_ Knowledge and proper use of pertinent ATC procedures is evident. (KI)
- .5 \_\_\_ Initial and subsequent control instructions and clearances provide effective air management while maintaining separation standards. (KI)
- .6 \_\_\_ Controller's speech rate and voice quality is adequate.
- .7 \_\_\_ Coordination with other ATC positions (or external agencies) with respect to aircraft control requirements and/or requested/required support is effected in an adequate manner.
- .8 \_\_\_ Efficient and effective control of ground aircraft and vehicular traffic is maintained.
- .9 \_\_\_ Controllers are alert to, and execute timely procedures with respect to the identification and handling of emergency situations. (KI)
- .10 \_\_\_ Flight data/progress information is posted in a correct and timely manner.
- .11 \_\_\_ Airfield and traffic advisory information is issued to concerned parties.
- .12 \_\_\_ Evaluation and adjustment of air traffic flow to effectively manage the existing and anticipated air traffic situation is performed.
- .13 \_\_\_ Effective and efficient use of the airfield and its facilities is ensured. (KI)

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

## KNOWLEDGE OF THE AIRFIELD AND SUPPORT FACILITIES

An extensive knowledge of the airfield layout, to include dimensions and limitations of the aircraft movement areas, placement of navigational aids, type and capability of arrestment gear, special usage areas, and location and capability of crash and fire fighting equipment is a prerequisite to mission accomplishment.

## KNOWLEDGE AND USE OF ATC PROCEDURES

In addition to standard national ATC separation minima and procedures, local ATC procedures may be promulgated to ensure aircraft safety and promote expeditious traffic flow. The below should be addressed:

1. Handling of aircraft with ordnance.
2. Handling of minimum fuel aircraft.
3. Coordination requirements between agencies.
4. Notification of crash alert/SAR facilities.
5. Handling of formation flights.
6. Handling of SVFR requests.
7. Handling of no radio aircrafts (NORDO)
8. GCA waveoff porcedures.

## INITIAL AND SUESEQUENT CONTROL INSTRUCTIONS

Initial and subsequent control instructions should be clear, concise, and effective. Excessive instructions; i.e., those not actually required to ensure compliance or maintain separation standards detract from the overall position control system, and pilot cockpit duties, should be avoided.

## TIMELY IDENTIFICATION/HANDLING OF EMERGENCIES

Timely identification of an emergency or belief that one is imminent is critical to an adequate emergency assistance response. The Airfield Operations Manual or the ATC SOP normally specifies emergency assistance procedures for typical emergencies.

## EFFECTIVE/EFFICIENT USE OF THE AIRFIELD AND ITS FACILITIES

Effective/efficient use of the airfield and facilities include such factors as establishing traffic priorities and traffic flow to afford a minimum delay. Establishing airport holding points for inbound/outbound traffic to preclude congestion, and providing timely notification to other agencies of their required support are also included.

## TASK: 8E.2.3 PROVIDE PRECISION/SURVEILLANCE RADAR APPROACHES

CONDITION(S): In support of the ACE, the MATC Det. has established Air Traffic Control services at a Forward Operating Base which includes PAR/ASR approaches. Coordination and control procedures are normally found in the ATC facility SOP, the airfield operations manual, and cognizant letters of agreement between ATC facilities. Diagrams of the airfield and its support facilities are normally found in the airfield operations manual or the ATC SOP.

## STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Radar equipment utilized is checked by the operator. (KI)
- .2 \_\_\_ Receiving handoff is effectively executed.
- .3 \_\_\_ Mandatory control transmissions are given in a timely manner. (KI)
- .4 \_\_\_ Necessary coordination with other air traffic control positions/agencies are effectively executed.
- .5 \_\_\_ Aircraft are contained within the area of responsibility.
- .6 \_\_\_ Range, azimuth, and elevation information are called at the appropriate times.

- .7 \_\_\_\_ Emergency aircraft handling is effective.
- .8 \_\_\_\_ Coordination with other airport support facilities is correctly performed. (KI)
- .9 \_\_\_\_ Required separation from other aircraft is effectively executed. (KI)
- .10 \_\_\_\_ Airfield advisory information is forwarded.
- .11 \_\_\_\_ Accountability of aircraft operations is performed. (KI)
- .12 \_\_\_\_ Equipment controls are used correctly.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### RADAR EQUIPMENT CHECKS

Radar equipment is checked to ensure it is within parameters prior to controlling aircraft to ensure safety of flight.

#### MANDATORY CONTROL TRANSMISSIONS

The final Controller provides mandatory control instructions, appropriate to the type of approach conducted (precision or surveillance); i.e., descent/glidepath notification, descent instructions, approach termination guidance, etc.

#### COORDINATION WITH OTHER SUPPORT FACILITIES

Coordination with the launch and recovery section for arrested landings requires that the tower controller relay information to the ground personnel in sufficient time to make gear settings and ensure the readiness of the arresting gear. Crash crew and firefighting support facilities require notification of impending emergency, actual crash, or hazardous aircraft operations. Coordination with the crash crew, firefighting unit, and search and rescue is normally initiated via the crash alarm network communications system, advising all known information. Coordination with the weather facility consists of relaying pilot reported weather information PIREP's, and the receiving and dissemination of local weather, SIGMET/AIRET observations.

#### ACTION TO MAINTAIN SEPARATION

Time permitting, controllers should advise the pilot of the anticipated action and the necessity for it. Some of these actions are:

1. Coordination with other ATC positions to increase interval of air traffic operations.
2. Requesting pilots to increase or decrease approach speed to achieve desired interval.
3. Executing abbreviated approach patterns.
4. Extending portions of the approach pattern to establish separation from previous aircraft.
5. Directing excessive turns throughout the pattern (S-turns) to establish longitudinal separation from preceding aircraft.

NOTE: This technique would be considered a poor choice if applied while the aircraft was in instrument conditions because it tends to induce vertigo. If necessary to maintain separation standards, it should be applied and the pilot advised of its necessity.

## ACCOUNTABILITY OF OPERATIONS

Accountability of operations is normally recorded on the air traffic flight data/progress strip or the GCA run log when employed in the garrison environment. In combat, the information is essential to the ACE to ensure appropriate actions commence if aircraft are overdue, or possible combat casualties.

## 8E.3 COORDINATION WITH EXTERNAL AGENCIES

TASK: 8E.3.1 COORDINATION OF ATC AND GROUND CONTROL INTERCEPT (GCI) HANDOVERS

CONDITION(S): ATC is required to effect handovers to the TAOC. Control and coordination procedures should be contained in the ATC appendix to the air operations annex of the Op Order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Pertinent control and handover information as stipulated in the AIC appendix is passed between control agencies.
- .2 \_\_\_ Handovers of aircraft are made to the receiving unit via automated or non-automated means.
- .3 \_\_\_ Controller continues to monitor until the handover is completed.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8E.3.2 COORDINATE CONTROL OF ALERT AIRCRAFT

CONDITION(S): The ACE has designated AIC personnel to coordinate the launching of alert aircraft. Instructions for alert aircraft should be contained in the air operations annex of the Op Order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Launch authority for alert aircraft is identified.
- .2 \_\_\_ Alert aircraft are given priority handling when launched.
- .3 \_\_\_ Coordination of launch is effected with the appropriate MACCS agencies.
- .4 \_\_\_ Appropriate mission information available is passed to the flight leader.
- .5 \_\_\_ A coordinated handoff is accomplished to an appropriate control agency.
- .6 \_\_\_ ATC personnel demonstrate knowledge of alert conditions.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

MCO 3501.9B

TASK: 8E.3.3 COORDINATE WITH DASC FOR AIRSPACE COORDINATION AREAS

CONDITION(S): Methods of identifying Airspace Coordination Areas/Restricted Operations Areas and required items of information to be passed on the coordination lines are established in the air operations annex of the Op Order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Required information concerning ACA's/ROA's is acquired from the DASC or TACC.
- .2 \_\_\_\_ Plotting of ACA's/ROA's is accomplished. (KI)
- .3 \_\_\_\_ ACA/ROA's information is continually updated and available to controllers. (KI)
- .4 \_\_\_\_ ACA/ROA's information is passed to aircrews.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### IDENTIFYING ACA'S/ROA'S AND PLOTTING

Grid coordinates are normally used for ACA's/ROA's, The ATC facility should have grid maps compatible with the DASC and available for plotting. There Should be a means of keeping track of those ACA's/ROA's that are current and those that are expired. LAT/LONG should be considered.

#### MAINTAINING AND UPDATING ACA'S/ROA'S

Current and planned ACA's/ROA's should he posted promptly and provided to all controllers requiring this knowledge. Access to ACA's/ROA's should be readily available to all controllers.

---

TASK: 8E.3.4 COORDINATE CONTROL OF SAR/TRAP MISSIONS

CONDITION(S): Authority for launching SAR/TRAP should be contained in the sir operations annex of the Op Order. ATC has been so designated by the ACE.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Change in Status of Search And Rescue (SAR/TRAP) assets are forwarded to the TACC, and other appropriate agencies.
- .2 \_\_\_\_ SAR/TRAP assets are incorporated into the crash alarm system.
- .3 \_\_\_\_ SAR/TRAP assets are provided appropriate information on all emergencies involving aircraft. (KI)
- .4 \_\_\_\_ Two way voice communications are maintained with SAR/TRAP at all times.
- .5 \_\_\_\_ SAR/TRAP is given priority handling throughout the duration of the emergency.
- .6 \_\_\_\_ Authority for launching SAR/TRAP is identified.
- .7 \_\_\_\_ Location of crash site is provided to SAR/TRAP aircraft. (KI)
- .8. \_\_\_\_ Necessary coordination with appropriate MACCS agencies is accomplished. (KI)

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### SAR INFORMATION

If available, the following items of information are provided to the SAR/TRAP agency if an emergency occurs:

1. Aircraft call sign.
2. Type aircraft.
3. Personnel onboard.
4. Ordnance loads.
5. Last known position of emergency aircraft.
6. Pilot's intentions (if known).
7. Specific type assistance that the emergency aircraft is requesting.
6. Radio frequency to conduct SAR/TRAP effort on.
9. Enemy situation if applicable.

#### CRASH SITE LOCATION

Grid coordinates, NAVAID bearing and distance, or other appropriate means should be provided to the SAR/TRAP pilot(s).

#### MACCS COORDINATION

If the SAR/TAP action is required over land, there may be a requirement for en route clearances. Coordination of security forces, to include both ground and aloft (e.g., suppressive fire, air cover) may be required for protection. It is essential that all involved agencies directly communicate all information to each other, regardless of redundancies. If the SAR/TRAP requirement is received first by the ATC facilities, an immediate screening must be made to identify the primary responsible control agency at the crash location. Communication with that agency must be established.

TASK: 8E.3.5 PROVIDE EARLY WARNING AIR DEFENSE INFORMATION

CONDITION(S): A MATC Det. has been established at an FOB. LAAD assets have also been assigned to the airfield as the only means of surface to air defense against hostile inbound aircraft. As the success of LAAD employment is highly dependent on receiving early warning information, the ACE has designated the MATC Det. to provide radar warning to the LAAD element commander. TAOC radars are not yet in place, and the ACE is operating from a temporary facility while awaiting the TACC equipment.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Primary and alternate communications are established between the LAAD element commander and the MATC Det. radar facility.
- .2 \_\_\_\_\_ Rules of Engagement (ROE), warning conditions, and weapons conditions are available to the MATC Det. from the ACE.
- .3 \_\_\_\_\_ Changes to ROE, warning conditions, or weapons conditions are passed to the LAAD element.
- .4 \_\_\_\_\_ Unidentified and known hostile tracks are passed to the LAAD elements using a grid system agreed to before hand. (KI)

- .5 \_\_\_\_\_ LAAD element visual reports, weapons status, and engagement results are immediately forwarded to the ACE.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### UNIDENTIFIED AIRCRAFT

Secure 1FF should be considered as the primary source of aircraft identification. Until MATC Det. is Mode IV capable, Control Points with Op Order designated headings and altitude can be used as primary sources. If any doubt exists, report the aircraft to the LAAD) element for visual identification or use of their secure 1FF system.

#### GRID SYSTEM

Map coordinates, or a specially designated X and Y grid system, are normally used for LAAD transfer of information. The MATC Det. must have the compatible diagrams or maps to transfer radar cuto to a system usable by LAM) elements. Prior coordination is required.

---

#### 8E.4 ELECTRONIC WARFARE

TASK: 8E.4.1 OPERATIONS IN AN ELECTRONIC WARFARE ENVIRONMENT

CONDITION(S): The MATC detachment's ability to react to and continue operations without interruption while undergoing active communications and radar jamming will be evaluated.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Operators/controllers/maintenance technicians are familiar with Electronic Protection (EP) features of radars and radios associated with the Marine Air Traffic Control and Landing System (MATCAL) of a MATC Det.
- .2 \_\_\_\_\_ MIJI reports are utilized as required by operators/controllers/maintenance technicians, (KI)
- .3 \_\_\_\_\_ Operators/controllers are familiar with Electronic Attack (EA) brevity codes as per applicable publications.
- .4 \_\_\_\_\_ Operators/controllers are able to launch/recover aircraft, effect Instrument Meteorological Condition (IMC) recoveries, and effect radar/nonradar handovers between the MATC Det and the TAOC while undergoing active communications and radar jamming.
- .5 \_\_\_\_\_ Alternate recovery techniques are developed, and published in the Op Order to provide for the recovery of aircraft (via TACAN/MRAALS, etc,) where active jamming is so severe that it cannot be overcome by any available means.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### MIJI ENCOUNTERED

The Net operator notifies ATC Watch Officer/Crew Chief of interference when he first becomes aware of a problem, recording time, and nature of interference. ATC Watch Officer/Crew Chief monitors net to verify problem and immediately notifies Systems Control (SYSCON) to investigate the problem.

## 8E.5 NBC OPERATIONS

TASK: 8E.5.1 PREPARE FOR NBC OPERATIONS

CONDITION(S): Threat forces have employed NBC munitions in the area, aimed at destroying/disrupting operations and facilities. Due to the threat, passive and active defense measures must be used for survival of the MATC Det.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Detachment or Squadron procedures subsequent to enemy NBC strikes are known.
- .2 \_\_\_ All individual NBC defense equipment authorized by the unit table of organization and equipment (T/O's and T/E's) is issued to each individual.
- .3 \_\_\_ All unit NBC defense equipment authorized by T/O's and T/E's is operationally ready and distributed to designated and trained/knowledgeable operators.
- .4 \_\_\_ Shortages are identified and replacement actions are taken.
- .5 \_\_\_ Decontamination equipment (mops, brooms, shovels, rags, etc.) and bulk decontaminates are assembled and prepared for ready transport to a decontamination area.
- .6 \_\_\_ M11 decontamination equipment units are filled (water used for training).
- .7 \_\_\_ NBC trained personnel are available on a 24 hour a day basis.
- .8 \_\_\_ HOFF level is established and personnel are at or above, required MOPP level.
- .9 \_\_\_ Marines properly identify NATO or Threat NBC contamination markers.
- .10 \_\_\_ The MATC Det. maximizes utilization of terrain features for cover, concealment, and topographic shielding.

EVALUATOR INSTRUCTIONS: Provide the unit information to expect an imminent nuclear attack by the enemy, and integrate NBC scenarios with normal missions. Evaluator(s) should be highly trained in the area of NBC Defense (MOS 57XX) or be thoroughly trained in this area as part of Evaluators' School.

KEY INDICATORS: None.

TASK: 8E.5.2 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): MATC Det. is informed that nuclear weapons have been used in the theater of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Backup command and control procedures are identified.
- .2 \_\_\_ Subordinate/displaced elements are alerted (if applicable).
- .3 \_\_\_ MATC Det. continues mission while implementing actions to minimize casualties and damage.
- .4 \_\_\_ Periodic monitoring is initiated, using available survey instruments.
- .5 \_\_\_ Personnel identify/prepare shelters from heat blast, and radiation.

MCO 3501.9B

- .6 \_\_\_\_\_ All loose Items, flammable/explosive items, food and water are secured/protected from heat, blast, and radiation.
- .7 \_\_\_\_\_ Personnel are familiar with standard first aid procedures to provide self/buddy aid for nuclear blast and thermal effects.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8E.5.3 RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator, or by other appropriate means.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Upon recognizing the attack, all personnel take immediate action to shield themselves from blast/beat of detonation.
- .2 \_\_\_\_\_ Chain of command and communications are maintained or reestablished. MATC Det resumes mission if possible.
- .3 \_\_\_\_\_ NBC-I initial and followup reports (as required) are rapidly submitted to unit headquarters by personnel designated or responsible for collecting the information. Reliable and complete reports are rapidly forwarded, by secure means when possible.
- .4 \_\_\_\_\_ Casualties are given first aid and are evacuated to a medical treatment station as the mission permits; fatalities are evacuated to a graves registration collection point.
- .5 \_\_\_\_\_ Damage assessment is submitted by secure means to higher/supported headquarters IAW SOP.
- .6 \_\_\_\_\_ Continuous monitoring is initiated, using available survey instruments.

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast, heat dazzle, radiation, and electromagnetic pulse (EMP). EMP casualties will be assessed by the evaluator for all communications systems (antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle) during a simulated nuclear detonation.

KEY INDICATORS: None.

TASK: 8E.5.4 RESPONSE TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): A surface or subsurface nuclear detonation has occurred. The ATC location is within the predicted fallout zone. An M5A2 radiological fallout predictor, or substitute, is available. The unit gets effective downwind messages at least once every 3 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit; NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Unit mission is performed concurrently with all other actions.
- .2 \_\_\_ Commander is advised of estimated time of fallout arrival and subordinate units are notified.
- .3 \_\_\_ Continuous monitoring is maintained using available survey instruments.
- .4 \_\_\_ Equipment, munitions, POL, food, and water are protected from fallout.
- .5 \_\_\_ Personnel take protective measures to minimize fallout effects as mission permits.
- .6 \_\_\_ NBC-4 reports are forwarded, as required, to higher headquarters by secure means.
- .7 \_\_\_ Unit total dose information is recorded and reported to higher headquarters, using available secure means.
- .8 \_\_\_ Exposure is minimized while the Detachment Commander determines if relocation to a clean area is necessary or possible. Optimum time of exit is calculated, and recommendations are made to the ACE.
- .9 \_\_\_ Personnel are able to handle and provide first aid treatment to casualties in a nuclear environment.
- .10 \_\_\_ Casualties and fatalities are assessed.

EVALUATOR INSTRUCTIONS: Commander is advised of estimated time of fallout arrival.

KEY INDICATORS: None.

TASK: 8E.5.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time and tactical situation permits decontamination. Decontamination support is not available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Decontamination priorities are established.
- .2 \_\_\_ Decontamination point is established.
- .3 \_\_\_ Decontamination personnel wear appropriate protective clothing and equipment.
- .4 \_\_\_ Equipment, personnel, and individual weapons are decontaminated using appropriate decontamination kits.
- .5 \_\_\_ MATC Det. equipment and vehicles are decontaminated using appropriate expedient devices.
- .6 \_\_\_ Contaminated areas are marked with NATO standard NBC markers.
- .7 \_\_\_ Adequacy of decontamination is determined using available personnel and equipment monitoring instruments.
- .8 \_\_\_ Contaminated materials are discarded according to tactical SOP, marked as contaminated, and location is provided to higher headquarters.
- .9 \_\_\_ Decontamination personnel are decontaminated as necessary.
- .10 \_\_\_ Total dose information is recorded and reported to higher headquarters.

MCO 3501.9B

EVALUATOR INSTRUCTIONS: None,

KEY INDICATORS: None.

TASK: 8E.5.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): Tactical situation forces unit to cross a radiological contaminated area while moving to set up at a new FOB. Unit receives a NBC-5 report or contamination overlay from higher headquarters.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ NBC-5 report and/or contamination overlay is posted to situation map and route determined.
- .2 \_\_\_ Route clearance and approval is obtained if necessary.
- .3 \_\_\_ Turn back dose and dose rate are provided to advance party and/or reconnaissance team.
- .4 \_\_\_ Vehicles receive additional shielding and personnel are provided all available protection from dust.
- .5 \_\_\_ Advance party and/or recon team is dispatched to reconnoiter new area,
- .6 \_\_\_ Unit crosses suspected contaminated area while employing contamination avoidance techniques.
- .7 \_\_\_ Operational exposure guidance is not exceeded.
- .8 \_\_\_ After clearing the contaminated area, the degree of personnel and equipment contamination is determined, using available personnel and equipment monitoring instruments.
- .9 \_\_\_ Decontamination priorities are established and performed as required.
- .10 \_\_\_ Unit total dose information is recorded, using available total dose instruments, and reported to higher headquarters.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8E.5.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): Unit receives a friendly nuclear STPIKWAIN per FM 21-40, pages 6-24 and 6-15. The MATC Det. is within the minimum safe distance (MSD).

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Detachment or Squadron NBC SOP addresses chemical defense/decontamination procedures.
- .2 \_\_\_ Pertinent information regarding the planned detonation (time of burst, ground zero, fallout coverage, MSD, etc,) is available to the Commander.
- .3 \_\_\_ Commander is advised of the vulnerability of the unit to the burst (within MSD 1, 2, or 3) and residual contamination (within predicted fallout zone).
- .4 \_\_\_ Commander is advised of the measures needed to prevent casualties, damage, and extended interference with the mission.
- .5 \_\_\_ MATC Det. warns those aircraft affected by the burst (within MSD 3 and/or fallout zone). (KI)

- .6 \_\_\_\_ Unit implements protective measures, as directed by higher headquarters, consistent with the mission.
- .7 \_\_\_\_ Personnel minimize exposure by rolling down sleeves, buttoning collars, and wearing additional clothing equal to a two layer uniform.
- .8 \_\_\_\_ Personnel take cover in foxholes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, etc.), or lie prone on open ground.
- .9 \_\_\_\_ Vehicles are placed behind masking terrain.
- .10 \_\_\_\_ Electronic devices are turned off; erected antennas are disassembled; antennas are tied down.
- .11 \_\_\_\_ All loose items (small weapons, tools, etc.) and highly flammable/explosive items (POL, propellants, etc.) are placed in armored vehicles or shelters.
- .12 \_\_\_\_ MATC Det. acknowledges the warning before the expected time of burst. All attachments and aircraft have been warned and protective measures implemented.

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator, or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to unprotected personnel and equipment.

KEY INDICATORS. MATC Det. may warn subordinate/attached elements or working aircraft of an impending nuclear detonation by using one of the following methods:

1. Using a proword or brevity code from the CEO! to indicate the message is a nuclear strike warning.
2. A brief, prearranged message that directs the receiver to implement specific protective measures.
3. Encoded message with expected time of burst, sent by secure voice or messenger.

TASK: 8E.5.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S): MATC Det. is informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ MATC Det. has and uses a chemical defense SOP which addresses chemical defense/decontamination procedures.
- .2 \_\_\_\_ All attached units/elements (if applicable) are directed to increase MOPP consistent with mission, temperature, work rate, and Commander's guidance.
- .3 \_\_\_\_ Mission essential tasks that require a high degree of manual dexterity or physical strength, and are difficult to perform in MOPP 4 are identified. Alternate methods, such as allowing more time, rotating or assigning additional personnel, are planned.
- .4 \_\_\_\_ Personnel identify criteria for and demonstrate the capabilities for donning the protective mask and chemical protective ensemble.
- .5 \_\_\_\_ The buddy system is established to facilitate monitoring/treatment for chemical agent poisoning and emergency decontamination.
- .6 \_\_\_\_ MATC Det. continues mission while implementing all actions to minimize casualties and damage.
- .7 \_\_\_\_ Portions of essential equipment, munitions, POL, food, and water supplies that cannot be placed in a shelter are covered with expendable or readily decontaminated tarps, shelter halves, or ponchos.

MCO 3501.9B

- .8 \_\_\_\_\_ Detector paper is affixed to visible, horizontal surfaces of protective clothing and on equipment, munitions, etc.
- .9 \_\_\_\_\_ MATC Det. decontamination equipment is checked to ensure the M11 is filled, individuals have complete M13 and M256 kits, and there is an available water source with a supporting road network.
- .10 \_\_\_\_\_ Potential decontamination sites are reported to higher headquarters.
- .11 \_\_\_\_\_ Available chemical agent alarms are set up and monitored.
- .12 \_\_\_\_\_ Protective NBC equipment and supplies are properly used and maintained in a high state of serviceability.
- .13 \_\_\_\_\_ Personnel demonstrate a knowledge of chemical agent symptoms.

EVALUATOR INSTRUCTIONS: Commander is informed that chemical weapons have been used in theater and that attack is imminent.

KEY INDICATORS: None.

---

TASK: 8E.5.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): MATC Det. is subjected to a chemical agent attack. Site should support the type of activities being conducted and permit the safe use of simulators and devices.

STANDARDS: EVAL Y; N; NE

- .1 \_\_\_\_\_ Upon hearing a chemical alarm, personnel take immediate protective measures followed by treatment/decontamination of casualties. (KI)
- .2 \_\_\_\_\_ Personnel automatically mask upon notification of any enemy artillery, rocket, or air attack/overflight.
- .3 \_\_\_\_\_ Personnel automatically mask upon perceiving a suspicious odor, airborne droplets/mist, or smoke from unknown source.
- .4 \_\_\_\_\_ Personnel do not unmask until authorized by their immediate commander. (KI)
- .5 \_\_\_\_\_ MATC Det. is able to perform mission for at least 4 hours while in MOPP 4.
- .6 \_\_\_\_\_ Type of chemical agent is identified and reported using available detector kit.  
  
If persistent agent:
  - .7 \_\_\_\_\_ Contamination is located and marked with NATO standard markers.
  - .8 \_\_\_\_\_ Location and type of contamination is reported to higher headquarters.
  - .9 \_\_\_\_\_ Commander determines if immediate relocation to a clean area is necessary or possible and advises the ACE.
  - .10 \_\_\_\_\_ Priorities are determined for decontamination. Decontamination support is requested if required.
  - .11 \_\_\_\_\_ WIA's are wrapped, marked as contaminated, and evacuated as mission permits. Medical treatment facility is warned.
  - .12 \_\_\_\_\_ WIA's are wrapped, marked as contaminated, and evacuated as mission permits. Graves registration collection point is warned.  
  
If nonpersistent agent:
    - .13 \_\_\_\_\_ Unmasking procedure is followed.

- .14 \_\_\_\_ WIA's are evacuated to the medical treatment facility as mission permits.
- .15 \_\_\_\_ WIA's are evacuated to the graves registration collection point as mission permits.
- 16. \_\_\_\_ Detector units are serviced and returned to operation.
- .17 \_\_\_\_ Expended chemical defense items are replaced as required.
- .15 \_\_\_\_ Commander adjusts MDPP level as required.
- .19 \_\_\_\_ Unit personnel are able to handle and provide first aid treatment to casualties in a chemical environment.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat designated casualties." Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator.

KEY INDICATORS:

CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach, without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Personnel who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it, break the seal on their masks, and keep their eyes open for 15 seconds.
2. Then they clear their masks, reestablish the seal, and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and reseal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

MCO 3501.9B

TASK: 8E.5.10 PERFORM PARTIAL DECONTAMINATION

CONDITION(S): Personnel and equipment have been, contaminated by a chemical agent. Emergency decontamination has been accomplished. Time is not available for complete decontamination. The hazard is such that partial decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Personnel decontaminate individual weapons and equipment using appropriate decontamination kits.
2. \_\_\_\_ Extent of decontamination is determined and decontamination priorities are established.
- .3 \_\_\_\_ Contaminated protective covers are removed, decontaminated, or discarded.
- .4 \_\_\_\_ Decontamination procedures are appropriate to items being decontaminated. (KI)
- .5 \_\_\_\_ MATC Det. equipment and vehicles are decontaminated using appropriate expedient devices.
- .6 \_\_\_\_ Adequacy of decontamination is determined. If inadequate.
  - Procedures are repeated. Decontamination support is requested or risk of using equipment is accepted.
- .7 \_\_\_\_ Contaminated materials are discarded according to tactical SOP, marked as contaminated, and location provided to higher headquarters.
- .8 \_\_\_\_ Commander reduces MOPP level if required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### DECONTAMINATION PROCEDURES

Initial decontamination of unit equipment, vehicles, and crew served weapons may be accomplished by:

1. Removing all gross liquid contamination with sticks or other improvised devices, which are buried after use.
2. Utilizing M11 decontamination apparatuses filled with DS2 to spray areas frequently used or touched (water is used to simulate DS2 in a training environment.)

Contaminated items that may need special decontamination treatment are:

1. POL, food, and water containers and munitions. These are washed with soapy water, rinsed, and thoroughly air dried.
2. Communications equipment, radar, and other electronic equipment. Decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (water is used for training purposes).
3. Optical Instruments. Blotted with rags and then wiped with lens cleaning solution or organic solvent.

Adequacy of decontamination is determined using the chemical agent detector kit. If contamination is still present, decontaminate again.

TASK: 8E.5.11 COORDINATE FOR COMPLETE DECONTAMINATION OF EQUIPMENT

CONDITION(S): MATC Det. equipment has been contaminated by a chemical agent. Emergency decontamination has been accomplished. Time is available for complete decontamination. Decontamination support from a decontamination unit is available upon request.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Coordination is made with the decontamination unit as to time of arrival, supplies, equipment, and personnel support to be furnished by the contaminated unit, and estimated time of completion is established.
- .2 \_\_\_\_ MATC Det. requests and receives route clearance to Personnel Decontamination Station/Equipment Decontamination Station (PDS/EDS) assembly area. Advance party (personnel to augment decontamination operation and establish security) is dispatched to PDS/EDS.
- .3 \_\_\_\_ Main body arrives at PDS/EDS assembly area and organizes for processing.
- .4 \_\_\_\_ Decontamination begins as scheduled.
- .5 \_\_\_\_ The Unit reorganizes in a clean area upwind of residual resumption of mission.
- .6 \_\_\_\_ Commander adjusts MOPP level as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8E.5.12 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S): The protective clothing is contaminated and a suitable uncontaminated area is available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Individuals put on new protective clothing.
- .2 \_\_\_\_ Contaminated clothing is removed without transfer of contamination.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8E.5.13 SCORE THE NBC EXAM

CONDITION(S): Classroom atmosphere. Exam will be prepared at the wing level and will take no more than 30 minutes. All available personnel will take the examination.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Unit averaged 10 percent or higher.
- .2 \_\_\_\_ Unit averaged 20 percent or higher.
- .3 \_\_\_\_ Unit averaged 30 percent or higher.

MCO 3501.98

- .4 \_\_\_\_ Unit averaged 40 percent or higher.
- .5 \_\_\_\_ Unit averaged 50 percent or higher.
- .6 \_\_\_\_ Unit averaged 60 percent or higher.
- .7 \_\_\_\_ Unit averaged 70 percent or higher.
- .8 \_\_\_\_ Unit averaged 80 percent or higher.
- .9 \_\_\_\_ Unit averaged 90 percent or higher.
- .10 \_\_\_\_ Unit averaged 100 percent.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N as appropriate. As an example, if the team average was 76 percent, 8E.5.13.1 through 8E.5.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA:

1. Number of personnel in unit:\_\_\_\_.
2. Number of personnel taking exam:\_\_\_\_.
3. Team average:\_\_\_\_.

KEY INDICATORS: None.

---

VIII-E-26

\*U.S. GOVERNMENT PRINTING OFFICE 1994 - 300-748/80204

MCO 3501.9B  
5 JUN 1991

SECTION 8F  
LOW ALTITUDE AIR DEFENSE (LAAD)

ENCLOSURE (1)

TABLE OF CONTENTS

	PAGE
MPS 8F.1 - TASK ORGANIZATION AND PLANNING	
TASK 8F.1.1. . . . .	VIII-F-1
THREAT ASSESSMENT	
TASK 8F.1.2. . . . .	VIII-F-1
INITIAL PLANNING	
TASK 8F.1.3. . . . .	VIII-F-2
CONCEPT OF EMPLOYMENT/OPERATIONS DEVELOPMENT	
TASK 8F.1.4. . . . .	VIII-F-3
DEVELOP AND ISSUE A GROUND BASED AIR DEFENSE (LAAD) OPERATIONS ORDER	
>MPS 8F.2 - LAAD OPERATIONS	
TASK 8F.2.1. . . . .	VIII-F-6
ESTABLISH COMMUNICATIONS	
TASK 8F.2.2. . . . .	VIII-F-7
EMERGENCY DEFENSE OF THE AMPHIBIOUS TASK FORCE	
TASK 8F.2.3. . . . .	VIII-F-7
CONTROL DURING AMPHIBIOUS LANDINGS AFLOAT	
TASK 8F.2.4. . . . .	VIII-F-8
TRANSFER CONTROL ASHORE	
TASK 8F.2.5. . . . .	VIII-F-9
CONTROL ASHORE	
TASK 8F.2.6. . . . .	VIII-F-10
COMMAND AND CONTROL	
TASK 8F.2.7. . . . .	VIII-F-11
SITE SELECTION	
TASK 8F.2.8. . . . .	VIII-F-11
AIRCRAFT DETECTION IDENTIFICATION	
TASK 8F.2.9. . . . .	VIII-F-12
MANEUVER WITH THE GROUND COMBAT ELEMENT	
TASK 8F.2.10. . . . .	VIII-F-13
CONDUCT OF ENGAGEMENT (DAY/NIGHT)	
TASK 8F.2.11. . . . .	VIII-F-14
SECURITY REAR AREA	
TASK 8F.2.12. . . . .	VIII-F-14
AIR DEFENSE CONVOY	
TASK 8F.2.13. . . . .	VIII-F-15
SAFETY PRECAUTIONS EQUIPMENT	
TASK 8F.2.14. . . . .	VIII-F-16
EMERGENCY DESTRUCTION EQUIPMENT	
MPS 8F.3 - NBC OPERATIONS	
TASK 8F.3.1. . . . .	VIII-F-17
PREPARE FOR NBC OPERATIONS	
TASK 8F.3.2. . . . .	VIII-F-18
PREPARE FOR NUCLEAR ATTACK	
TASK 8F.3.3. . . . .	VIII-F-18
RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	
TASK 8F.3.4. . . . .	VIII-F-19
RESPONSE TO THE RESIDUAL EFFECTS OF A NUCLEAR BLAST	
TASK 8F.3.5. . . . .	VIII-F-20
PERFORM RADIOLOGICAL DECONTAMINATION	
TASK 8F.3.6. . . . .	VIII-F-20
CROSS A RADIOLOGICAL CONTAMINATED AREA	
TASK 8F.3.7. . . . .	VIII-F-21
PREPARE FOR A FRIENDLY NUCLEAR STRIKE	
TASK 8F.3.8. . . . .	VIII-F-22
PREPARE FOR A CHEMICAL AGENT ATTACK	
TASK 8F.3.9. . . . .	VIII-F-23
RESPOND TO A CHEMICAL AGENT ATTACK	
TASK 8F.3.10. . . . .	VIII-F-24
PERFORM PARTIAL DECONTAMINATION	

MCO 3501.9B  
6 DEC 1994

TASK 8F.3.11 COORDINATE FOR COMPLETE DECONTAMINATION OF EQUIPMENT VIII-F-25

TASK 8F.3.12 EXCHANGE PROTECTIVE CLOTHING VIII-F-26

TASK 8F.3.13.....VIII-F-26  
SCORE THE NBC EXAM

>MPS 8F.4 - LOGISTICS/COMBAT SERVICE SUPPORT

TASK 8F.4.1.....VIII-F-27  
LOGISTIC REQUIREMENTS

TASK 8F.4.2.....VIII-F-28  
EMBARKATION PROCEDURES

8F.1 TASK ORGANIZATION AND PLANNING

TASK: 8F.1.1 THREAT ASSESSMENT

CONDITION(S): The LAAD battalion is assigned the mission to provide deployed elements with close-in, Low altitude, air defense of MAGTF assets. The threat has fixed and rotary wing aircraft capable of attack, as well as air-to-surface and surface-to-surface missiles. The enemy possesses a Limited night attack capability with fixed and rotary winged aircraft and is capable of Electronic Attack (EA) and Electronic Warfare Support (ES).

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Examines enemy capabilities with respect to MAGTF capabilities, limitations and intentions. To include Air Order of Battle, Ground Order of Battle, Electronic Order of Battle, Reconnaissance Capabilities, and terrorist/unconventional threat.
- .2 \_\_\_\_\_ Develops Essential Elements of Information (EEI) and Other Intelligence Requirements (OIR); submits requests for information (RFI) to appropriate S-2.
- .3 \_\_\_\_\_ Threat assessment permeates entire planning process from the time of mission receipt to the time of mission accomplishment.
- .4 \_\_\_\_\_ As threat changes, employment plans are adjusted accordingly.
- .5 \_\_\_\_\_ Threat capabilities, Limitations, weapons, tactics, and doctrine are assessed and accounted for when developing LAAD concepts of employment.
- .6 \_\_\_\_\_ Conducts a well-planned Intelligence preparation of the Battlefield (IPB) which includes a battlefield area evaluation, terrain analysis, weather analysis, threat evaluation and threat integration.

TASK: 8F.1.2 INITIAL PLANNING

CONDITION(S): The LAAD Battalion is assigned the mission to provide deployed elements with close-in, low altitude, air defense of MAGTF assets.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Reviews contingency Op plans, SOPs, and other information on LAAD operations to include lessons learned.
- .2 \_\_\_\_\_ Establishes coordination with MACG or appropriate ACE level staff to ensure integrated planning.
- .3 \_\_\_\_\_ Analyzes assigned mission, to include ACE and MAGTF mission, Commander's Intent and Concept of Operations. Derives specified and implied tasks which will prove crucial to accomplishment of assigned mission.
- .4 \_\_\_\_\_ Requests MAGTF/Supported unit commander's guidance concerning vital areas to be defended and assists in the development of air defense priorities.
- .5 \_\_\_\_\_ Receives briefing on mission, concept of operations, scheme of maneuver, and disposition of defended assets or supported unit.

TASK: 8F.1.3 CONCEPT OF EMPLOYMENT/OPERATIONS DEVELOPMENT

CONDITION(S): The LAAD Battalion is assigned the mission to provide deployed elements with close-in, low altitude, air defense MAGTF assets.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Develops courses of action and estimates of supportability which supports assigned mission, designated air defense priorities, and complements capabilities, while offsetting limitations of other MAGTF air defense weapons in the integrated air defense System (IADS).
- .2 \_\_\_\_\_ Considers surveillance capabilities of radar equipped agencies within the MAGTF and organic UPS-3 capabilities within the AOR which can provide early warning and cueing to adjacent LAAD elements.
- .3 \_\_\_\_\_ Employs LAAD sections to provide close-in, Low altitude, air defense of assigned vital areas using doctrinal air defense employment guidelines.
- .4 \_\_\_\_\_ Positions LAAD Section Leaders where they can most effectively control subordinate teams, advise supported units, and facilitate critical information flow within the IADS. Section leaders are integrated with agencies of the MACCS to access cueing and immediately relay to the teams.
- .5 \_\_\_\_\_ Positions LAAD Platoon Commanders where they can most effectively command and control subordinate Sections, advise adjacent MACCS/supported units, and facilitate critical information flow and combat service Support. Platoon Commanders are positioned to provide a redundant means of cueing sections which cannot receive cueing directly.
- .6 \_\_\_\_\_ Positions Battery Commanders where they can most effectively command and control subordinate platoons, advise adjacent MACCS/Supported units, expedite critical information flow within the IADS, and facilitate combat service support to subordinate LAAD elements.
- .7 \_\_\_\_\_ Develops Lame Duck Procedures, in consonance with ACE guidance, which can be applied by LAAD gunners in the conduct of engagements.
- 8 \_\_\_\_\_ Evaluates Airspace Control/Air Defense Control measures and procedures to ensure they support assigned missions.
- .9 \_\_\_\_\_ Designates reference system to be used for manual crosstell and incorporates appropriate manual crosstell reporting procedures from ACE Operations Order.
- .10 \_\_\_\_\_ Develops communications connectivity for deployed LAAD elements to include single channel radio and Ground Based Data link (GBDL) connectivity with supported Units and adjacent MACCS agencies. Ensures information is incorporated in Annex K of the MAGTF Operations Order.
- .11 \_\_\_\_\_ Develops combat service support procedures which Support concept of employment and LAAD operations. Missile resupply, maintenance, and replacement of combat essential supply item must be considered. Logistical considerations must be well integrated throughout operations planning process.
- .12 \_\_\_\_\_ Coordinates with higher, adjacent, and supported units where necessary to ensure required combat service support is provided.
- .13 \_\_\_\_\_ Coordinates with MAGTF/ACE planners to ensure that LAAD concepts of operations and specific employment considerations are reflected in the appropriate annexes of the MAGTF Operations Order.
- 14 \_\_\_\_\_ Issues a Warning Order to subordinate LAAD elements.

TASK: 8F.1.4 DEVELOP AND ISSUE A GROUND BASED AIR DEFENSE (LAAD)  
OPERATIONS ORDER

CONDITION(S): Initial planning, threat assessment, and detailed operations planning have taken place in response to warning orders or specified mission assignments being received from higher headquarters.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Prepares a Ground Based Air Defense Five Paragraph Order for subordinate LAAD Battery/Platoon Commanders and LAAD Section Leaders. (KI)
- 2 \_\_\_\_\_ Issue the five paragraph order to subordinate LAAD Battery/Platoon commanders and LAAD Section Leaders. (KI)

EVALUATOR INSTRUCTIONS: The Five Paragraph Order culminates the planning process and in written form reflects, in detail, all operational, administrative, logistical and communications planning conducted for the exercise. When issuing a five paragraph order, the briefer must display knowledge, confidence and enthusiasm in the plan. In particular, the Commander's Intent portion of the order should be emphasized to ensure subordinates will be able to take independent action that will rain in keeping with the commander's vision for success and desired end state/final result of the battle/operation. The effectiveness of the plan or the delivery of the five paragraph order can more fully be assessed at the end of the operation once evaluators have had sufficient opportunity to observe how well subordinates understood and executed the plan as briefed.

KEY INDICATORS:

#### FIVE PARAGRAPH ORDER

- I. Orientation
- II. Situation
  - A. General
  - B. Enemy Forces
    1. Ground forces disposition
    2. Aircraft number, type, and location (FW, RW, UAV)
    3. Enemy aircraft ability to range air defense priorities
    4. Expected threat axes and likely avenues of approaches
    5. Expected times of attack
    6. Ordnance and delivery techniques
      - Standoff weapons
      - Air to surface missiles (Strategic, GP, Anti-radiation)
      - Targeting capabilities (FLIR, IV optics, laser or command guidance, etc.
      - Cruise missiles.
    7. Electronic Attack Capabilities
    8. Electronic Warfare Support Capabilities
    9. Night Capabilities
    10. IRCM Capabilities

11. NBC Capabilities
12. Surface to Surface Threat
13. Special Operations/Terrorist threat
14. Most timely enemy course of action

C. Friendly Forces

1. Higher
2. Adjacent
3. Supporting

D. Attachments and Detachments

E. Assumptions

III. MISSION

IV. EXECUTION

A. Commanders Intent

B. Concept of Operations

C. Tasks

D. Coordinating Instructions

1. Time of departure/time to be operational
2. Initiate Air Defense Warning Condition, Weapon Control Status  
State of Alert
3. Autonomous Operations Procedures
4. Destruction area (BDZ's, MEZ's, FEZ's, Crossover Zones/Points, JEZ's)
5. Origin Points (friendly/hostile)
6. Location of Combat Air Patrols (CAP's) and Orbit areas
7. Surveillance coverage and gaps
8. Primary threat axes
9. Manual Risk Routes
10. Rules of Engagement (ROE)
11. Self-defense criteria
12. Firing doctrine guidance
13. Lamé Duck procedures/Risk assessment
14. Manual crosstell procedures
15. Liaison requirements
16. Alternate site locations
17. Consolidation points

18. Rehearsals and Inspections, as required
19. Actions to be taken upon enemy contact
20. Casualty plans
21. NBC MOPP condition and decontamination plans

V. ADMIMINISTRAION AND LOGISTICS

- A. Rations
- B. Fuel and Water
- C. Medical (Battalion Aid Station and Corpsman Locations)
- D. Missile load-out and resupply procedures
- E. Handling of Enemy Prisoners of War (EPWs)
- F. Contact team Locations and request procedures

VI. Command and Signal

- A. Command
    1. Your location and the next higher units location
    2. Succession of Command
  - B. Signal
    1. Current period for ACEOI
    2. Frequencies/Call signs (primary/alternate)
    3. Required communication nets to be monitored
    4. Prioritization and restoration of communication nets
    5. Data Link Reference Points (DLRP's) and Battery Address (Include Ground Based Data Link [GBDL] DLRP's)
    6. Lost/alternate comm procedures
    7. Crypto change over times
  8. Challenge and password
    9. Brevity codes
    10. Required reports (times required. path of transmission. Responsibility of submission)
    11. EMCON/Electronic Protection procedures to include RADCON plan and Ziplip condition
    12. Plan for ATO distribution
-

>8F.2 LAAD OPERATIONS

TASK: 8F.2.1 ESTABLISH COMMUNICATIONS

CONDITION(S): LAAD elements in support of the landing force are deployed. ACEOI has been disseminated. Threat forces are reported to have both Electronic Attack (EA) and Electronic Support (ES) capabilities.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ LAAD Battalion Command net is established. (KI)
- .2 \_\_\_ LAAD Command net is established. (KI)
- .3 \_\_\_ LAAD Weapons Control net is established. (KI)
- .4 \_\_\_ LAAD Team Control net is established. (KI)
- .5 \_\_\_ Required supplemental nets are activated.
- .6 \_\_\_ Nets and data circuits are employed per annex K of the Oplan/Op Orders
- .7 \_\_\_ LAAD personnel are aware of alternate means of communications.
- .8 \_\_\_ LAAD personnel demonstrate the ability to use authentication tables on approved nets.
- .9 \_\_\_ Radio operators do not compromise unit locations, strengths, or commit other "BEADWINDOW" security violations.
- .10 \_\_\_ Instances of communications jamming or imitative deceptions are reported per Annex K of the Oplan/op Order.
- .11 \_\_\_ Communications plan reflects correct key lists and edition numbers, and they are verified as being onhand.
- .12 \_\_\_ Communications operators demonstrate the ability to load and operate secure voice devices.
- .13 \_\_\_ Proper ComSec procedures are followed with regard to minimum transmissions, brevity codes, and circuit discipline.
- .14 \_\_\_ Communications operators demonstrate actions to take in the event of lost communications.
- .15 \_\_\_ LAAD personnel demonstrate proficiency in the use of field expedient antennas (HF/VHF).
- .16 \_\_\_ Communications use proper radio procedures.
- .17 \_\_\_ LAAD commander understands how to use a collocated unit's communications assets to this advantage (e.g strap-over).
- .18 \_\_\_ All required nets are maintained during displacement.

EVALUATOR INSTRUCTIONS: To grade a net as "YES" for being established and maintained, it must be operational at Least 90 percent of the time.  
Reference: FMFM 5-52 for description of nets.

KEY INDICATORS: COMMUNICATIONS

The destructive capabilities of the Stinger missile system, combined with the predicted density of friendly aircraft overflying the AOR, dictate that reliable communications systems, capable of supporting command and control, as well as providing early warning information exist. Due to the wide dispersion and mobility of LAAD elements throughout the AOR, radio is the primary means of satisfying those requirements. Wire is used in static defensive positions. The Level of communications required will vary with the size of the MAGTF to be supported; however, all doctrinal nets are required.

TASK: 8F.2.2 EMERGENCY DEFENSE OF THE AMPHIBIOUS TASK FORCE

CONDITION(S): "An unescorted ATF should not be employed in situations where organic shipboard assets cannot defeat the expected threat. In an unforeseen emergency situation where the organic shipboard assets cannot defeat an unexpected threat, the CATF will use all means available to defend the ATF and to defeat the attacking force, including the use of embarked landing force aviation assets. In an emergency, landing force assets may be used as a final option when: (1) the ATF is under actual attack; (2) increasing tensions, intelligence or defense conditions indicate an attack is imminent; (3) the governing rules of engagement permit intercept or engagement of contacts presumed to be hostile; or (4) other circumstances or situations occur such that CATF/CLF agree that an emergency exists. (COMSURFWARDEVGRU TACHEMO EZ 1630-1-92). Command relationships are based on the normal CATF/CLF relationships as defined in NWP 22B. Under any circumstances, embarked MAGTF assets remain OPCON to the MAGTF commander. Assignment of all emergency defensive missions involving MAGTF aviation assets are through the MAGTF commander. As such, embarked LAAD elements are prepared to employ missiles aboard naval vessels to provide close in air defense, if directed.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD employment procedures aboard ATF vessels are included in Oplans; or joint CATF/CLF Orders.
- .2 \_\_\_\_ Ensures that Rules of Engagement (ROE), promulgated by the CATF, are understood by all.
- .3 \_\_\_\_ Coordination is made to position the senior LAAD representative in the Combat Information Center (CIC) of the task force command ship.
- .4 \_\_\_\_ A LAAD representative is positioned in the CIC of each naval vessel employing LAAD teams.
- .5 \_\_\_\_ Establish communications between CIC's for a LAAD Weapons Control net.
- .6 \_\_\_\_ Procedures are established for the senior LAAD representative to provide air defense warning conditions, weapons control status, and early warning information to the ATF CIC's and deployed teams.
- .7 \_\_\_\_ Designated firing locations are manned by LAAD teams.
- .8 \_\_\_\_ Firing points provide 360 degree coverage for the ship if possible.
- .9 \_\_\_\_ Communications between the CIC's and the firing locations are established on a separate circuit of the ship's internal communications system.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8F.2.3 CONTROL DURING AMPHIBIOUS LANDINGS AFLOAT

CONDITION(S): Control afloat procedures depend on the size MAGTF that is supported, the composition and operational displacement of the Amphibious Task Force CATF). The conditions described below are typical of a MEF(FWD) employment. The senior LAAD representative locates in the TACC (afloat) or FAAWC/SAAWC, and establishes the LAAD Command (LC) net. He assigns LAAD logistics representative to the SACC who will monitor the LAAD weapons control net, and coordinates support requirements for the employed LAAD platoons. Direct support elements moving ashore have a representative in each Battalion FSCC collocated with the Air Officer. LAAD section leaders deployed with forward elements coordinate with the FAC. A representative is located in the senior GCE COC/FSCC, while a representative is also located with the best MACCS agency for integration.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Coordination Is completed with ATF representatives to ensure LAAD representation in appropriate control agencies afloat. (KI)
- .2 \_\_\_\_ LAAD communications requirements are coordinated with the ATF, and comm assets are available to LAAD representatives.
- .3 \_\_\_\_ LAAD Command net is established afloat.
- 4 \_\_\_\_ LAAD Weapons Control net is established afloat.
- .5 \_\_\_\_ Coordination with MW representatives in the TACC/SACC/Navy AAWC is established, and early warning information is available for passing to deployed LAAD elements.
- .6 \_\_\_\_ Procedures are established for deployed LAAD elements to pass visual reports up the operational chain.
- .7 \_\_\_\_ Procedures are established for the deployed LAAD elements to request logistic support or missile resupply from abroad the ATF.
- .8 \_\_\_\_ LAAD representatives are positioned in the highest level GCE COC/FSCC ashore.
- .9 \_\_\_\_ LAAD representatives are positioned with appropriate MACCS agencies or other command and control elements to provide early warning information, and friendly aircraft positions to deployed teams.
- .10 \_\_\_\_ Briefs deploying LAAD sections items on the enemy air order or battle, enemy tactics (to include ordnance and delivery techniques and visual recognition of the specific types of aircraft they might encounter.
- .11 \_\_\_\_ Briefs deploying LAAD elements on the visual recognition of specific types of friendly aircraft.
- .12 \_\_\_\_ Briefs LAAD sections/teams on alternate means of communications and lost communications procedures.
- .13 \_\_\_\_ Briefs communications operators on ENCON and EP procedures.
- .14 \_\_\_\_ Briefs LAAD rules of engagement, air defense warning conditions, weapon control status, states of alert and sources of antiair warfare intelligence.
- .15 \_\_\_\_ Coordinates with CSSE/supported units to ensure methods for effective resupply are established and published.

EVALUATOR INSTRUCTIONS: The conditions set herein are typical of a MEF(FWD) employment, and will be adjusted by the evaluator in concert with actual assignments made in the OP Order. The location of the LAAD commanders will depend on where they can best monitor and direct their subordinate units. Flexibility and effectiveness of control is the best approach in determining if the location of the LAAD commander is the "best" position for him.

#### AFLOAT CONTROL

The LAAD commander must be able to communicate effectively with LAAD elements ashore. Communication nets ensure effective and timely passing of information to the LAAD elements. Also critical is the requirement for monitoring Navy equivalent nets as LF AAW assets must initially be integrated into the ATF AAW Plan.

TASK: 8F.2.4 TRANSFER CONTROL ASHORE

CONDITION(S): The conditions again describe a MEF(FWD) scenario. As control is passed ashore, the LAAD commander displaces from the TACC (afloat) to the TAOC ashore. The LAAD logistics representatives will displace ashore from the SACC to a locations described by the LAAD commander. The representative who was assigned to the TAOC/EW/C sites may be replaced by a platoon commander, and in turn can displace to a forward early warning and control site to provide EW information to deployed LAAD teams. Other LAAD personnel will operate from the same locations as with control afloat.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Communications are established per Annex K of the Op Order.
- .2 \_\_\_ Procedures are delineated in the Op Order for phasing control ashore.
- .3 \_\_\_ Checklists or unit Sop's are utilized to ensure there is no interruption of landing force support prior to transferring control.
- .4 \_\_\_ Exchange of air defense warning conditions, weapons control status, antiair warfare intelligence, and other pertinent data continues while the transfer takes place.
- .5 \_\_\_ Transfer of control is complete with no loss of support or vital information.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.2.5 CONTROL ASHORE

CONDITION(S): LAAD control has been successfully phased ashore. The MEF(FWD) is supported by a complete MACCS which includes a TACC, a TAOC with forward EW/C sites, a DASC, one LAAD battery, and ATC detachment providing terminal control at one airfield, and one LAAD battery. Air defense priorities and the allocation of air defense assets have been established by the MEF(FWD) commander after receiving advice from the ACE. LAAD firing elements have been assigned in general support of ACE/CSSE elements, and in direct support of GCE Units.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ LAAD commander coordinates with the supported units to ensure the sectors of fire complement the ground scheme of maneuver, and cover the likely air avenues of approach.
- .2 \_\_\_ Recommends adequate number of sections/teams to provide low altitude air defense based on the threat assessment.
- .3 \_\_\_ Ensures early warning information is passed to LAAD sections/teams from available radar sources (TAOC, EW/C, ATC, HAWK, etc.). (KI)
- .4 \_\_\_ Provides necessary liaison to available radar sites, and establishes communications with deployed sections/teams.
- .5 \_\_\_ LAAD guidance for succession of command is published in the Op Order, and LAAD personnel are aware of that guidance.
- .6 \_\_\_ LAAD sections/teams can identify friendly aircraft ingress and egress routes, CAP stations, and Missile Engagement Zones (MEZ), and are made aware of any changes.
- .7 \_\_\_ LAAD sections/teams are able to define the published air defense warning conditions.
- .8 \_\_\_ LAAD sections/teams are able to define the published weapon control Status.
- .9 \_\_\_ LAAD employment is included in the integrated air defense plan with all other air defense assets.
- .10 \_\_\_ LAAD sections/teams are aware of the CLF published air defense priorities.
- .11 \_\_\_ When assigned in direct support, LAAD element commander coordinates with the supported unit to ensure the required load of missiles is carried, and any required augmentation to carry the combat load is identified, if foot mobile.
- .12 \_\_\_ LAAD section/team is aware of procedures to relay visual sightings, and status reports into the integrated air defense system.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### EARLY WARNING

Success of LAAD employment is highly dependent on receiving early warning information, and properly emplaced command and control. Though the system is designed to be flexible, the LAAD element commander must be located in a position to provide both of the above. As the CATF will establish a Force Antiair Warfare Coordinator (FAAWC), it is imperative that LAAD be integrated into that network to ensure total integration of air defense assets while MAGTF assets are still linked with the Navy. Similarly, they must be integrated with the air defense network when the CLF is established ashore.

---

TASK: 8F.2.6 COMMAND AND CONTROL

CONDITION(S): The LAAD commander should be located with the MACCS agency which can best provide early warning, air defense warning conditions, weapons control status and friendly aircraft situation updates.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD commander positions himself at the best MACCS agency to ensure effective command and control, and critical information flow. (KI)
- .2 \_\_\_\_ LAAD commander maintains continuous updates of air defense warning conditions, weapons control status, and early warning information.
- .3 \_\_\_\_ LAAD commander provides timely and accurate early warning information to subordinate LAAD elements to allow for successful engagements.
- .4 \_\_\_\_ Visual sightings, engagements reports, and unit status reports are passed up the operational chain from LAAD elements.
- .5 \_\_\_\_ LAAD element positions are consistently updated and correctly recorded on the current situation map.
- .6 \_\_\_\_ States of alert (SOA) are utilized to facilitate crew rest.
- .7 \_\_\_\_ LAAD element CP/COC organizational facilities information from to subordinate units.
- .8 \_\_\_\_ LAAD element CP/COC has established procedures to employ and echelon CP.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### CONTROL FACILITIES

If LAAD assets are assigned in a general support role of a MEF or MEF(FWD), the LAAD commander may establish a Battalion or Battery CP/COC to recommend employment of subordinate units, provide alert conditions, coordinate necessary logistical support, and provide for administrative functions such as personnel replacements. Specific watch teams will be task organized to perform these functions, and communications nets established to facilitate their duties. Whichever method of LAAD control that is utilized must provide the vital information flow to individual LAAD teams that allows for the constant update of intelligence information, and the advanced early warning that is necessary for success

---

TASK: 8F.2.7 SITE SELECTION

CONDITION(S): Individual LAAD teams deployed in overlapping defensive positions have been assigned specific sectors by their section leader.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Teams have correct maps for area of operation.
2. \_\_\_\_ Conducts a map reconnaissance to include analysis of terrain, man made obstacles, and aircraft masking to determine sites suitable to accomplish the mission.
- .3 \_\_\_\_ Primary and alternate sites are selected, plotted and reported.
- .4 \_\_\_\_ Positions selected provide all around visibility, and allow the weapon to be fired in any direction within the gunner's assigned Sector.
- .5 \_\_\_\_ Sites are selected with consideration to engagement of ground targets utilizing the AVENGER MP3 Machine Gun.
- .6 \_\_\_\_ Selected Sites do not hinder effective communications with higher echelons/supported unit.
- .7 \_\_\_\_ Sites are accessible for resupply.
- .8 \_\_\_\_ Sites are defensible against troop assault.
- .9 \_\_\_\_ Passive air defense is utilized to reduce vulnerability to enemy observation and fire.
- .10 \_\_\_\_ Sites are positioned to provide mutual support.
- .11 \_\_\_\_ Sites are selected and cleared to take into consideration the missile back blast area.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.2.8 AIRCRAFT DETECTION IDENTIFICATION

CONDITION(S): Individual LAAD teams deployed in point defensive positions have been assigned primary sectors by their section leader. Early warning information is being passed by radio. They have been informed of ingress/egress routes of friendly aircraft and ROE from the Op Order. The section employs the TDAR to augment visual aircraft detection. Personnel of the LAAD element are required to visually identify various friendly and enemy aircraft in both a classroom and field environment, as well as distinguishing between friends or foes using the Stinger 1FF system.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ A map reconnaissance and threat assessment is conducted of the supported units area of operation to determine likely air avenues of approach.
- .2 \_\_\_\_ LAAD teams are familiar with proper search and scan procedures.
- .3 \_\_\_\_ LAAD teams are able to recognize and identify pre-planned friendly egress and ingress routes.
- .4 \_\_\_\_ LAAD teams detect all inbound aircraft with sufficient time for engagement per rules of engagement.
- .5 \_\_\_\_ LAAD teams report "early warning" detection of hostile targets to their section leader/supported unit.

- .6 \_\_\_\_ The LAAD Section employs the TOAR to detect aircraft in the assigned sector
- .7 \_\_\_\_ The LAAD Section Leader immediately provides "early warning" of TOAR detected targets to the LAAD teams and higher headquarters.
- 8 \_\_\_\_ Binoculars are available to assist the team with aircraft identification.
- .9 \_\_\_\_ LAAD personnel correctly identify aircraft. (KI)
- .10 \_\_\_\_ LAAD personnel recognize appropriate 1FF audio responses.
- .11 \_\_\_\_ LAAD personnel visually distinguish between FRIEND or FOE without the aid of 1FF. (KI)

EVALUATOR INSTRUCTIONS:

PREPARATION

A recommended method for testing/evaluating aircraft recognition is for the MCCRES evaluator to submit a list of hostile aircraft 1 to 2 weeks prior to evaluation. This would approximate the immediate predeployment period that elements would have prior to entering a theater of operations. Gunners can be expected to spend predeployment and transit time familiarizing themselves on threat and aircraft expected to be in the AOR. This should include any host country or allied aircraft expected within the AOR.

KEY INDICATORS:

AIRCRAFT IDENTIFICATION

In order for a unit to receive a "yes", all cognizant personnel must take the examination with each person attaining a score of at least 90 percent.

RECOGNITION

Using computer aircraft recognition Systems or slides, LAAD personnel should be able to identify aircraft in 5 seconds and distinguish FRIEND or FOE based on the enemy/friendly air order of battle. LAAD personnel are able to identify actual aircraft in a field environment within the same standards.

---

TASK: 8F.2.9 MANEUVER WITH THE GROUND COMBAT ELEMENT

CONDITION(S): A LAAD Section has been assigned to provide direct support to a ground Unit. The section Leader has established the LAAD Weapon Control net and is receiving early warning information from the rear. The MAGTF Op Order delineates alert conditions and the ROE. The section leader and the deployed teams accomplish communications on the LAAD Team Control net.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD element leader actively advises the supported ground commander on weapon employment tactics and passive air defense measures which will Support the scheme of maneuver.
- .2 \_\_\_\_ LAAD teams provide overwatch or mobile coverage for the supported ground units.
- .3 \_\_\_\_ MANPAD elements dismount from vehicles and prepare to engage targets within 10 seconds.
- .4 \_\_\_\_ Team leaders maintain contact with the IADS while moving with the Supported unit.
- .5 \_\_\_\_ LAAD vehicles assigned are adequate to enable teams to keep pace with the supported unit.
- .6 \_\_\_\_ LAAD personnel are able to keep pace with the supported unit when required to deploy on foot.
- 7. \_\_\_\_ LAAD personnel coordinate supply requirements with the supported unit. (KI)
- .8 \_\_\_\_ Supported units provide Limited maintenance for common items of equipment (vehicles, radios, etc.)
- .9 \_\_\_\_ When stopped, LAAD teams select Sites to provide optimum air defense coverage to the supported unit.

- .10 \_\_\_\_ LAAD team properly reports position locations over the LAAD Team Control net.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: SUPPORT REQUIRED

The LAAD element leader must coordinate with the supported unit commander to ensure the required load of missiles is carried. He also must identify any augmentation required to carry the combat load, and the means of resupply. Further, early planning is necessary to ensure common supply items, and limited maintenance assistance is available from the supported unit.

---

TASK: 8F.2.10 CONDUCT OF ENGAGEMENT (DAY/NIGHT)

CONDITION(S): Early warning of inbound hostile aircraft has been received from the rear. The section leader is providing control of the teams over the LTC net. A high state of alert has been established, and the teams are anticipating an engagement in day or night.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Teams are aware of their primary sectors of fire, and the ingress and egress routes (safe passage routes) for friendly aircraft.
- .2 \_\_\_\_ Team Leaders Orient the team correctly when occupying their firing positions.
- .3 \_\_\_\_ Section leaders have instructed the teams in proper fire discipline and target assignment.
- .4 \_\_\_\_ Team Leaders keep the section Leader informed on their location, ammunition status and engagement capabilities.
- .5 \_\_\_\_ Each team is cognizant of the air defense warning conditions, weapons control status, early warning, and friendly flight information.
- .6 \_\_\_\_ Gunners position themselves for the earliest possible engagement taking into consideration the elements of good threat assessment.
- .7 \_\_\_\_ Positive aircraft identification is made prior to the engagement.
- .8 \_\_\_\_ Weapon is activated upon hostile target acquisition allowing for earliest target engagement.
- .9 \_\_\_\_ Weapon seeker has been uncaged, and IR acquisition tone is clear and steady.
- .10 \_\_\_\_ Proper lead angle and superelevation is used.
- .11 \_\_\_\_ Gunners engage aircraft within weapon range parameters.
- .12 \_\_\_\_ In single target raids, the teams use "shoot-look-shoot-look" techniques.
- .13 \_\_\_\_ In multiple target raids, the teams use "shoot-new target-shoot" techniques.
- .14 \_\_\_\_ Teams promptly report engagement to section leader.
- .15 \_\_\_\_ Teams can demonstrate a working knowledge of the Rules of Engagement.
- .16 \_\_\_\_ LAAD teams demonstrate the ability to differentiate ranges to various objects within view of team position.

EVALUATOR INSTRUCTIONS: Reference FMFRP 5-53

KEY INDICATORS: None.

---

TASK: 8F.2.11 SECURITY REAR AREA

CONDITION(S): A LAAD Battalion has been assigned to support a MEF(FWD). The Battalion Commander has established a CP/COC adjacent to an appropriate MACCS agency, and has established a Rear Area Security Plan for internal protection of its personnel and assets.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Bn Commander, or his Operations Officer, has provided necessary EEI's to establish a Rear Area Security (RAS) Plan to defend their AOR.
- .2 \_\_\_\_ Camp Commandant assigned as Rear Area Security Coordinator.
- .3 \_\_\_\_ Camp Commandant emplaces Battalion HQ in a perimeter defense. Position should support (1) mission accomplishment, (2) tactically sound cover and concealment, (3) sufficient observation and fields of fire, (4) control by the Unit commander.
- .4 \_\_\_\_ Establishes a Reaction Force and procedures to augment perimeter defense.
- .5 \_\_\_\_ Establishes an obstacle plan.
- .6 \_\_\_\_ Establishes access controls to the rear area.
- .7 \_\_\_\_ Prepared a COC/CP Fire Support Plan.
- .8 \_\_\_\_ Prepare priority of work to support overall RAS.
- .9 \_\_\_\_ Establish hardwire COMM plan to Support overall RAS
- .10 \_\_\_\_ Prepare and brief pertinent personnel on implementation of fire sketch plan.
- .11 \_\_\_\_ Coordinates and integrates with adjacent fire support units.
- .12 \_\_\_\_ Establish a damage Control Team and brief them on pertinent duties.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATONS: None.

---

TASK: 8F.2.12 AIR DEFENSE CONVOY

CONDITION(S): A LAAD Section has been assigned the mission of providing air defense for a convoy.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD Section Leader actively advises the supported convoy commander on weapon employment tactics which will support the convoy scheme of maneuver.
- .2 \_\_\_\_ LAAD teams provide bounding over-watch or mobile coverage of the maneuvering convoy.
- .3 \_\_\_\_ LAAD elements are able to keep continuous orientation and integration while moving with the supported convoy.
- .4 \_\_\_\_ LAAD elements are able to keep pace with the supported convoy.

- .5 \_\_\_\_\_ MANPAD teams are able to dismount from vehicles and engage targets within 10 seconds.
- .6 \_\_\_\_\_ LAAD elements demonstrate proficiency in various convoy defensive maneuvers.
- .7 \_\_\_\_\_ LAAD elements demonstrate procedures for recovery/repair of disabled LAAD vehicles during convoy operations to include team displacement.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.2.13 SAFETY PRECAUTIONS EQUIPMENT

CONDITION(S): Individual LAAD teams are set up in firing positions which allow for aircraft detection, identification, and engagement. Safety factors are briefed to ensure inadvertent damage is not done to friendly troops or equipment.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Battery Coolant units (BCU) are never inserted during shipment or storage of missiles.
- .2 \_\_\_\_\_ Gunner demonstrates knowledge in handling/transporting missiles in both container and weapon configurations.
- .3 \_\_\_\_\_ Gunners demonstrate knowledge of maximum/minimum launch angles. (KI)
- .4 \_\_\_\_\_ Gunners are able to explain back blast safety distances required for firing a missile within friendly positions. (KI)
- .5 \_\_\_\_\_ Gunners wear ear protection, helmets, and flac jackets when firing missiles.
- .6 \_\_\_\_\_ Missiles are kept within containers when transported within aircraft.
- .7 \_\_\_\_\_ Hangfires, misfires, and duds are handled properly per appropriate TM's or SOP's.
- .8 \_\_\_\_\_ All LAAD personnel demonstrate the 13 critical checks upon receipt LAAD teams provide bounding over watch or mobile coverage of the maneuvering convoy.
- .9 \_\_\_\_\_ LAAD elements are able to keep continuous orientation and integration while moving with the supported convoy.
- .10 \_\_\_\_\_ LAAD elements are able to keep pace with the supported convoy.
- .11 \_\_\_\_\_ MANPAD teams are able to dismount from vehicles and engage targets within 10 seconds.
- .12 \_\_\_\_\_ LAAD elements demonstrate proficiency in various convoy defensive maneuvers.
- .13 \_\_\_\_\_ LAAD elements demonstrate procedures for recovery/repair of disabled LAAD vehicles during convoy operations to include team displacement.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: LAUNCH ANGLES

LAAD personnel should demonstrate launch angles from 10 to 65 degrees to prevent missile tip over, or inadvertent injury from back blast. An elevated firing position should be chosen, if tactically possible, to increase the possibility of engaging a low level hostile aircraft.

BACKBLAST

The back blast safety area for personnel when firing the STINGER is 50m (164 feet) to prevent risk of injury by flying debris. When in a MANPAD employment scenario, the team leader should be close to the gunner's side to ensure that he is not endangered by the weapons back blast.

TASK: 8F.2.14 EMERGENCY DESTRUCTION EQUIPMENT

CONDITION(S): Destruction of the Stinger weapon or its' components is performed by the LAAD team only under emergency conditions. This action is required when, in the judgement of the LAAD unit Leader, the loss or capture of the weapon is imminent. Normally, destruction of malfunctioned weapons would be carried out by qualified EOD teams.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Requests Support from EOD, if time permits.
- .2 \_\_\_\_ When destroying the Stinger by burning, the seeker is smashed, the sight and handgrip assembly are smashed, incendiary grenades are placed around the weapon or it is doused with flammable liquids, and ignited.
- .3 \_\_\_\_ When destroying the Stinger by demolition, seven and one half (7.5) pounds of (C-4) or equivalent are used per weapon. The charges are placed lengthwise on top of the Stinger. (KI)
- .4 \_\_\_\_ As a last resort, small arms gunfire is directed at the rocket motor or warhead. Due to an extremely hazardous condition, personnel should fire from at least 50 meters away from the missile to be destroyed. (KI)
- .5 \_\_\_\_ IFF belt packs are kept with individual, or destroyed completely as above.
- .6 \_\_\_\_ Special considerations are directed for the Avenger weapon system due to its sophistication.

EVALUATOR INSTRUCTIONS: Simulate destruction methods using a field handling trainer for training exercises.

KEY INDICATORS: EMERGENCY DESTRUCTION

Stinger missiles in a MANPAD or Avenger configuration should be fired or attempted to be fired first. Gunners must clear the codes in the IFF system, render the IFF interrogator inoperable through demolition or smashing and destroy all CMS software. Avenger considerations involve destroying the Stinger missiles, the Integrated Electronic Assembly (IEA), and all COMSEC materials by demolition or other readily available means.

BURNING

The Stinger weapon contains both a live rocket motor and a high explosive (HE) warhead. Burning should create an explosion which is extremely hazardous to personnel. Ignite the prepared weapon cautiously, and immediately seek cover at least 50 meters away.

DEMOLITION

Determine whether electrical blasting caps and wire or non electric caps and safety fuse are available for priming and detonating the charges. If non electric blasting caps are used, crimp them to at least 2 meters (about 6.5 feet) of safety fuse. Connect charges with detonating cord for simultaneous detonations if destroying more than one Stinger. Dual-prime the charges to minimize the possibility of a missile misfire or hang fire. If the charges are primed with non electric blasting caps, initiate the safety fuses and then immediately take cover. If the charges are primed with electric blasting caps, take cover before firing. See FMFM 5-52, Appendix A for further amplification.

---

SMALL ARMS FIRE

Small arms fire may not be accurate enough to ensure destruction. If no other method is possible, smash the seeker and fire on the missile with rifles, machine-guns, rifle grenades, or rocket Launchers from a distance of more than 50 meters.

---

8F.3 NBC OPERATIONS

ASK: 8F.3.1 PREPARE FOR NBC OPERATIONS

CONDITION(S): Threat forces have employed NBC munitions in the area where LAAD is assigned in general support, aimed at destroy/disrupting operations. Due to the threat, passive and active defense measures must be used for survival of the LAAD elements.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD has established an SOP which outlines procedures for enemy NBC strikes and reports required.
2. \_\_\_\_ All individual NBC defense equipment authorized by the unit table of organization and equipment (T/O and T/E) is issued to each individual, and is serviceable.
- .3 \_\_\_\_ All unit NBC defense equipment authorized by T/O and T/E is operationally ready, and distributed to designated and trained/knowledgeable operators.
- .4 \_\_\_\_ Shortages are identified and replacement actions are taken.
- .5 \_\_\_\_ Decontamination equipment is identified and ready for use.
- .6 \_\_\_\_ School trained NBC personnel are available on a 24 hour a day basis.
- .7 \_\_\_\_ MOPP Level is established by the LAAD command element and personnel are at or above, required MOPP level.
- .8 \_\_\_\_ LAAD commander is familiar with the Operational Exposure Guidance (OEG), Radiation Exposure Status (RES), and Mission Oriented Protective Posture (MOPP) in order to protect personnel from radiological, biological, and chemical hazards.
- 9 \_\_\_\_ Marines properly identify NATO or Threat NBC contamination markers.
- .10 \_\_\_\_ LAAD elements maximizes utilization of terrain features for cover, concealment, and topographic shielding.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N as appropriate. As an example, if the team average was 76 percent, 8F.3.13.1 through 8F.3.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA

1. No. of personnel in UNIT: \_\_\_\_.
2. No. of personnel taking exam: \_\_\_\_.
3. Team average: \_\_\_\_.

KEY INDICATORS: None.

TASK: 8F.3.2 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): LAAD commander is informed that nuclear weapons have been used in the theater of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Backup command and control procedures are identified.
- .2 \_\_\_ Subordinate/displaced elements are alerted.
- .3 \_\_\_ Deployed LAAD elements continue their mission while implementing actions to minimize casualties and damage.
- .4 \_\_\_ Vehicles and equipment are protected from heat, blast, and radiation.
- .5 \_\_\_ Electronic equipment is protected for electromagnetic pulse (EMP) and Transient Radiation Effects on Electronics (TREE) by removing it from exposed locations, and placing it in covered/hardened locations.
- .6 \_\_\_ Periodic monitoring is initiated at the command post (CP), using available RADIAC monitoring.
- .7 \_\_\_ All personnel prepare shelters (i.e. fighting hole, bunker) for protection from the initial effects of a nuclear detonation.
- .8 \_\_\_ All loose items, flammable/explosive items, food and water are secured/protected from heat, blast, and radiation.
- .9 \_\_\_ Marines are familiar with standard first aid procedures to provide self/build aid for nuclear blast and thermal effects.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.3.3 RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator or by other appropriate means.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Upon recognizing the attack, all personnel take immediate action to shield themselves from blast/heat of detonation.
- .2 \_\_\_ Chain of command and communications are maintained or re-established.
- .3 \_\_\_ NBC-1 initial and follow up reports (as required) are rapidly submitted to unit headquarters by personnel designated or responsible for collecting the information. Reliable and complete reports are rapidly forwarded, by secure means when possible.
- .4 \_\_\_ Casualties are given first aid, and are evacuated to a medical treatment station as the mission permits; fatalities are evacuated to a graves registration collection point.
- .5 \_\_\_ Damage assessment is submitted by secure means to higher/supported headquarters per SOP.
- .6 \_\_\_ Continuous monitoring is initiated at the Co, using available RADIAC monitoring equipment.

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast, heat dazzle, radiation, and electromagnetic pulse (EMP). EMP casualties will be assessed by the evaluator for all communications systems antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle) during the simulated nuclear detonation.

KEY INDICATORS: None.

TASK: 8F.3.4 RESPONSE TO THE RESIDUAL EFFECTS OF A NUCLEAR BLAST

CONDITION(S): A surface or subsurface nuclear detonation has occurred. The LAAD element locations are within the predicted fallout zone. An M5A2 radiological fallout predictor, or substitute, is available. The unit gets effective downwind messages at least once every 3 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit; NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Unit mission is performed concurrently with all other actions.
- .2 \_\_\_\_ LAAD commander is advised of estimated time of fallout arrival, and subordinate units are notified.
- .3 \_\_\_\_ Continuous monitoring is maintained at the CP, using available RADIAC monitoring equipment.
- .4 \_\_\_\_ Equipment, munitions, POL, food, and water are protected from fallout.
- .5 \_\_\_\_ Personnel take protective measures to minimize fallout exposure and subordinate units are notified.
- .6 \_\_\_\_ Monitor/Survey team is activated, given a specific mission and begins survey. All NBC 4 reports are forwarded to higher headquarters by secure means. Contaminated areas are marked using standard NATO markers.
- .7 \_\_\_\_ Unit total dose information is recorded, and reported to higher headquarters.
- .8 \_\_\_\_ Exposure is minimized while LAAD commander determines if relocation to a clean area is necessary or possible. Optimum time of exit is calculated.
- .9 \_\_\_\_ Personnel are able to handle and provide first aid treatment to casualties in a nuclear environment.
- .10 \_\_\_\_ Casualties and fatalities are assessed.

EVALUATOR INSTRUCTIONS: LAAD commander is advised of estimated time of fallout arrival.

KEY INDICATORS: None.

TASK: 8F.3.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time and tactical situation permits decontamination. Decontamination support is not available.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Decontamination priorities are established.
- .2 \_\_\_ Decontamination point is established.
- .3 \_\_\_ Decontamination personnel wear appropriate protective clothing and equipment.
- .4 \_\_\_ Personnel, individual weapons, and missile Systems and equipment are decontaminated using appropriate decontamination kits.
- .5 \_\_\_ Contaminated areas are marked with NATO standard NBC markers.
- .6 \_\_\_ Adequacy of decontamination is determined using available personnel and equipment monitoring instruments.
- .7 \_\_\_ According to tactical SOP, contaminated materials are discarded, marked as contaminated, and the location provided to higher headquarters.
- .8 \_\_\_ Decontamination personnel are decontaminated as necessary.
- .9 \_\_\_ Operational Exposure Guidance (OEG) is not exceeded.
- .10 \_\_\_ Total dose information is recorded and reported to higher headquarters.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8F.3.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): Tactical situation forces LAAD units to cross a radiological contaminated area while moving to new sites. Unit receives a NBC-5 report or contamination overlay from higher headquarters.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ NBC-5 report and/or contamination overlay is posted to situation map and route determined.
- .2 \_\_\_ Route clearance and approval is obtained if necessary.
- .3 \_\_\_ Turn back dose and dose rate are provided to advance party and/or reconnaissance team.
- .4 \_\_\_ Vehicles receive additional shielding and personnel are provided all available protection from dust.
- .5 \_\_\_ Advance party and/or recon team is dispatched to reconnoiter new areas and informs the CP of conditions concerning amount of radiation present.
- .6 \_\_\_ LAAD elements cross suspected contaminated area while employing contamination avoidance techniques.
- .7 \_\_\_ Operational exposure guidance is not exceeded.
- .8 \_\_\_ After clearing the contaminated area, the degree of personnel and equipment contamination is determined, using available personnel and equipment monitoring instruments.

- .9 \_\_\_\_\_ Decontamination priorities are established and performed as required. Decontaminated personnel and equipment are monitored, using available RADIAC equipment to determine if the decontamination was done correctly.
- .10 \_\_\_\_\_ Unit total dose information is recorded, using available total dose instruments, and reported to higher headquarters.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8F.3.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): LAAD commander receives a friendly nuclear STRIKWARN per FM 21 through 40, pages 6-24 and 6-15. All LAAD elements are within minimum safe distance (MSD).

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ LAAD command element accurately and completely applies the STRIKWARN to the situation map within 5 minutes after message receipt.
- 2 \_\_\_\_\_ Pertinent information regarding the planned detonation (time of burst, ground zero, fallout coverage, MSD, etc.) is available to the LAAD commander.
- .3 \_\_\_\_\_ LAAD commander is advised of the vulnerability of the unit to the burst (within MSD 1,2, or 3) and residual contamination (within predicted fallout zone).
- .4 \_\_\_\_\_ LAAD commander is advised of the measures needed to prevent casualties, damage, and extended interference with the mission.
- .5 \_\_\_\_\_ LAAD implements protective measure, as directed by higher headquarters, consistent with the mission.
- .6 \_\_\_\_\_ Personnel minimize exposure by rolling down sleeves, buttoning collars, and wearing additional clothing equal to a two-layer uniform.
- .7 \_\_\_\_\_ Personnel take cover in foxholes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, etc.), or lie prone on open ground.
- .8 \_\_\_\_\_ Vehicles are placed behind masking terrain.
- .9 \_\_\_\_\_ Electronic devices are turned off; erected antennas are disassembled; and antennas are tied down.
- .10 \_\_\_\_\_ All loose items (small weapons, tools, etc.) and highly flammable/explosive items (POL, propellants, missiles, etc.) are placed in armored vehicles or shelters.
- .11 \_\_\_\_\_ LAAD commander acknowledges the warning before the expected time of burst. All LAAD elements have been warned and protective measures implemented.

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator, or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to protected personnel and equipment.

KEY INDICATORS

WARNING

LAAD commander may warn subordinate/detachment elements of an impending nuclear detonation by using one of the following methods:

1. Using a proword or brevity code from the CEOI to indicate the message is a nuclear strike warning.
2. A brief, prearranged message that directs the receiver to implement specific protective measures.
3. Encoded message with expected time of burst, sent by secure voice or messenger.

TASK: 8F.3.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S): LAAD commander is informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ LAAD has and uses a chemical defense SOP which addresses chemical defense/decontamination procedures.
- .2 \_\_\_\_ All LAAD units/elements are directed to increase MOPP consistent with mission, temperature, work rate, and commander's guidance.
- .3 \_\_\_\_ LAAD team tasks that require a high degree of manual dexterity or physical strength, and are difficult to perform in MOPP 4 are identified. Alternate methods, such as rotating or assigning additional personnel, are planned.
- 4 \_\_\_\_ Marines identify criteria for and demonstrate the capabilities for donning the protective mask and chemical protective ensemble.
- .5 \_\_\_\_ LAAD team system is used to facilitate monitoring/treatment for chemical agent poisoning and emergency decontamination of team members.
- .6 \_\_\_\_ LAAD elements continue their mission while implementing all actions to minimize casualties and damage.
- .7 \_\_\_\_ Portions of essential equipment, munitions, POL, food, and water supplies that cannot be placed in a shelter are covered with expendable or readily decontaminated tarps, shelter halves, or ponchos.
- .8 \_\_\_\_ Detector paper is affixed to visible, horizontal surfaces of protective clothing, and on equipment, munitions, etc.
- .9 \_\_\_\_ LAAD decontamination equipment is checked for serviceability, the M11 is filled, all individuals ensure that they have one (1) M258A1 personnel decontamination kit or it's equivalent, M9 tape and detection capabilities.
- .10 \_\_\_\_ Potential decontamination sites are reported to higher headquarters.
- .11 \_\_\_\_ Available chemical agent alarms are set up and monitored.
- .12 \_\_\_\_ Protective NBC equipment and supplies are properly used, and maintained in a high state of serviceability.
- .13 \_\_\_\_ Marines demonstrate a knowledge of chemical agent symptoms.

EVALUATOR INSTRUCTIONS: LAAD commander is informed that chemical weapons have been used in theater and that attack is imminent.

KEY INDICATORS: None.

TASK: 8F.3.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): LAAD elements are subjected to a chemical agent attack. Site should support the type of activities being conducted, and permit the safe use of simulators and devices.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Upon hearing a chemical alarm, personnel take immediate protective measures followed by treatment/decontamination of casualties.
- .2 \_\_\_\_ Personnel automatically mask upon notification of any enemy artillery, rocket, or air attack/over flight.
- .3 \_\_\_\_ Personnel automatically mask upon perceiving a suspicious odor, airborne droplets/mist, or smoke from unknown source.
- .4 \_\_\_\_ Marines do not unmask until directed by the Commanding Officer or his direct representative.
- .5 \_\_\_\_ LAAD elements are able to perform mission for at least 4 hours white in MOPP 4.
- .6 \_\_\_\_ Type of chemical agent is identified and reported using available detector kit.
- .7 \_\_\_\_ Contamination is Located and marked with NATO standard markers.
- .8 \_\_\_\_ Location and type of contamination is reported to higher headquarters.
- .9 \_\_\_\_ LAAD team determines if immediate relocation to a clean area is necessary or possible, and advises the supported unit/LAAD commander.
- .10 \_\_\_\_ WIA's are wrapped, marked as contaminated, and evacuated as mission permits.
- .11 \_\_\_\_ KIA's are wrapped, marked as contaminated, and evacuated as mission permits.
- .12 \_\_\_\_ Unmasking procedure is followed.
- .13 \_\_\_\_ Detector units are serviced and returned to operation.
- .14 \_\_\_\_ Expended chemical defense items are replaced as required.
- .15 \_\_\_\_ LAAD commander adjusts MOPP level as required.
- .16 \_\_\_\_ Unit personnel are able to handle and provide first aid treatment to casualties in a chemical environment.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat designated casualties." Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator.

KEY INDICATORS:

CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood Within arms reach, without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptom's appear, reminder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it, break the seal on their masks, and keep their eyes open for 15 seconds.
2. Then they clear their masks, re-establish the seal, and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and reseal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

TASK: 8F.3.10 PERFORM PARTIAL DECONTAMINATION

CONDITION(S): Personnel and equipment have been contaminated by a chemical agent. Emergency decontamination has been accomplished. Time is not available for complete decontamination. The hazard is such that partial decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Personnel decontaminate individual weapons and LAAD equipment using appropriate decontamination kits.
- .2 \_\_\_\_ Extent of decontamination is determined and decontamination priorities are established.
- .3 \_\_\_\_ Contaminated protective covers are removed, decontaminated, or discarded.
- .4 \_\_\_\_ Decontamination procedures are appropriate to items being decontaminated. (KI)
- .5 \_\_\_\_ LAAD element equipment and vehicles are decontaminated using appropriate devices.
- .6 \_\_\_\_ Adequacy of decontamination is determined. If inadequate:

1. Procedures are repeated.
  2. Decontamination support is requested or risk of using equipment is accepted.
- .7 \_\_\_\_ According to tactical SOP, contaminated materials are discarded, marked as contaminated, and the location provided to higher headquarters.
- .8 \_\_\_\_ LAAD commander reduces MOPP level if required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### DECONTAMINATION PROCEDURES

Initial decontamination of unit equipment, vehicles, and weapons may be accomplished by:

1. Removing all gross liquid contamination with sticks or other improvised devices, which are buried after use.
2. Utilizing M11 decontamination apparatuses filled with DS2 to spray areas frequently used or touched. (Water is used to simulate DS2 in a training environment.)

Contaminated items that may need special decontamination treatment are:

1. POL, food, water containers, and munitions. These are washed with soapy water, rinsed, and thoroughly air dried.
2. Communications equipment, missiles, and other electronic equipment. Decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (Water is used for training purposes.)
3. Optical Instruments. Blotted with rags and then wiped with lens cleaning solution or organic solvent.

Adequacy of decontamination is determined by using the chemical agent detector kit. If contamination is still present, decontaminate again.

---

TASK: 8F.3.11 COORDINATE FOR COMPLETE DECONTAMINATION OF EQUIPMENT

CONDITION(S): LAAD element equipment has been contaminated by a chemical agent. Emergency decontamination has been accomplished. Time is available for complete decontamination. Decontamination support from a decontamination unit is available upon request.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Coordination is made with the decontamination unit as to time of arrival, supplies, equipment, and personnel support to be furnished by the contaminated unit, and estimated time of completion is established.
- .2 \_\_\_\_ LAAD commander requests and receives route clearance to Personnel Decontamination Station/Equipment Decontamination Station (PDS/EDS) assembly area. Advance party (personnel to augment decontamination operation and establish security) is dispatched to PDS/EDS.
- .3 \_\_\_\_ Main body arrives at PDS/EDS assembly area and organizes for processing.
- .4 \_\_\_\_ Decontamination begins as scheduled.
- .5 \_\_\_\_ LAAD elements reorganize in a clean area upwind of residual effects for the resumption of their mission.

.6 \_\_\_\_ LAAD commander adjusts MOPP level as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.3.12 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S) The protective clothing is Contaminated, and a suitable uncontaminated area is available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Security is established to provide protection for the exchange process.
- .2 \_\_\_\_ Individual gear is decontaminated using bleach/dry mixture.
- .3 \_\_\_\_ Hood is decontaminated properly and rolled.
- .4 \_\_\_\_ Overgarments are taken off without transfer of contamination.
- .6 \_\_\_\_ Gloves are removed.
- .7 \_\_\_\_ Personnel redress in uncontaminated clothing and equipment.
- .8 \_\_\_\_ All contaminated material is disposed of properly.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8F.3.13 SCORE THE NBC EXAM

CONDITION(S): Classroom Atmosphere. An exam will be prepared at the wing/division level, and will take no more than 30 minutes. All available personnel will take the examination.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Unit averaged 49 percent or tower.
- .2 \_\_\_\_ Unit averaged 50 percent or higher.
- 3 \_\_\_\_ Unit averaged 60 percent or higher.
- .4 \_\_\_\_ Unit averaged 70 percent or higher.
- 5 \_\_\_\_ Unit averaged 80 percent or higher.
- .6 \_\_\_\_ Unit averaged 90 percent or higher.
- .7 \_\_\_\_ Unit averaged 100 percent.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N as appropriate. As an example, if the team average was 76 percent, 8F.3.13.1 through SF.3.13. would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA:

1. No. of personnel In UNIT:\_\_\_\_\_.
2. No. of personnel taking exam:\_\_\_\_\_.
3. Team average:\_\_\_\_\_.

KEY INDICATORS: None.

>8F.4 LOGISTICS/COMBAT SERVICE SUPPORT

TASK: 8F.4.1 LOGISTIC REQUIREMENTS

CONDITION(S): A LAAD battery has been assigned to support a deployed MEF(FWD). The Battery commander has established a CP/COC adjacent to a MACCS agency and is providing general support to the MAGTF, as well as direct support of maneuver elements. The MEF(FWD) Operations Order contains the responsibility for CSS in each situation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Resupply of LAAD elements is accomplished per guidelines established in the Operations Order.
- .2 \_\_\_\_ The LAAD commander plans and Submits logistic requirements for all levels (e.g., teams, sections, platoons, battery) of the Unit deployed.
- .3 \_\_\_\_ The LAAD commander conducts liaison with supported units to plan for resupply of Class I,III, and V items to LAAD elements. (KI)
- .4 \_\_\_\_ Supported units clearly understand their responsibility for Class I (rations and water) resupply to the LAAD element.
- .5 \_\_\_\_ Supported units clearly understand their responsibility for Class III (POL) to the LAAD element, or arrangements have been made with the nearest CSS issue point.
- .6 \_\_\_\_ Procedures are established for the maintenance of T/E equipment (less missiles) at the supported unit or LAAD battery level, and this information is disseminated to all platoons, sections, and teams.
- .7 \_\_\_\_ Resupply procedures within the battery have been published and executed. (Redistribution of assets is conducted within the battery in lieu of resupply if possible).
- .8 \_\_\_\_ All LAAD personnel are aware of proper inspection methods for receipt of missiles, and the disposition of unsatisfactory missiles.
- .9 \_\_\_\_ Demonstrate a basic understanding of what an equipment repair order (ERO) is and how it impacts LAAD operations.
- .10 \_\_\_\_ Demonstrate 1st echelon preventative maintenance procedures of vehicles in the field.
- .11 \_\_\_\_ Demonstrate 1st echelon preventative maintenance on communications equipment.
- .12 \_\_\_\_ All LAAD elements must possess the minimum requisite T/E equipment.

EVALUATOR INSTRUCTIONS: Obtain appropriate preventive maintenance checklists for the T/E equipment to be evaluated.

KEY INDICATORS:

#### LOGISTICS PLANNING

Senior LAAD personnel will be required to participate in the planning stages of all deployments to ensure logistical requirements are met. There is no substitute for proper prior Planning.

#### LOGISTICS LIAISON

Continuous liaison must be conducted to ensure the supported units acknowledge logistical support requirements and resupply methods for LAAD elements. Alternate means of resupply, as well as emergency resupply of missiles, must be outlined.

#### RESUPPLY PROCEDURES

Resupply procedures should include contact team communications, check points, timeline, passage of lines procedures, passwords, security briefs, and route briefs. Resupply can be forced, or done upon request as a result of a status report. Redistribution of assets should be accomplished according to established unit procedures. A unit missile resupply and equipment repair point has been established by the LAAD senior element, and all platoons, sections, and teams are aware of the location and required support procedures. LAAD teams, sections, and platoons acknowledge how and where to obtain all classes of supply from outside units.

#### MAINTENANCE

Demonstrate 1st echelon/operator preventive maintenance on T/E authorized communications equipment and vehicles in accordance with the pertinent references.

---

TASK: SF.4.2 EMBARKATION PROCEDURES

CONDITION(S): A battery is tasked with deployment one T/O section by C-130 to a forward area, and then by Ship to a beachhead.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Identify what hazardous material is embarked on any LAAD associated Vehicle and/or pallet.
- .2 \_\_\_\_ Demonstrate knowledge of Hazards of Electromagnetic Radiation on Ordnance (HERO) safety considerations for air and ship embarkation.
- .3 \_\_\_\_ Demonstrate knowledge on how to prepare a vehicle for air embarkation.
- .4 \_\_\_\_ Demonstrate proficiency in making embarkation placards, and packing lists for vehicles and/or palletized equipment.
- .5 \_\_\_\_ Demonstrate knowledge of amphibious/fording capabilities for LAAD vehicles
- .6 \_\_\_\_ Demonstrate corrosion control/weather proofing of equipment for amphibious operations.
- .7 \_\_\_\_ Demonstrate ability to properly palletize and band material for air embarkation.
- .8 \_\_\_\_ Demonstrate knowledge of height and weight restrictions of fully loaded Stinger vehicles.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### EMBARKATION

Training has been conducted by the Battalion Embarkation Officer, and documented in the Individual Training Record. Preparing a vehicle for air embarkation in the simplest terms includes a thorough washdown, a complete Listing of Contents, a knowledge of obtaining a DASH-2 certification (completed by a certified Marine), checks for class 2/3 leaks, securing of cargo with approved straps, and a knowledge of obtaining a Center of Balance (CB) of the vehicle.

#### LOGISTICS LIAISON

Continuous liaison must be conducted to ensure the supported units acknowledge logistical support requirements and resupply methods for LAAD elements. Alternate means of resupply, as well as emergency resupply of missiles, must be outlined.

#### RESUPPLY PROCEDURES

Resupply procedures should include contact team communications, check points, timeline, passage of lines procedures, passwords, security briefs, and route briefs. Resupply can be forced, or done upon request as a result of a Status report. Redistribution of assets should be accomplished according to established unit procedures. A unit missile resupply and equipment repair point has been established by the LAAD senior element, and all platoons, Sections, and teams are aware of the location and required support procedures. LAAD teams, sections, and platoons acknowledge how and where to obtain all classes of supply from outside units.

#### MAINTENANCE

Demonstrate 1st echelon/operator preventive maintenance on T/E authorized communications equipment and vehicles in accordance with the pertinent references.

MC0 3501.9B  
5 JUN 1991

SECTION 8G

LIGHT ANTI-AIRCRAFT MISSILE (LAAM) BATTALION

ENCLOSURE (1)

TABLE OF CONTENTS

	PAGE
MPS 8G.1 - AAW PLANNING	
TASK 8G.1.1.....	VIII-G-1
CONDUCT INITIAL AAW PLANNING	
TASK 8G.1.2.....	.VIII-G-3
CONDUCT PREDEPLOYMENT PREPARATIONS	
MPS 8G.2 - OPERATIONAL PREPARATIONS	
TASK 8G.2.1.....	.VIII-G-5
PLAN RECONNAISSANCE OF TACTICAL SITE	
TASK 8G.2.2 .....	VIII-G-5
CONDUCT RECONNAISSANCE, SELECTION. AND OCCUPATION OF POSITION (RSOP)	
TASK 8G.2.3.....	VIII-G-7
MOVE TO AND OCCUPY TACTICAL SITE	
TASK G.2.4.....	VIII-G-8
ESTABLISH AND MAINTAIN SITE SECURITY	
TASK 8G.2.5 .....	VIII-G-9
EMPLACE TACTICAL EQUIPMENT	
TASK 8G.2.6.....	VIII-G-11
PREPARE AND CHECKOUT HAWK SYSTEM FOR OPERATIONS	
TASK 8G.2.7.....	VIII-G-12
ESTABLISH VOICE COMUNICATIONS AND DATA LINK NETWORKS	
TASK 8G.2.8.....	VIII-G-13
ESTABLISH PASSIVE AIR DEFENSE MEASURES	
TASK 8G.2.9.....	VIII-G-13
PREFARE MISSILES FOR FIRING	
MPS 8G.3 - AAW OPERATIONS	
TASK 8G.3.1.....	VIII-G-14
DETERMINE PREENGAGEMENT EQUIPMENT STATUS	
TASK 8G.3.2.....	VIII-G-16
DETERMINE ENGAGEMENT OPERATIONAL RAADINESS	
TASK 8G.3.3.....	VIII-G-18
DEMONSTRATE TARGET ENGAGEMENT IN A NON-ECM ENVIRONMENT	
TASK 80.3.4 .....	VIII-G-19
DEMONSTRATE TARGET ENGAGEMENT IN AN ECM ENVIRONMENT	
TASK 8G.3.5.....	VIII-G-20
DEMONSTRATE TARGET ENGAGEMENT IN AN NBC ENVIRONMENT	
TASK 8G.3.6.....	VIII-G-20
ORGANIC LAAD TEAMS	
MPS 8G.4 - COMMAND, ADMINISTRATION, AND LOGISTICS	
TASK 8G.4.1.....	VIII-G-22
ESTABLISH A BATTALION/BATTERY COMMAND POST	
TASK 8G.4.2.....	VIII-G-23
OPERATE A COMMAND POST	
TASK 8G.4.3.....	VIII-G-24
INTEGRATE LAAD OPERATIONS	
TASK 8G.4.4.....	VIII-G-25
CONDUCT MAINTENANCE OPERATIONS	
MPS 8G.5 - PERFORM LOGISTICS FUNCTIONS	
TASK 8G.5.1.....	VIII-G-26
CONDUCT SUPPLY OPERATIONS	
TASK 8G.5.2.....	VIII-G-26
HELICOPTER MOVEMENT OPERATIONS	
TASK 8G.5.3 .....	VIII-G-28
FIXED-WING AIRCRAFT MOVEMENT OPERATIONS	
TASK 8G.5.4.....	VIII-G-28
PREPARE FOR AMPHIBIOUS EMBARKATION	

TASK 8G.5.5	OPERATE BATTALION AID STATION	VIII-G-29
MPS 8G.6 - PERSONNEL		
TASK 8G.6.1	CONDUCT PERSONNEL OPERATIONS	VIII-G-30
TASK 8G.6.2	PROCESS ENEMY PRISONERS OF WAR (POW'S)	VIII-G-30
MPS 8G.7 - NBC OPERATIONS		
TASK 8G.7.1	PREPARE FOR NBC OPERATIONS	VIII-G-31
TASK 8G.7.2	PREPARE FOR NUCLEAR ATTACK	VIII-G-32
TASK 8G.7.3	RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK	VIII-G-32
TASK 8G.7.4	RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK	VIII-G-33
TASK 8G.7.5	PERFORM RADIOLOGICAL DECONTAMINATION	VIII-G-33
TASK 8G.7.6	CROSS A RADIOLOGICAL CONTAMINATED AREA	VIII-G-34
TASK 8G.7.7	PREPARE FOR A FRIENDLY NUCLEAR STRIKE	VIII-G-35
TASK 8G.7.8	PREPARE FOR A CHEMICAL AGENT ATTACK	VIII-G-36
TASK 8G.7.9	RESPOND TO A CHEMICAL AGENT ATTACK	VIII-G-36
TASK 8G.7.10	PERFORM NASTY DECONTAMINATION	VIII-G-38
TASK 8G.7.11	PERFORM BASTY DECONTAMINATION	VIII-G-39
TASK 8G.7.12	COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT	VIII-G-41
TASK 8G.7.13	EXCHANGE PROTECTIVE CLOTHING	VIII-G-41
TASK 8G.7.14	SCORE THE NBC EXAM	VIII-G-41

8G.1 AAW PLANNING

TASK: 8G.1.1 CONDUCT INITIAL AAW PLANNING

CONDITION(S): The MAGTF (MEF/MEB) is in receipt of an initiating directive and has begun planning for an amphibious operation and/or extended operations ashore. The aviation combat element (ACE) has been constituted and staff planning has begun. The LAAM Battalion Commander and his staff are supporting the ACE/ACG planning staff in preparing the aviation portions of the operations order.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Advises the ACE/MACG planning staff on the elements of operation guidance essential to the effective employment of HAWK fire units. (KI)
- .2 \_\_\_ Participates in preparing the air defense appendix to the operations order based on an analysis of the enemy air order of battle (EAOB).
- .3 \_\_\_ Checks to ensure that the operations order contains all operations guidance essential to the effective employment of HAWK fire units, and makes additional recommendations if required.
- .4 \_\_\_ Provides inputs to the identification of critical assets, vital areas, and air defense priorities.
- .5 \_\_\_ Recommends priorities for the employment of HAWK fire unit assets.
- .6 \_\_\_ Advises the ACE/MACG planning staff in the optimum placement of HAWK fire units in support of the AAW concept of operations to include the phasing in of equipment consistent with the lift capability. (KI)
- .7 \_\_\_ Advises ACE/MACG planning staff on HAWK fire unit surveillance, target location, identification and engagement capabilities, and limitations.
- .8 \_\_\_ Participates in preparing the ACE surveillance plan to include the communications required for effective surveillance coordination.
- .9 \_\_\_ Advises ACE/HACG planning staff in their analysis of the enemy Electronic Order of Battle and in their preparation of the Electronic Warfare plan.
- .10 \_\_\_ Advises the ACE/MACG planning staff in developing the EMCON plan. (KI)
- .11 \_\_\_ Advises ACE/HACG planning staff of HAWK battalion voice communications and tactical data link capabilities and limitations.
- .12 \_\_\_ Advises ACE/MACG planning staff of HAWK elements initial logistics requirements for deployment to, and continuing operations within, the AOR to include moving missiles.
- .13 \_\_\_ Advises ACE/MACG planning staff of HAWK battalion mobility capabilities.
- .14 \_\_\_ Advises ACE/MACG planning staff in the establishment of criteria for the replenishment/redistribution of HAWK and Stinger missiles among firing units.
- .15 \_\_\_ Advises ACE/MACO planning staff in the optimum phasing of HAWK fire unit displacements in support of continuing operations.
- .16 \_\_\_ Advises ACE/ACO planning staff of HAWK fire units capabilities to support the MAGTF NBC plan.
- .17 \_\_\_ Advises ACE/MACG planning staff of HAWK fire unit capabilities to support the higher command element's deception plan.

EVALUATOR INSTRUCTIONS: In the absence of higher echelon planning, the battalion initiates the planning process based upon a locally generated operational scenario and publishes a battalion operations order. Planning should be conducted using the anti-air warfare planning processes delineated in FMFM 5-5.

#### ESSENTIAL ELEMENTS OF OPERATIONAL GUIDANCE

Operations guidance in the form of air defense control measures and procedures are promulgated in the operations order. They constitute a set of rules which, when applied within the integrated air defense command and control system, facilitate coordination of the antiair battle. The following elements of operations guidance are essential to effective employment of HAWK fire units as part of the integrated air defense force:

1. Centralized/decentralized operations procedures.
2. Autonomous operations procedures.
3. Rules of engagement.
4. Air defense warning conditions.
5. Air defense alert States.
6. Air defense weapons control Status.
7. Air defense identification criteria.
8. Fire control orders.
9. Primary and secondary modes of operation.
10. Vital area and critical assets assignments.
11. Sectors of fire for missile engagement zones (MEZ).
12. Crossover zones and methods of coordination.
13. MEZ re-entry corridors with altitudes, airspeed, and IF codes.
14. Coordinating instructions for operations in MEZ.
15. Self defense.
16. ATOL Oats Link Reference Points (DLRP) CAS/CAP orbit re-entry, and exit checkpoint.
17. Helicopter loiter, re-entry, and exit checkpoints.
18. IFF conflict procedures.
19. No track zones.
20. Reports required.
21. Surveillance responsibilities.
22. Lost communication procedures.
23. Primary target lines (PTL) for each fire unit.

#### HAWK FIRE UNIT PLACEMENT CONSIDERATIONS

The following air defense principles and guidelines are applied in determining position, numbers, and type of HAWK fire units that will best support the MAGTF concept of operations. They represent "best case" characteristics of an effective defense and when applied in the design process, will optimize utilization of assets available:

1. Mass, mix, mobility, and integration.
2. Balanced fires.

3. Weighted coverage for avenues of approach.
4. Mutual support.
5. Overlapping fires.
6. Early engagement.
7. Defense in depth.

#### EMCON PLAN

The EMON plan defines procedures to protect MACCS elements from targeting by enemy forces. It prescribes general operating procedures such as frequency diversity, use of covered nets, and radar sector search, which are applicable to all MACCS elements, as well as specific emission control instructions to individual radar and radio users. EMCON should reduce susceptibility, but not at the expense of improving enemy probability of penetrating the vital area. LAAM battalion representatives should advise the ACE/MACG planning staff of HAWK system technical characteristics and fire unit ability to operate effectively within the established EMCON procedures.

---

#### TASK: 8G. 1.2 CONDUCT PREDEPLOYMENT PREPARATIONS

CONDITION(S): ACE planning has begun to support a MAGTF (MEF/HEB) deployment. The LAAM battalion is in receipt of ACE operational guidance which tasks battalion elements with providing low to medium altitude surface to air missile defense for the MAGTF. Battalion and battery preparations are underway to execute the operations order upon receipt.

#### STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Analyzes assigned mission.
- .2 \_\_\_ Obtains intelligence and weather information from higher command element.
- .3 \_\_\_ Analyzes enemy situation in the objective area.
- .4 \_\_\_ Analyzes EAOB and electronic order of battle for specific tactics, routing, and raid configuration.
- .5 \_\_\_ Identifies additional required essential elements of information (EEI) and forwards to ACE/MACG/battalion.
- .6 \_\_\_ Ensures early dissemination of available intelligence estimate information to deploying battalion elements.
- .7 \_\_\_ Conducts supportability analysis of MAGTF/ACE/MACG operations plan.
- .8 \_\_\_ Determines alternative courses of action that will support the operations plan.
- .9 \_\_\_ Issues guidance to battalion elements impacted by the impending deployment.
- .10 \_\_\_ Inventories basic load of maps and requests those not on hand.
- .11 \_\_\_ Requests TAMPS/ECAC overlays for radar coverage for projected positions in the operational area.
- .12 \_\_\_ Requests aerial imagery or satellite photographic coverage of operational area.
- .13 \_\_\_ Determines method of disseminating intelligence and weather information to subordinate deployed elements.
- .14 \_\_\_ Determines optimum sites (primary, alternate, supplemental) based on priorities assigned by the MAGTF.

- 15 \_\_\_ Determines radar coverage of the AOR in conjunction with other radar capable units (TAOC, EW/C, and ATC) to identify surveillance maps.
- .16 \_\_\_ Determines adequacy of radar coverage to allow target engagement prior to aircraft ordnance release point(s).
- .17 \_\_\_ Determines mutual support between fire units.
- .18 \_\_\_ Determines overlapping radar coverage/fires.
- 19 \_\_\_ Assigns PTL to fire units.
- .20 \_\_\_ Determines priorities for the allocation of missiles, personnel, equipment, motor transport, supplies and communication, and maintenance assets.
- .21 \_\_\_ Develops plan for tactical movement of units to include coordinating procedures with ACE/MAGTF elements.
- 22 \_\_\_ Reviews OPSEC plan for currency and completeness.
- .23 \_\_\_ Continues/initiates intensified training program to bring deploying units to highest possible level of combat readiness.
- .24 \_\_\_ Requests assignment of designated medical personnel to deploying unit(s).
- .25 \_\_\_ Briefs medical personnel on mission, area of operations, and enemy situation, and coordinates their integration into the deploying force.
- .26 \_\_\_ Determines logistics requirements for each deploying battalion element.
- .27 \_\_\_ Submits logistics requirements to ACE/HACG/MAGTF CSSE.
- .28 \_\_\_ Determines availability of equipment and supplies to be deployed to include Stinger missiles for organic LAAD teams.
- 29. \_\_\_ Determines operational status of all equipment that will accompany deploying units.
- .30 \_\_\_ Adjusts maintenance priorities to bring all equipment earmarked for deployment to an operational status.
- .31 \_\_\_ Issues operational readiness float (ORF) equipment if necessary, to fully equip deploying fire units.
- .32 \_\_\_ Conducts priority follow-up actions on requests for equipment and supplies needed for deployment.
- .33 \_\_\_ Redistributes equipment and supplies per the established priorities.
- .34 \_\_\_ Prepares plan for logistics and maintenance support of deployed units. (See MPS 8G.5: Perform Logistics Functions.)
- .35 \_\_\_ Designates general location of all battalion element command posts, bivouac, and support areas as coordinated with the ACE/MAGTF elements.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

8G.2 OPERATIONAL PREPARATIONS

TASK: 8G.2.1 PLANE RECONNAISSANCE OF TACTICAL SITE

CONDITION(S): The MAGTF (MEF/MEB) ACE has assigned the battalion its mission and has identified vital areas/critical assets. Movement to the general area of operation has been completed. The higher command element has ordered HAWK missile site reconnaissance planning to commence.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Conducts map reconnaissance to validate positions from which the vital area(s) can be defended. (KI)
- .2 \_\_\_ Identifies primary/alternate/supplemental sites.
- .3 \_\_\_ Plans organization of the reconnaissance team.
- .4 \_\_\_ Plans reconnaissance team briefing on the mission, enemy ground, and air activity in the area of interest.
- .5 \_\_\_ Plans reconnaissance team briefing on the location of friendly forces, communications with main body, and mode of transportation.
- .6 \_\_\_ Requests helo support if organic transportation is not used for reconnaissance.
- .7 \_\_\_ Plans communication between the main body and the reconnaissance team.
- .8 \_\_\_ Plans for local security during the reconnaissance.
- .9 \_\_\_ Plans for EEI required in the report from the reconnaissance team.
- .10 \_\_\_ Coordinates reconnaissance team movement with MEF/MEB/higher command elements.
- .11 \_\_\_ Conducts physical (ground/air) reconnaissance on the potential sites if tactically feasible.
- .12 \_\_\_ Reports reconnaissance results to higher command element.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

MAP RECONNAISSANCE

When conducting a map survey, the following site selection criterion will be considered:

1. Site is able to provide full coverage of the assigned area of operational responsibility (AOR).
2. Provides for overlapping radar coverage and fires with adjacent unit(s) to prevent dead spots.
3. Site is selected to prevent radiation interference from other radars and electronic devices (radios, microwaves, etc.).
4. Site is on terrain which is supportable by wheeled vehicle or helicopter for resupply requirements.
5. Site is supportable by wire, multi channel radio, or radio communications.
6. Site is defensible from ground attack.
7. Site provides good drainage.
8. Site is large enough to support proper dispersal of equipment.

MCO 3501.9B  
5 JUN 1991

CONDUCT RECONNAISSANCE, SELECTION AND OCCUPATION OF  
POSITION (RSOP)

CONDITION(S): Initial map reconnaissance has been completed. The MEF/MEBACE has approved the sit locations and has directed LAAM unit elements to expeditiously establish an air defense capability at the primary site(s).

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Designates RSOP team and equipment.
- .2 \_\_\_ Briefs RSOP team on its mission, functions and essential elements of friendly and enemy information.
- .3 \_\_\_ Reconnoiters RSOP team and main body convoy routes.
- .4 \_\_\_ Deploys RSOP team to primary site using proper convoy or helo procedures.
5. \_\_\_ Maintains communications between RSOP team and the main body.
- .6 \_\_\_ Provides for site security during RSOP.
- .7 \_\_\_ Deploys RSOP team to primary site using MOPP protection, if appropriate.
- .8 \_\_\_ Occupies site and ensures that it is secure prior to proceeding with other RSOP activities.
- .9 \_\_\_ Conducts sweep of the position by RSOP team for NBC contaminants, if required.
- .10 \_\_\_ Directs RSOP team in the sweep of the position for mines, antipersonnel devices, and unexploded ordnance.
- .11 \_\_\_ Prepares deliberate radar coverage diagram for primary site(s) utilizing ECAC studies or TAMPS, if available.
- .12 \_\_\_ Prepares hasty radar coverage diagram using the aiming circle if no other method is available.
- .13 \_\_\_ Identifies dead spots in radar coverage.
- .14 \_\_\_ Reports dead spots for radar coverage by adjacent fire units to higher command elements.
- .15 \_\_\_ Identifies dead spots for coverage by organic Stinger teams, or requests LAAD battalion assistance from ACE/MACG.
- .16 \_\_\_ Ensures site meets plus or minus 10 degree terrain slope requirements, or begins site preparation.
- .17 \_\_\_ Ensures site meets terrain drainage requirements.
- 18 \_\_\_ Selects HAWK assault fire unit/base fire unit equipment positions per the employment doctrine and available terrain.
- .19 \_\_\_ Marks the equipment positions for follow-on emplacement.
- .20 \_\_\_ Selects and records known reference points (KRP's) for the primary site(s). (KI)
- .21 \_\_\_ Designates missile area of sufficient dimension to provide safety easement, where possible.
- .22 \_\_\_ Selects storage area for small arms, ammunition, and other explosives.
- .23 \_\_\_ Designates bivouac and support areas. (KI)
- .24 \_\_\_ Ensures RF hazard areas were taken into consideration during site selection/emplacement to minimize potential danger to personnel.
- .25 \_\_\_ Designates helo landing area for MEDEVAC and logistic purposes. (KI)
- .26 \_\_\_ Coordinates and integrates specific fire unit and support site locations and security requirements with adjacent units and higher command elements.

VIII-G-6

ENCLOSURE (1)

EVALUATOR INSTRUCTIONS: None

KEY INDICATORS:

KNOWN REFERENCE POINTS (KRP's)

Both primary and secondary KRP's at a distance of at least 1km from the system are selected and recorded. An alternate KRP 300 to 500 meters from the system should also be established should environmental conditions change due to darkness, fog, or poor visibility

BIVOUAC/SUPPORT AREAS

Bivouac, supply, motor transport and other support areas are located in a terrain masked position and/or HPI no track zone. Maximum advantage of natural cover is taken to enhance the effectiveness of and reduce the amount of camouflage needed to conceal the area profile.

HELICOPTER LANDING AREA

Helicopter landing areas should be sufficient distance from operational equipment/billeting area to prevent interruption of operations or injury to personnel and be free of foreign object damage (FOD). Area dimensions and configuration should be as specified in OH 5-3A or as otherwise directed in the ACE operations order.

TASK: 8G-2.3 MOVE TO AND OCCUPY TACTICAL SITE

CONDITION(S): The RSOP has been completed. Equipment and main body personnel must be embarked aboard tactical vehicles and are prepared to displace. The ACE/MACG has directed unit movement and site occupation.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Prepares a convoy plan.
- .2 \_\_\_ Prioritizes equipment for initial operational capability while maintaining distribution of remaining critical end items throughout the convoy.
- .3 \_\_\_ Divides vehicles/end items into manageable serials.
- .4 \_\_\_ Distributes bed/tow loads properly among the trucks to prevent overloading of any truck.
- .5 \_\_\_ Briefs personnel on contingency plans for NBC, air, and ground attacks.
- .6 \_\_\_ Briefs personnel on vehicle to vehicle communication using hand/arm, light signals, or radios.
- .7 \_\_\_ Distributes critical personnel throughout the convoy.
- .8 \_\_\_ Distributes automatic weapons throughout the convoy.
- .9 \_\_\_ Requests protective air coverage for the convoy from the ACE/MACG if tactically required, based on the enemy air capability.
- .10 \_\_\_ Coordinates convoy movement with MAGTF CSSE road control elements.
- .11 \_\_\_ Assigns specific security watch zones for ground/air attack to personnel within the convoy.
- .12 \_\_\_ Employs assigned organic LAAD teams using weighted coverage front and back, bounding/traveling overwatches, or point defense as the tactical situation dictates.
- .13 \_\_\_ Selects convoy routes based upon security and speed requirements.

MCO 3501.9B  
5 JUN 1991

- 14 \_\_\_\_ Briefs convoy drivers on the primary and alternate routes, and provides a strip map for each vehicle.
- .15 \_\_\_\_ Maintains convoy speed and separation requirements.
- .16 \_\_\_\_ Minimizes radio communications among convoy elements.
- .17 \_\_\_\_ Conducts convoy security stops if the tactical situation dictates.
- .18 \_\_\_\_ Coordinates convoy route and stops with protective air elements as available.
- .19 \_\_\_\_ Deploys security teams during stops.
- .20 \_\_\_\_ Maintains communication between main body serials.
- .21 \_\_\_\_ Maintains communications with rear elements as required.
- .22 \_\_\_\_ Stands down operations and checks off operational nets when authorized by the movement order using appropriate communications procedures.
- .23 \_\_\_\_ Responds to NBC, air, and ground attack per unit contingency plans/SOP's.
- .24 \_\_\_\_ Organic/assigned LAAD teams respond to air attacks/ground attacks based on the rules of engagement established.
- .25 \_\_\_\_ Initiates immediate site security (ground and air) during initial site occupation.

EVALUATOR INSTRUCTIONS: For the purpose of evaluating equipment location in convoy, critical equipment for one fire section includes power generators, a control van, one launcher, a high powered illuminator (HPI), three missiles, and a loader, Movement to or within the operations area by other than surface vehicles will be evaluated per the subordinate tasks of section 8G.

KEY INDICATORS: None.

TASK: 8G.2. ESTABLISH AND MAINTAIN SITE SECURITY

CONDITION(S): The unit has arrived at the designated site and equipment has been emplaced. The enemy ground situation is such that ground attack by small lightly armed forces may be expected.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Prepares a around defense plan with due regard for the rules of engagement, and the duty to protect civilians from indiscriminate placement of mines and boobytraps.
- .2 \_\_\_\_ Positions AN/PPS-15 ground surveillance radars to cover likely avenues of approach per the ground defense plan.
- .3 \_\_\_\_ Emplaces ground anti-intrusion devices (mines, concertina, booby traps, and engineering stakes) per the ground defense plan.
- .4 \_\_\_\_ Requests support for any anti-intrusion device emplacement that exceeds LAAM battalion organic capability.
- .5 \_\_\_\_ Emplaces M2 (.50 cal) and M60 (7.62) MG's with overlapping fields of fire per the ground defense plan.
- .6 \_\_\_\_ Establishes control measures and communications to coordinate and control site defenses from one location.
- .7 \_\_\_\_ Coordinates with higher command element and adjacent units to integrate security with friendly forces; (i.e., local security patrols, artillery support, etc.).

VIII-G-8

ENCLOSURE (1)

- .8 \_\_\_\_\_ Requests ground security augmentation forces if site cannot be protected with organic resources
- .9 \_\_\_\_\_ Designates a reaction force to repel threats to perimeter security.
- .10 \_\_\_\_\_ Establishes reliable communications among ground defense elements and reaction forces/outside units who are providing support.
- .11 \_\_\_\_\_ Emplaces the assigned/organic LAAD teams) to provide protective fires along likely avenues of aircraft approach or radar dead spaces.
- .12 \_\_\_\_\_ Establishes observation/listening posts beyond the site perimeter consistent with resources available.
- .13 \_\_\_\_\_ Develops plans for equipment destruction in the event of emergency site abandonment.
- .14 \_\_\_\_\_ Ensures explosives are available for emergency equipment destruction.
- .15 \_\_\_\_\_ Prepares a ground defense map and posts it in the CP.
- .16 \_\_\_\_\_ Briefs ground defense plan to all supervisory personnel.
- .17 \_\_\_\_\_ Continuously evaluates and improves perimeter security positions/camouflage.

EVALUATOR INSTRUCTIONS: The unit ground security can be tested by using a small aggressor force to probe, snipe or otherwise harass the unit 55 it establishes the site and after all ground security measures have been taken. The scope and intensity of this action should be generally commensurate with intelligence estimates and within the units capability to defend itself.

KEY INDICATORS:

#### GROUND DEFENSE MAP

Should include the applicable elements of the following:

1. Tactical Site layout.
2. Bunkers.
3. Location of Force.
4. Foxholes.
5. Fields of Fire.
6. Barbed Wire.
7. Mines.

---

TASK: 8G.2.5 EMPLACE TACTICAL EQUIPMENT

CONDITION(S): The main body convoy is approaching the tactical site. RSOP team guides are prepared to direct equipment to its designated location. The battery commander orders equipment moved on to site and emplaced.

MCO 3501.9B  
5 JUN 1991

STANDARD: EVAL: Y; N; NE

- .1 \_\_\_ Support equipment, tentage, radios, and vehicle, parking areas are sited to take advantage of cover provided by natural terrain features.
- .2 \_\_\_ Emplaces HAWK equipment as prescribed in technical manuals.
- .3 \_\_\_ Assigns CWAR first terrain priority.
- .4 \_\_\_ Emplaces the CWAR with a clear, unrestricted view of the primary threat axis.
- .5 \_\_\_ Installs proper CWAR antenna shim for the current site.
- .6 \_\_\_ Assigns HPI's second terrain priority.
- .7 \_\_\_ Separates HPI's by at least 40 meters.
- .8 \_\_\_ Emplaces HPI's with the radar set group optimally located to preclude interference with the PAR.
- .9 \_\_\_ Identifies "no track" zones and clearly marks them on the TCO/TO and RO scopes.
- .10 \_\_\_ Ensures 1FF had higher terrain priority over PAR when 1FF is remotod.
- .11 \_\_\_ Separates launchers by at least 61 meters.
- .12 \_\_\_ Separates launchers from other equipment by at least 61 meters.
- .13 \_\_\_ Positions equipment to provide at least a 31 meter separation from radars.
- .14 \_\_\_ Masks generators from the radars.
- .15 \_\_\_ Emplaces generators for easy refueling and maintenance access while providing equipment protection (berms, sandbags), and adhering to noise discipline as much as possible.
- .16 \_\_\_ Positions air conditioner fans so that they are facing away from CW radars.
- .17 \_\_\_ Disperses unit assets to minimize damage and reduce their vulnerability to bursting munitions.
- .18 \_\_\_ Establishes missile assembly area. (KI)
- .19 \_\_\_ Disperses missiles in protected storage areas to avoid sympathetic detonation in case of attack.
- .20 \_\_\_ Positions launcher azimuth and elevation cutouts properly (360 degrees unless obstructed).

EVALUATOR INSTRUCTIONS: Equipment emplacement activities evaluated with this task are timed as part of system preparation and checkout standards delineated in Task 8G.2.6

KEY INDICATIONS:

#### MISSILE ASSEMBLY AREA

Missile assembly areas are established per TM 9-1425-1525. Terrain should allow vehicular access to ready pits/launchers.

---

VIII-G-10

ENCLOSURE (1)

TASK: 8G.2.6 PREPARE AND CHECKOUT HAWK SYSTEM FOR OPERATIONS

CONDITION(S): Equipment has been moved onto the tactical site and emplaced. Each item of equipment was positioned at the location designated during RSOP or as otherwise specified by the battery commander or his authorized representative. Operational prefire checks are required.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Advises higher headquarters of any problems relating to limitations on system performance.
- 2 \_\_\_ Completes the setup of an contingency fire unit (CFU) to include manual prefire checks within 30 minutes. (KI)
- .3 \_\_\_ Completes the setup of an CFU to include manual prefire checks within 40 minutes.
- .4 \_\_\_ Completes the setup of an CFU to include manual prefire checks within 50 minutes.
- .5 \_\_\_ Completes the setup of the base fire unit (BFU) with one firing section, to include manual prefire checks, within 45 minutes.
- .6 \_\_\_ Completes the setup of the BFU with one firing section, to include manual prefire checks, within 55 minutes.
- .7 \_\_\_ Completes the setup of the BFU with one firing section, to include manual prefire checks, within 60 minutes.
- .8 \_\_\_ Completes the setup of the BFU with two firing sections, to include manual prefire checks, within 60 minutes.
- .9 \_\_\_ Completes the setup of the BFU with two firing sections, to include manual prefire checks, within 75 minutes.
- .10 \_\_\_ Completes the setup of the BFU with two firing sections, to include manual prefire checks, within 90 minutes.
- .11 \_\_\_ Fire unit is completely operational in 90 minutes BFU/45 minutes CFU with all nets manned, system oriented and aligned, silent mode integrated system checks (ISC) complete, and prefire checks complete.
- .12 \_\_\_ Fire unit is completely operational in 105 minutes BFU/60 minutes CFU with all nets manned, system oriented and aligned, silent mode ISC completed, and prefire checks complete.
- .13 \_\_\_ Fire unit is completely operational in 120 minutes BFU/75 minutes CFU with all nets manned, system oriented and aligned, silent mode ISC complete, and prefire checks complete.
- .14 \_\_\_ Full operational status is attained and is reported to higher command element. (KI)

EVALUATOR INSTRUCTIONS: All equipment is fully march ordered and connected to a truck. The evaluator announces "start", and time begins when the first truck enters the battery site. Time stops when all checks are verified. Timed events may be halted and evaluated as "No" at the discretion of the evaluator if a safety violation occurs.

KEY INDICATORS:

#### FIRE SECTION DEFINED

The following fire sections definitions are applied in timing manual prefire checks: One fire section is comprised of one launcher with three missiles, one HPI radar, one LSCB, one firing console, and one acquisition radar. Two fire sections are comprised of two launchers, each with three missiles, two HPI radars, two LSCB's, two firing consoles, and one acquisition radar.

FULL OPERATIONAL STATUS

The following communications nets, as a minimum, must be up and manned for the fire unit(s) to be considered completely operational: Combat information detection net (CI/D), antiaircraft control net (AAC), antiaircraft intelligence net (AAI), LAAD weapons control (local), ATDL-1, and all other nets required in the operations order.

---

TASK: 8G.2.7 ESTABLISH VOICE COMMUNICATIONS AND DATA LINK NETWORKS

CONDITION(S): The unit has occupied the tactical site. HAWK equipment emplacement has begun. The communications element supporting the fire unit has established voice communications and data link with the TAOC.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Ensures all voice communication nets are established and operational as required by annex X of the operations order.
- .2 \_\_\_ CEOI instructions for daily changing frequencies and call signs are adhered to.
- .3 \_\_\_ Implements the communications ECON plan as directed by command elements.
- .4 \_\_\_ Employs directional antennas where possible.
- .5 \_\_\_ Remotes antennas where possible.
- .6 \_\_\_ Ensures organic spares/back-up radios are available per the operations order.
- .7 \_\_\_ Ensures adequate communications operators are onsite to maintain nets on a 24-hour watch basis.
- .8 \_\_\_ CEOI allocates alternate frequencies for critical radio nets.
- .9 \_\_\_ Authenticates communications as prescribed in the operations order.
- .10 \_\_\_ Proven or suspected enemy electronic activity is reported by a MIJI report via secure means in a timely manner.
- .11 \_\_\_ Ensures current COMSEC material is available to all operators and stored in a secure area when not in use.
- .12 \_\_\_ Ensures that personnel are thoroughly familiar with COMSEC procedures and materials.
- .13 \_\_\_ Uses covered communications per the operations order.
- .14 \_\_\_ Marines operating radios do not compromise unit locations, strength, or commit other BEADWINDOW violations.
- .15 \_\_\_ MUX/wire lines are established and operational as required in the operations order.
- .16 \_\_\_ Completes the ATOL loop test as prescribed by TM 9-1425-2525-12-1.
- .17 \_\_\_ Verifies KG-30 is operational and properly keyed.
- .18 \_\_\_ ATDL link develops +20DB over noise up and down link.
- .19 \_\_\_ Ensures all data links are operational, and the unit is sending and receiving information.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8G.2.8 ESTABLISH PASSIVE AIR DEFENSE MEASURES

CONDITION(S): The site has been established and equipment is emplaced, interconnected, and checked out. Camouflage work was begun immediately as equipment arrived at the site. Site improvement will continue.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_ Demonstrates attention to detail and individual camouflage awareness when concealing equipment.
- 2 \_\_\_ Camouflage the site as expeditiously and as effectively as possible with the assets available.
- 3 \_\_\_ Minimizes highly reflective surfaces (mirrors/glass) with tape, mud or other obscuring materials.
- .4 \_\_\_ Enforces light discipline of personnel as well as equipment.
- .5 \_\_\_ Enforces movement discipline within the site.
- .6 \_\_\_ Attempts to block heat sources (generators, stoves, et al) from aerial observation.
- .7 \_\_\_ Removes signs of vehicle movement within the site.
- .8 \_\_\_ Establishes an alarm system to warn unit members of an air attack.
- .9 \_\_\_ Establishes deception sites (models, balloons, et al) as directed by higher command elements.
- .10 \_\_\_ Reports enemy air attacks to higher command by fastest means possible.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8G.2.9 PREPARE MISSILES FOR FIRING

CONDITION(S): The unit has occupied the tactical site. Canned missiles have been off loaded at the designated missile assembly area. Missile crews have been directed to commence preparation of missiles.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Removes missiles from missile canisters per procedures specified in TM 9-1410-530-14.
- .2 \_\_\_ Performs SATA checks per procedures specified in TM 9-1410-530-14. (KI)
- .3 \_\_\_ Installs missile wings per procedures specified in TM 9-1410-530-14.
- .4 \_\_\_ Torques missile wings per procedures specified in TM 9-1410-530-14.
- .5 \_\_\_ Transfers missiles from pallet to loader per procedures specified in TM 9-1410-530-14.
- .6 \_\_\_ Prepares missiles using components of tool kit, ground. (KI)
- .7 \_\_\_ Adheres to safety procedures specified in Th 9-1410-530-14 when preparing and handling missiles.
- .8 \_\_\_ Indexes and transfers missiles to launcher properly.
- .9 \_\_\_ Arms missiles as specified in Th 9-1410-530-14.

MCO 3501.9B  
5 JUN 1991

10. \_\_\_ Completes decanning, winging transferring to launcher, and arming of each missile in 25 minutes.
- .11 \_\_\_ Completes decanning, winging, transferring to launcher, and arming of each missile in 35 minutes.
- .12 \_\_\_ Completes decanning, winging, transferring to launcher, and arming or each missile in 45 minutes.
- .13 \_\_\_ Downloads missiles to pallets per procedures in Th 9-1410-530-14 procedures.
- .14 \_\_\_ Transfers missiles from pellets to canister per procedures in TM 9-1410-53C-14.

EVALUATOR INSTRUCTIONS: Evaluation of missile preparation is an event separate from the fire unit becoming operational. Missile preparation time Starts when the canned missile is off loaded from its carrier.

KEY INDICATORS:

#### SATA CHECKS

These checks are performed initially when a missile is decanned, and before it is winged. Assembled missiles are checked again just prior to arming.

---

#### 8G.3 AAW OPERATIONS

TASK: 8G.3.1 DETERMINE PREENGAGEMENT EQUIPMENT STATUS

CONDITION(S): Site has been established and equipment has been emplaced and interconnected. Voice communication and data link networks have been established. HAWK Systems have been prepared and checked out for operation. Fire unit is prepared to report as operational to TAOC.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ TAS unit is operational.
- .2 \_\_\_ ADP is operational.
- .3 \_\_\_ IFT system is operational.
- .4 \_\_\_ ADP threat orders CWAR targets.
- .5 \_\_\_ Verifies alignment.
- .6 \_\_\_ Continuous wave acquisition radar (CWAR) is operational.
- .7 \_\_\_ HFI is operational.
- .8 \_\_\_ Locks on target with the H?I in non-ECM environment.
- .9 \_\_\_ Detects targets with (CWAR) (KI)
- .10 \_\_\_ Completes integrated Systems checks properly.
- .11 \_\_\_ Completes HPI four parameter auto designate checks.
- .12 \_\_\_ Completes launcher firing downstep checks. (KI)
- .13 \_\_\_ Completes launcher firing timing checks. (KI)
- .14 \_\_\_ Verifies launcher azimuth elevation cutouts, azimuth elevation override, minimal elevation angles, and launcher/HPI alignments.

VIII-G-14

ENCLOSURE (1)

- .15 \_\_\_ Battery control post (BCP) is operational.
- .16 \_\_\_ TAB unit "A" is operational.
- .17 \_\_\_ TAB unit "B" is operational.
- .18 \_\_\_ Information coordination central (ICC) is operational.
- .19 \_\_\_ The ADP is operational.
- .20 \_\_\_ The 1FF system is operational.
- .21 \_\_\_ Pulse acquisition radar (PAR) is operational.
- .22 \_\_\_ CWAR is operational.
- .23 \_\_\_ Dish powered illuminator "A" (HPI A) is operational.
- .24 \_\_\_ High powered illuminator "B" (HPI B) is operational.
- .25 \_\_\_ "A" section launchers are operational.
- .26 \_\_\_ "B" section launchers are operational.
- .27 \_\_\_ Locks on targets at specified range increments with HPI A in non-ECM environment.
- .28 \_\_\_ Locks on targets at specified range increments with HPI B in non-ECM environment.
- .29 \_\_\_ Detects targets at specified range increments with the CWAR.
- .30 \_\_\_ Detects targets at specified range increments with the PAR. (KI)
- .31 \_\_\_ The ADP threat orders both CWAR and PAR targets.
- .32 \_\_\_ Ensures the PAR ECCM modes are operational: MTI (norm); MTI/BB/DF ECCCCM); BB/DF (ECCM2); BB/DF (ECCH3) sidelobe blanking; frequency change capability.
- .33 \_\_\_ Verifies alignment.
- .34 \_\_\_ Completes integrated system checks properly.
- .35 \_\_\_ Completes ADP HPI four parameter auto designate checks within parameters.
- .36 \_\_\_ Completes launcher firing downstep checks within parameters.
- .37 \_\_\_ Completes launcher firing timing checks within parameters.
- .38 \_\_\_ Verifies launcher azimuth elevation cutouts, azimuth elevation override. minimum elevation angles, and launcher/HPI alignments.  
ALL:
- .39 \_\_\_ Ensures generators are sufficient in numbers to meet unit requirements and are operational.
- .40 \_\_\_ Ensures loader/transporters are sufficient to meet unit requirements (minimum of 1 per firing section) and are operational.
- .41 \_\_\_ Reports operational status to the TADC, or appropriately designated control agency as directed in the operations order.

EVALUATOR INSTRUCTIONS: None.

#### HIGH POWERED ILLUMINATOR

High powered illuminator locked onto targets at the following ranges: Less than 20km, 20km to 40km, 40km to 60km, 60km to 80km, 80km to 100km, and over 100km. Evaluators will note the maximum range the radar can acquire targets, and ensure it is included in the evaluation debriefs. Under other than unusual environmental conditions the range should be at least 70 percent or more of the radar range as defined in the HAWK System Effectiveness Manual. If the radar range is less than 70 percent under other than unusual environmental conditions the system is considered degraded.

#### CWAR DETECTED TARGETS

CWAR detected targets at the following ranges. Less than 20km, 20 to 40km, 40 to 60km, and over 60km.

#### LAUNCHER CHECKS

Launcher checks will be per Th 9-1440-531-12-1. Launchers will be evaluated as non operational for any firing section without at least one completely capable launcher.

#### PAR DETECTED TARGETS

PAR detected targets at the following ranges: Less than 20km, 20 to 40km, 40 to 60km, over 60km.

---

#### TASK: 8G.3.2 DETERMINE ENGAGEMENT OPERATIONAL READINESS

CONDITION(S): The tactical site has been established and equipment is emplaced and interconnected. Voice communication and data link networks are operational. HAWK system has been prepared and checked out for operation. Fire unit has reported as operational to the TAOC.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Ensures all equipment is in remote control from the BCC/PCP.
- .2 \_\_\_ Communicates with TAOC missile coordinator over antiair control (AAC) net.
- .3 \_\_\_ Communicates with TAOC surveillance section over antiair intelligence (AAI) net.
- .4 \_\_\_ Passes and receives control and surveillance symbology over the ATDL-1 data link.
- .5 \_\_\_ Inserts proper data link reference point and battery longitude/latitude into data takeoff (DTO) drawer 2 along with battery address and altitude, and sets ADP sector start/stop switches.
- .6 \_\_\_ Keys KG-30 data encryption device properly from the correct date and time code book.
- .7 \_\_\_ Sets alert states, warning conditions, and weapons control conditions and posts them in the control van.
- .5 \_\_\_ Changes alert states, warning conditions, and weapons control status per the operational order or instructions from the controlling agency (normally TAOC), when required.
- .9 \_\_\_ Keeps engagement loghooks current.
- .10 \_\_\_ Ensures report formats are available.
- .11 \_\_\_ Ensures primary and alternate manual control means are available.
- .12 \_\_\_ Has three crews available to conduct 24-hour operations and assigns them by name.

- .13 \_\_\_\_\_ Ensures all radars are in remote/full radiate (or as prescribed by the EMCON plan for the alert condition)
- .14 \_\_\_\_\_ Determines launcher/LSCB/missiles condition based upon alert state status.
- .15 \_\_\_\_\_ Plots appropriate MEZ and RTF corridors on the TCO/TO and RO scopes.
- .16 \_\_\_\_\_ Enters appropriate IFF modes/codes into 1FF equipment per the operations order.
- .17 \_\_\_\_\_ Inserts proper Mode 4 code IFF into KIR-1A.
- .18 \_\_\_\_\_ Mans all positions per the alert state retirements.
- .19 \_\_\_\_\_ Positions loader transporters for expeditious missile reload (missiles may be simulated).
- .20 \_\_\_\_\_ Selects appropriate "fire node", PAR video fix, and designated "fire interlock" setting. (TCO/TO).
- .21 \_\_\_\_\_ Sets the target extractor sector start and MTI processor mode range switches to the desired tactical setting on the PAR digital signal processor.
- .22 \_\_\_\_\_ Designates the HFI sector search patterns and marks them and PTL's on the FC/TDEC consoles.
- .23 \_\_\_\_\_ All crewmembers demonstrate a thorough knowledge of the operations orders and rules of engagement.
- .24 \_\_\_\_\_ All crew members and organic LAAD gunners demonstrate knowledge of current weapons control status, air defense warning conditions, air defense alert state, and mode of control.
- .25 \_\_\_\_\_ Crews brief thoroughly prior to assuming duty in the BCC/PCP.
- .26 \_\_\_\_\_ Ensures plotting board or command console has appropriate data conditions, status, safe corridors. Mode 3 IFF codes; etc., plotted/recorded and verified.
- .27 \_\_\_\_\_ Ensures rules of engagement provide for immediate engagement of pop-up targets presenting threat to fire unit or vital area without prior TAOC authorization.
- .28 \_\_\_\_\_ Ensures data link commands and responses are being acknowledged promptly.
- .29 \_\_\_\_\_ BCC/FCP crews demonstrate proficiency in manual plotting/reporting in Cartesian polar, GEOREF, or radial grid per the operations order.
- .30 \_\_\_\_\_ Demonstrates proficiency in all AAW report formats as listed in the operations order. (ICO/TO/TCA)
- .31 \_\_\_\_\_ Transmits reports to higher headquarters as required by the operations order.
- .32 \_\_\_\_\_ Differentiates enemy and friendly air utilizing safe corridors, 1FF procedures, air speed, and altitude criteria.
- .33 \_\_\_\_\_ Briefs oncoming crews using tactical situation board prior to assuming watch.
- .34 \_\_\_\_\_ Establishes plans/procedures to deal with missile misfires.
- .35 \_\_\_\_\_ Promulgates procedures for degraded mode operations, and ensures crewmembers are familiar with those procedures.
- .36 \_\_\_\_\_ Demonstrates proficiency in target speed and range determination.
- .37 \_\_\_\_\_ All crew members demonstrate knowledge of all aspects of the communication plan to include unit capabilities for alternate communications, assigned frequencies, net priorities, etc.
- .38 \_\_\_\_\_ Organic LAAD gunners demonstrate proficiency in STINGER weapon system operation. (See section 8F of MCD 3501.9A.)
- .39 \_\_\_\_\_ BCC/PCP crews implement the surveillance plan using primary and/or alternate communications to the TAOC and other surveillance assets.

MCO 3501 9B  
5 JUN 1991

EVALUATOR INSTRUCTIONS: This task contains several standards which require an assessment of crew knowledge and proficiency. While some of these standards may be evaluated by observing crewmembers perform tasks associated with their job, others may be more readily measured through questioning or a combination of these techniques. It is anticipated that the evaluator will question/observe more than one crew per fire unit. The three crew standards are intended to highlight personnel problems, manning levels, and crew proficiency when spread over three crews. The requirement for more than one combat capable crew is emphasized

KEY INDICATORS: None.

TASK: 8G.3.3 DEMONSTRATE TARGET ENGAGEMENT IN A NON-ECM ENVIRONMENT

CONDITION(S): The HAWK unit is emplaced and fully operational. Air activity continues to increase. At present, hostile aircraft have demonstrated no electronic warfare (EW) capabilities.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Detects target at sufficient range to allow engagement.
- .2 \_\_\_ Designates target for identification.
- .3 \_\_\_ Confirms correct IFF code.
- .4 \_\_\_ Indicates the appropriate re-entry corridor.
- .5 \_\_\_ Identifies target as friend or foe.
- .6 \_\_\_ Designates friendly targets as 'friendly' in the ADP track file.
- .7 \_\_\_ Redesignates friendly targets as friendly at change overtime.
- .8 \_\_\_ Resolves target identification conflicts.
- .9 \_\_\_ Monitors the engagement sequence to ensure higher priority targets do not 'pop up' without being engaged.
- .10 \_\_\_ Makes proper assignment(s) (manual/auto).
- .11 \_\_\_ Accepts the assignment at the RO console.
- .12 \_\_\_ Achieves HPI lock.
- .13 \_\_\_ Reports target speed, altitude, signal strength, raid size, and other special information concerning target lock.
- .14 \_\_\_ Evaluates all targets by applying rules of engagement, and hostile identification criteria prior to firing.
- .15 \_\_\_ Continuously evaluates adequacy of safe corridors, IFF procedure, air speed, and altitude requirements in order to allow the TCO/TCA/TO to differentiate enemy, and friendly aircraft.
- .16 \_\_\_ Records target location, altitude, speed, aircraft type, number of missiles fired engagement results.
- .17 \_\_\_ Marks "Fire" point and intercept point on TDECC.
- .18 \_\_\_ Takes appropriate actions in case of target maneuver, special lock, jamming, helo, etc.
- .19. \_\_\_ Reports special actions required to the TCO/TCA/TO.
- .20 \_\_\_ Completes engagement with the fire interlock assembly remaining in the "ADP" position.
- .21 \_\_\_ Determines predicted intercept point is within the HAWK system effectiveness envelope.

VIII-G-18

ENCLOSURE (1)

- .22 \_\_\_\_\_ Fires appropriate number of missiles to destroy target as specified in the MAGTF rules of engagement/effectiveness requirements.
- .23 \_\_\_\_\_ Estimates missile time of flight to intercept plus/minus 10 seconds at time of fire as an aid to kill assessment. Controls end coordinates the crew effectively during a the engagement sequence.
- 25 \_\_\_\_\_ Destroys target (may be simulated)
- .26 \_\_\_\_\_ Reports engagement results.

EVALUATOR INSTRUCTIONS: Preplanned support aircraft should be used to evaluate this task. Multiple target aircraft for each crew assigned are required.

KEY INDICATORS: None.

---

TASK: 8G. 3.4 DEMONSTRATE TARGET ENGAGEMENT IN AN ECM ENVIRONMENT

CONDITION(S): Enemy air activity is moderate. However, hostile aircraft have demonstrated an active EW capability during previous air to air and HAWK missile engagements.

STANDARDS: EVAL: Y; N; NE

- 1 \_\_\_\_\_ Radars are properly remoted into the system, and all functions are operational.
- 2 \_\_\_\_\_ Gives standoff jamming target proper threat priority.
- .3 \_\_\_\_\_ Counters VGFO jammers effectively.
- 4 \_\_\_\_\_ Transmits completed FIR/MIJI reports to higher command elements during a jamming raid.
- .5 \_\_\_\_\_ Uses HPI's in a 'search mode' when other acquisition means are effectively jammed.
- .6 \_\_\_\_\_ Reverts to weapons control status specified in the operations order when communications are lost with the controlling agency due to ECM.
- .7 \_\_\_\_\_ Effectively utilizes HAWK system ECCM features to suppress the effects of jamming.
- .8 \_\_\_\_\_ Effectively engages target(s) in an ECM environment.
- .9 \_\_\_\_\_ Defeats raid despite jamming.

EVALUATOR INSTRUCTIONS: Preplanned aerial flights using ECM and non-ECM aircraft with small radar cross-section (attack type) should he used to evaluate this task.

KEY INDICATORS: None.

---

MCO 3501.9B  
5 JUN 1991

TASK: 8G.3 .5 DEMONSTRATE TARGET ENGAGEMENT IN AN NBC ENVIRONMENT

CONDITION(S): The enemy has demonstrated the capability to employ nuclear, biological, and chemical (NBC) weapons. Intelligence sources report both air and ground delivery capabilities. Appropriate MOPP level consistent with the tactical situation has been set. An enemy attacking aircraft has dispensed a chemical agent on the site.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Uses the unit SOP for operations in an NBC environment.
- .2 \_\_\_ Personnel are at or above the Set MOPP level.
- .3 \_\_\_ Detects presence of chemical agent, and sounds the chemical alarm.
- .4 \_\_\_ Notifies MOPP to level four if required.
- .5 \_\_\_ Notifies higher command element of chemical attack.
- .6 \_\_\_ Replaces casualties in assigned crew.
- .7 \_\_\_ Provides first aid to chemical casualties.
- .8 \_\_\_ Maintains communications within tactical site, and with higher command element.
- .9 \_\_\_ Conducts successful engagement in chemical environment.
- .10 \_\_\_ Performs tactical mission for at least 4 hours while in MOPP 4 protective gear.
- .11 \_\_\_ Evacuates casualties consistent with tactical situation.
- .12 \_\_\_ Evaluates necessity to relocate the fire unit to an area free of contamination.
- .13 \_\_\_ Establishes decontamination priorities.
- .14 \_\_\_ Initiates decontamination of individuals, equipment, and supplies.
- .15 \_\_\_ Recommends site relocation if persistent chemicals are present and the site cannot be expeditiously decontaminated.

EVALUATOR INSTRUCTIONS: A chemical agent (nonlethal) should be dispensed upwind of the tactical site soon before the appearance of a preplanned attack aircraft run against the vital area. Timing is important in that the fire unit should be reacting to the chemical agent at about the same time of aircraft entry into radar coverage. Fire unit should be at a high state of alert. Designate a minimum of three casualties using insofar as possible the criteria delineated in Task 8G.7.9, Respond To A Chemical Attack. Should such criteria produce no casualties, remove at random three key crewmembers from their duty position and designate them as casualties.

KEY INDICATORS: None.

---

TASK: 8G.3.6 ORGANIC LAAD TEAMS

CONDITION(S): The LAAM battalion's organization includes organic LAAD teams to provide short range, low altitude air defense. These teams contribute to the defense in depth, and are normally deployed in radar coverage dead spots to ensure hostile engagement. Success of LAAD employment is highly dependent on early involvement in the planning phase, receiving early warning information, and properly emplaced mans for command and control. Nonorganic LAAD battalion units in support of the MAGTF should also be included in integrated air defense system at all echelons to achieve mutual support and surveillance coordination.

VIII-G-20

ENCLOSURE (1)

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Reviews contingency operation orders, SOP's and other information on LAAD operations to include lessons learned.
- .2 \_\_\_\_\_ Reviews EEI and submits requests for all sources of intelligence on enemy aircraft and tactics.
- .3 \_\_\_\_\_ Provides briefing to LAAD teams/units on LAAM elements mission, and intended disposition of fire units/installations.
- .4 \_\_\_\_\_ Requests special topographic products which facilitate the identification of terrain masked, low altitude ingress and egress routes available to enemy aircraft.
- .5 \_\_\_\_\_ Reviews the capabilities and limitations of LAAM fire units, concentrating on available radar coverage, to ensure an integrated air defense.
- .6 \_\_\_\_\_ Assigns adequate numbers of teams to provide short range air defense based on the zone(s) of action, anticipated threat, and the order of priorities.
- .7 \_\_\_\_\_ Determines methods for providing early warning information to the LAAD teams through the LAMM fire units control central.
- .8 \_\_\_\_\_ Coordinates LAAD teams communications requirements, and alternatives.
- .9 \_\_\_\_\_ Coordinates with the ACE/MACO to ensure LAAD rules of engagement, warning conditions, weapons conditions, and sources of anti-aircraft intelligence appear in the aviation annex to the operations order.
- .10 \_\_\_\_\_ Coordinates with the ACE/MACO/higher command element to ensure the required number of Stinger missiles is onhand, and identifies the means of resupply.
- .11 \_\_\_\_\_ Maintains continuous updates of alert conditions, weapons conditions, and early warning information to the LAAD teams.
- .12 \_\_\_\_\_ Provides timely and accurate early warning information to/from organic LAAD teams and adjacent nonorganic LAAD teams to allow for successful engagements.
- .13 \_\_\_\_\_ Passes any changes to alert state, warning conditions, and weapons control status to LAAD teams without delay.
- .14 \_\_\_\_\_ Provides cueing information to organic LAAD teams based on their location and range/capability of the missile system without delay.
- .15 \_\_\_\_\_ Receives report of LAAD teams visual sightings, engagement reports, and teams status, and reports the information to the TAOC.

EVALUATOR INSTRUCTIONS: Actual conduct of LAAD engagements and the operational training of organic LAAD teams will be evaluated utilizing section 8F of this Order. The intention of this task is to verify the LAAM battalions/battery's preparation, planning, and integration of organic assets.

KEY INDICATORS: None.

8G.4 COMMAND ADMINISTRATION, AND LOGISTICS

TASK: 8G.4.1 ESTABLISH A BATTALION/BATTERY COMMAND POST

CONDITION(S): HAWK fire unit(s) have occupied tactical position(s) and are prepared to conduct the AAW mission. Command, administrative and logistics activities in support of the deployed fire units must be monitored and coordinated to sustain combat capability. The concept of employment, and the actual disposition of HAWK assets will dictate whether this is a battalion and/or battery requirement.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Organizes and operates the CP per prescribed procedures contained in the unit SOP.
- .2 \_\_\_ Staff the CP with the executive staff, necessary special staff members, liaison personnel, and supporting personnel.
- .3 \_\_\_ Organizes personnel, equipment, and vehicles to operate on a 24-hour a day basis.
- .4 \_\_\_ Bases the location of the battalion CP on battery dispositions, routes of communications, communication requirements, space required, cover and concealment, and ground security. (KI)
- .5 \_\_\_ Identifies alternate locations in the event the command post must be displaced rapidly.
- .6 \_\_\_ Prepares plans for the establishment of alternate CP's per procedures contained in the unit SOP; e.g., seniority list of officers, designation of one of the batteries to assume command, etc.
- .7 \_\_\_ Conducts, at a minimum, one displacement of the CP at night.
- .8 \_\_\_ Employs deceptive measures when planning, preparing, and conducting a CP displacement.
- .9 \_\_\_ Employs both active and passive security measures; e.g., use of local security patrols, natural cover and concealment, supplementary camouflage, etc.
12. \_\_\_ Demonstrates the ability to react to a small unit ground attack.
- .11 \_\_\_ Restricts movement and access to the CP.
- .12 \_\_\_ Grounds barbed wire placed around the CF and other system containing communications equipment to shunt induced voltages to ground in order to reduce electromagnetic interference (EMI).
- .13 \_\_\_ Locates generators as far as possible away from antennas and radars.
- .14 \_\_\_ Remotes radio antennas away from the CF to reduce the probability of detection by hostile forces using direction finding equipment.
15. \_\_\_ Properly grounds radios and other electronic equipment to reduce susceptibility to noise generating sources.
- .16 \_\_\_ Establishes message handling procedures which provide for message accountability and quick distribution.
- .17 \_\_\_ Locates dismount points, message drops, and pick-up points within defended areas.
- .18 \_\_\_ Positions supply and medical facilities to ensure constant communications with the CP.
- .19 \_\_\_ Locates bivouac areas and helicopter landing zones (LZ's) to add depth to local security forces.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

GROUND SECURITY

The battery CP should be positioned within the base fire unit perimeter and as such may require no additional security measures. The battalion contingent will be positioned such that its elements may best support deployed fire units, and must tailor their security requirements to the site chosen. Should it collocate with another force element, personnel and weapon resources will likely augment that element's security system.

---

TASK: 8G.4.2 OPERATE A COMMAND POST

CONDITION(S): The HAWK unit has established its tactical position and is prepared to conduct its AAW mission. To facilitate field operations and the coordination of administrative and logistics requirements, a Combat Post has been established.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Conducts a detailed briefing for oncoming watch standers prior to relief. (Bn/Btry)
- .2 \_\_\_ Manages information within the CP to ensure required action is taken in a timely, coordinated, and thorough manner, and that an audit trail is maintained. (Bn/Btry)
- .3 \_\_\_ Assists ACE/MACG in continuous operations planning as the tactical situation changes. (Bn/Btry)
- .4 \_\_\_ Plans and recommends the movement and positioning of subordinate units consistent with the tactical situation and updated combat information/intelligence.
- .5 \_\_\_ Issues movement orders after approval from ACE/MACG command elements and coordination with air defense control agencies. (KI)
- .6 \_\_\_ Maintains close and continuous coordination with external control agencies and higher command elements. (Bn/Btry)
- .7 \_\_\_ Ensures batteries states of alert are consistent with ACE/MACG directives and the needs of the tactical situation.
- .8 \_\_\_ Maintains friendly and enemy situation maps, overlays, charts, etc., and ensures a viable method of continuous updates as information changes. (Bn/Btry)
- .9 \_\_\_ Disseminates updated intelligence and other critical information to subordinate units/elements immediately after processing. (Bn/Btry)
- .10 \_\_\_ Disseminates current threat tactics, and combat information (raid sizes, engagement results, etc.) to subordinate/adjacent units and to higher command echelons immediately. (Bn/Btry)
- .11 \_\_\_ Responds to direction by higher echelon commands or control agencies as prescribed in the operations order. (Bn/Btry)
- .12 \_\_\_ Maintains/positive and reliable communications with both higher command elements and subordinates. (Bn/Btry)
- .13 \_\_\_ Demonstrates the ability to use other communications paths or means to pass critical traffic when the primary path or means fail. (Bn/Btry)
- .14 \_\_\_ Maintains covered communications on those nets so designated in the CEOI. (Bn/Btry)
- .15 \_\_\_ Ensures equipment and operational status information of subordinate fire units/LAAD teams are available. (Bn/Btry)

16. \_\_\_ Anticipates the resupply needs (missiles, etc.) of subordinates and allocates/redistributes asset per established priorities and operational guidance. (Bn)
- .17 \_\_\_ Coordinates logistics and administration support of fire units in response to requests from subordinates - (Bn/Btry)
- .18 \_\_\_ Displaces the CP without interrupting support to subordinates. (Bn/Btry)
- .19 \_\_\_ Submits routine combat reports per the operations order in a timely manner. (Bn/Btry)

EVALUATOR INSTRUCTIONS: Manning and configuration of the battery and battalion facilities are not fixed. However each facility should have personnel, communications, and equipment sufficient to effectively execute all required command and support functions.

KEY INDICATORS:

FIRE UNIT MOVEMENT

Elements in the movement order that should be specifically addressed are:

New mission (including search responsibilities and PTL's), changes in the threat, precise time that the fire unit may go "off-line, movement communications requirements, route through the AOR, passage of lines procedures and PC's, motor transport and support coordinating procedures, new location, time to be back "on-line" and reporting requirements when operational.

---

TASK: 8G.4.3 INTEGRATE LAAD OPERATIONS

CONDITION(S): The HAWK unit has established its tactical site and is prepared to conduct its AAW mission. Organic LAAD teams are to be positioned to protect ingress routes that have limited radar coverage. LAAD battalion resources are also deployed in and around the vital area.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Coordinates organic LAAD communications requirements with MAGTF/ACE/MACG communications planners.
- .2 \_\_\_ Provides rules of engagement, alert conditions, weapons conditions, and intelligence information to deploy organic LAAD teams.
- .3 \_\_\_ Establishes liaison and coordination with adjacent LAAD battalion units to ensure integrated AAW planning.
- .4 \_\_\_ Positions organic LAAD teams for air defense coverage of HAWK radar dead spots, and recommends/requests nonorganic LAAD positions as required.
- .5 \_\_\_ Provides/receives organic LAAD teams with cuing information and alert status over locally established LAAD weapons control net.
- .6 \_\_\_ Provides early warning cuing information to/from nonorganic LAAD units/teams as directed in the MAGTF/ACE/MACG operations orders, or as an alternate communications source if their primary means are nonoperational.
- .7 \_\_\_ Disseminates changing friendly combat information (MEZ, FEZ, re-entry corridors, alert conditions, weapons conditions, et al) to LAAD teams as they occur.
- .8 \_\_\_ Coordinates with the organic LAAD teams to ensure the required load of missiles are available, and a means of resupply is established.
- .9 \_\_\_ Provides engagement direction and receives early warning and engagement results from organic LAAD teams over local LAAD weapons control net.
- .10 \_\_\_ Reports organic LAAD engagements to TAOC.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATOR: None.

TASK: 8G.4.4 CONDUCT MAINTENANCE OPERATIONS

CONDITIONS: An, organic maintenance capability exists at the lowest unit level. H&S battery elements, to include contact maintenance teams, are being deployed to provide additional intermediate level maintenance.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Identifies any nonorganic repair or calibration services required to support HAWK system, and other equipment deployed to the supporting CSSE.
- .2 \_\_\_\_\_ Calculates pre-expended bin items and quantities based upon rates of consumption, and expected resupply rates to support operational requirements.
- .3 \_\_\_\_\_ Ensures adequate critical low density parts are available within deployment packups, as well as intermediate facilities.
- 4 \_\_\_\_\_ Identifies special test and support equipment required to support electronic systems.
- .5 \_\_\_\_\_ Ensures current status of Supported equipment is readily available.
- .6 \_\_\_\_\_ Ensures organizational level maintenance personnel correct all equipment deficiencies within their capabilities per established procedures.
- .7 \_\_\_\_\_ Ensures maintenance personnel are thoroughly familiar with unit SOP procedures to evacuate equipment to higher echelon maintenance facilities, when required.
- .8 \_\_\_\_\_ Responds with intermediate level maintenance contact team support to requests from deployed fire unit/batteries in a timely manner per battalion maintenance priorities.
- .9 \_\_\_\_\_ Performs intermediate maintenance as far forward as possible to reduce delay time.
- .10 \_\_\_\_\_ Replaces deadlined equipment with maintenance float assets to ensure maximum operational support, when required.
- .11 \_\_\_\_\_ Coordinates equipment evacuation when required.
- .12 \_\_\_\_\_ Maintains equipment maintenance records and reports at the organizational and intermediate level per unit SOP.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

8G.5 PERFORM LOGISTICS FUNCTIONS

TASK: 8G.5.1 CONDUCT SUPPLY OPERATIONS

CONDITION(S): The HAWK unit has been deployed in support of MAGTF operations. Essential to mission accomplishment is the ability to maintain adequate stock levels for all classes of supply. A headquarters and service battery element has been deployed to support HAWK firing battery(s). A MAGTF CSSE is located within the local area of operations.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Ensures initial adequate supply support (all classes) to accomplish the mission is available to each fire unit.
- .2 \_\_\_ Ensures adequate food, water, diesel fuel, and other supplies are available at each site.
- .3 \_\_\_ Establishes resupply procedures/priorities for food, water, and fuel with higher command element.
- .4 \_\_\_ Establishes procedures for obtaining additional spare parts, ORF exchange, and depot items if required.
- .5 \_\_\_ Ensures that supply personnel know the location of supply points for all classes of supply to include POL, ordnance, and repair parts.
- .6 \_\_\_ Ensures the fire unit possesses HAWK missiles on-site in the quantity specified in the operations order.
- .7 \_\_\_ Ensures supply personnel are aware of missile resupply procedures to include necessary transportation.
- .8 \_\_\_ Ensures batteries possess minimum load of STINGER missiles as specified in the operations order for Organic LAAD teams.
- .9 \_\_\_ Ensures adequate amounts of small arms ammunition (5.56, 7.62, .50 cal ) are planned for site defense, and delivered to the deployed units.
- .10 \_\_\_ Ensures sufficient amounts of other special ordnance items (hand grenades, smoke, illumination, C4, etc.) are onhand.
- .11 \_\_\_ Establishes procedures for obtaining ground defense devices, such as concertina wire, engineer stakes, mines, and booby traps to meet tactical needs.
- .12 \_\_\_ Monitors supply status, and maintains constant liaison with the supported units.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8G.5.2 HELICOPTER MOVEMENT OPERATIONS

CONDITION(S): Elements of the battalion have been ordered to displace to a remote area accessible by helicopter only. Assignments to individual units have been made.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Conducts early and detailed helicopter planning with the ACE/assigned squadron aviation planners.
- .2 \_\_\_ Requests combat information and intelligence to develop enemy situation, terrain, and weather data base.

- .3 \_\_\_\_\_ Provides detailed embarkation information to ensure sufficient numbers of helicopter for the movement.
- 4. \_\_\_\_\_ Forms and utilizes an HST for the helo loading and movement.
- .5 \_\_\_\_\_ Ensures end item weights/helo capabilities, altitude, and temperature were considered when planning halo movement.
- .6 \_\_\_\_\_ Prepare heliteam, wave and serial assignment tables.
- .7 \_\_\_\_\_ Gives consideration to the expeditious movement of missiles, and assembly means to the site if tactically feasible.
- .8 \_\_\_\_\_ Prepares serials and lifts of outsized equipment per OH 5-3A, Helicopter External Cargo Loading.
- .9 \_\_\_\_\_ Prepares spreader bars for all equipment, and ensures battalion/battery personnel have been trained in their use.
- .10 \_\_\_\_\_ Prepares each item of equipment for movement per the appropriate TM.
- .11 \_\_\_\_\_ Briefs HST on equipment specifications, use of spreader bars and equipment positions at the tactical site.
- .12 \_\_\_\_\_ Briefs helo crews on equipment positioning at the tactical site using maps, aerial photos, sketches, or other aids.
- .13 \_\_\_\_\_ Divides end items into manageable lifts for expeditious movement to the site with emphasis on the equipment necessary for initial operational capability.
- .14 \_\_\_\_\_ Task organizes personnel into manageable lifts for movement to the site based on tactical initial act-up requirements, and the numbers of helicopters available.
- .15 \_\_\_\_\_ Places LAAD teams in the first lift to provide initial air defense at predetermined positions around the landing site.
- .16 \_\_\_\_\_ Manifests personnel for movement to the site.
- .17 \_\_\_\_\_ Ensures authority and procedures to change LZ's or ingress/egress routes are clearly established.
- .18 \_\_\_\_\_ Organizes personnel into teams for operational set-up, security, and helicopter offload so that work is being accomplished concurrently.
- .19 \_\_\_\_\_ Provides representation at all aviation mission briefings involving HAWK movement.
- .20 \_\_\_\_\_ Ensures HERO safety requirements are observed by LAAD teams while embarked on helicopters.
- .21 \_\_\_\_\_ Establishes primary and alternate communications with the helicopter flight leader, upon arrival in the delivery LZ's, to ensure the ability to make any required adjustments.
- .22 \_\_\_\_\_ Reports to ACE/MACG/higher command element when operationally ready.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

MCO 3501.9B  
5 JUN 1991

TASK: 8G.5.3 FIXED-WING AIRCRAFT MOVEMENT OPERATIONS

CONDITION(S): Contingency plans require the flyout of LAAM battalion elements in support of MAGTF continuing operations. Battalion staff is planning for the air embarkation of fire units and H&S Battery elements

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Conducts early and detailed planning with the ACE/squadron aviation planners.
- .2 \_\_\_ Submits a request for lift assets.
- .3 \_\_\_ Divides end items into loads with emphasis on the equipment necessary for initial operational requirements.
- .4 \_\_\_ Task organizes personnel for movement based on the operational requirements and the number of transports available.
- .5 \_\_\_ Prepares load plans and coordinates with the ACE/squadron planners.
- .6 \_\_\_ Identifies hazardous cargo per applicable regulations to aviation planners/loadmasters.
- .7 \_\_\_ Prepares each item of equipment for aircraft movement per the appropriate TM.
- .8 \_\_\_ Organizes personnel into teams for assistance with loading, unloading, re-embarking new transportation means, security, and operational setup.
- .9 \_\_\_ Provides representation to all aviation mission briefings involving HAWK movement.
- .10 \_\_\_ Stages equipment and dunnage at the loading site.
- .11 \_\_\_ Requests materiel handling equipment for offloading at the destination air field.
- .12 \_\_\_ Loads equipment under the direction of loadmaster.
- .13 \_\_\_ Arranges for follow-on transportation to the operational site(s).
- .14 \_\_\_ Reports to ACE/MACG/higher command element when operational ready.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

TASK: 8G.5.4 PREPARE FOR AMPHIBIOUS EMBARKATION

CONDITION(S): LAAM Battalion has received initial guidance to begin preparation for amphibious embarkation in support of MAGTF continuing operations. The battalion staff has initiate planning to accomplish this task.

STANDANDS: EVAL: Y; N; NE

- .1 \_\_\_ Prepares and submits equipment density lists to the MEB/MEF ACE/MACG.
- .2 \_\_\_ Provides representation to all pre-deployment planning meetings.
- .3 \_\_\_ Develops load plans in concert with planning guidance.
- .4 \_\_\_ Stages equipment at port of embarkation.
- .5 \_\_\_ Provides augmentation personnel organized into teams to assist with loading/unloading.

- .6 \_\_\_ Provides fording gear and dunnage.
- .7 \_\_\_ Identifies hazardous cargo/equipment per applicable regulations.
- .8 \_\_\_ Loads hazardous cargo/equipment per applicable regulations.
- .9 \_\_\_ Prioritizes equipment load plans to ensure early initial operational capability upon arrival.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8G.5.5 OPERATE BATTALION AID STATION

CONDITION(S): The LAAM Battalion has deployed in support of MAGTF operations. Essential to the health care of battalion/battery personnel is the immediate treatment of casualties and routine medical support. A field hospital is located within the area of operations.

STANDARDS: EVAL: Y; N;: NE

- .1 \_\_\_ Ensures appropriate numbers of medical personnel are available to staff the aid station(S) for extended operations.
- .2 \_\_\_ Ensures medical supplies and equipment are available at the aid station(s) to provide health care end to process casualties.
- .3 \_\_\_ Requests medical information for assigned personnel to include location of additional military and civilian facilities and any special problems/diseases expected in the operational area.
- .4 \_\_\_ Disseminates location of aid station(s) to subordinate elements, and to higher command echelons.
- .5 \_\_\_ Disseminates casualty evacuation procedures to subordinate LAAM elements.
- .6 \_\_\_ Ensures the medical element assigned to each tactical site is organized, equipped, supplied, and ready to deploy with the supported unit.
- .7 \_\_\_ Provides routine medical care for deployed LAAM force elements.
- .8 \_\_\_ Provides preventive medicine measures for the control of disease(s).
- .9 \_\_\_ Provides emergency treatment of casualties.
- .10 \_\_\_ Conducts TRIAGE.
- .11 \_\_\_ Prepares patients, establishes priorities, and arranges for rearward evacuation, if required.
- .12 \_\_\_ Coordinates the communications support for assigned medical elements.
- .13 \_\_\_ Coordinates casualty reporting procedures with all appropriate staff agencies.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

8G.6 PERSONNEL

TASK. 8G.6.1 CONDUCT PERSONNEL OPERATIONS

CONDITION(S): LAAM battalion elements have deployed in support of MAGTF operations. Battalion representatives have deployed within the CP to provide personnel and administrative support to the deployed force. Extended field operations are anticipated. Casualties may occur at any time.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Provides input to the battalion operations order on all personnel and administrative matters.
- .2 \_\_\_ Coordinates the battalion reports control system with the S-2/3/4/CEO, and ensures compliance with higher command elements requirements.
- .3 \_\_\_ Coordinates religious ministries services for subordinate units to include visits by ministers/RP's.
- .4 \_\_\_ Submits personnel reports per the unit SOP and the operations order.
- .5 \_\_\_ Receives and submits casualty reports par the operations order.
- .6 \_\_\_ Provides personnel replacements and augmentation to subordinate units per the unit SOP.
- .7 \_\_\_ Requests personnel assets beyond the battalion capability from the higher command element.
- .8 \_\_\_ Processes incoming replacements with minimum delay, and completes their assignment to subordinate units.
- .9 \_\_\_ Processes personal mail per postal regulations.
- .10 \_\_\_ Coordinates regular mail delivery to tactical sites.
- .11 \_\_\_ Coordinates morale and welfare activities, to include pay, for all subordinates.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8G.6 .2 PROCESS ENEMY PRISONERS OF WAR (POW'S)

CONDITION(S): Small enemy units are active in the vicinity of the LAAM Battalion sites. These units are armed with a variety of shoulder fired weapons and have the ability to target personnel and equipment. Local activity has been increasing. Attempts have been made to penetrate the perimeter security. The battalion has designated a POW collection point.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ The battalion has, and uses, an SOP for POW's.
- .2 \_\_\_ Individual Marines handling POW's segregate them by type and sex; officers, NCO's, troops, civilian combatants, etc.
- .3 \_\_\_ POW's are searched immediately after capture; weapons and items of potential intelligence value are tagged and evacuated at the same time as the POW; personal items and protective clothing and equipment are returned to the POW.
- .4 \_\_\_ POW's are required to remain silent and are not permitted to converse among themselves.
- .5 \_\_\_ POW's are processed with speed to obtain maximum intelligence benefits.

- .6 \_\_\_\_\_ Marines guarding POW's ensure that they are safeguarded from abuse and from hazards of enemy fire.
- .7 \_\_\_\_\_ Perishable information obtained from POW's is reported immediately to higher command elements.
- .8 \_\_\_\_\_ Enemy casualties receive the same medical care and MEDEVAC priorities as unit casualties with any difference in treatment based solely on medical reasons.
- .9 \_\_\_\_\_ POW's are escorted under guard to the designated collection point as soon as possible.
- .10 \_\_\_\_\_ POW's and all recovered equipment/documents are transferred to higher command elements as soon as possible.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

#### 8G.7 NBC OPERATIONS

TASK: 8G.7.1 PREPARE FOR NBC OPERATIONS

CONDITION(S): Threat forces have been reported to be capable of employing NBC munitions in the area where the LAAM Bn/Btry is located. Due to the threat, passive and active defense measures must be used for survival of the unit.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Possesses an SOP which outlines procedures for enemy NBC strikes and reports required.
- .2 \_\_\_\_\_ Ensures individual NBC defense equipment authorized by the unit table of equipment (T/E) is serviceable and issued to each individual.
- .3 \_\_\_\_\_ Ensures unit NBC defense equipment (including mops, brooms, shovels, rags, etc.) authorized by unit T/E is operationally ready and distributed to designated and trained/knowledgeable operators.
- .4 \_\_\_\_\_ Ensures decontamination equipment and bulk decontaminates authorized by T/E's are available and ready for transport to a decontamination area.
- .5 \_\_\_\_\_ Ensures M11 decontamination equipment units are filled (water used for training).
- .6 \_\_\_\_\_ Ensures NBC trained personnel are available on a 24-hour a day basis.
- .7 \_\_\_\_\_ Ensures personnel thoroughly understand mission oriented protective posture (MOPP) for the control of exposure of personnel to NBC hazards.
- .8 \_\_\_\_\_ Establishes MOPP level, and personnel are at or above the required MOPP level.
- .9 \_\_\_\_\_ Marines properly identify NATO or threat NBC contamination markers.
- .10 \_\_\_\_\_ Emplaces equipment to maximize utilization of terrain features for cover, concealment, and topographic shielding from NBC attacks.

EVALUATOR INSTRUCTIONS: Provide the unit information to expect an imminent nuclear attack by the enemy and integrate NBC scenarios with normal operational assignments. Evaluator(s) should be school trained in the area of NBC Defense (MOS 57XX) or be thoroughly trained in this areas as part of Evaluators' School.

MCO 3501.9B  
5 JUN 1991

KEY INDICATORS: None

TASK: 8G. 7.2 PREPARE FOR NUCLEAR ATTACK

CONDITION(S): LAAM Bn/Btry is informed that nuclear attack is imminent. SOP's and/or operation orders are on hand to provide checklists, sequence of actions, and guidance.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Identifies backup/alternate command, control, and communications procedures.
- .2 \_\_\_ Alerts subordinate/displaced elements.
- .3 \_\_\_ Unit continues mission while implementing actions to minimize casualties and damage.
- .4 \_\_\_ Protects vehicles and equipment by emplacing behind masking terrain.
- .5 \_\_\_ Initiates periodic monitoring using available survey instruments.
- .6 \_\_\_ Identifies/prepares shelters for defense against heat, blast, and radiation.
- .7 \_\_\_ Personnel minimum exposure possibilities by rolling down sleeves, buttoning collars, and wearing any additional clothing equal to a two-layered uniform.
- .8 \_\_\_ Secures/protects loose items, flammable/explosive items, food, and water from heat, blast, and radiation.
- .9 \_\_\_ Demonstrates proficiency in standard first aid procedures to provide self/buddy aid for nuclear blast, and thermal effects.

EVALUATOR INSTRUCTIONS: Commander is informed that nuclear weapons have been used.

TASK: 8G.7.3 RESPOND TO THE INITIAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): Nuclear attack is simulated by the detonation of an artillery or nuclear blast simulator, or by other appropriate means.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Personnel take immediate action, upon recognizing the attack, to shield themselves from blast, heat of detonations by taking cover in fighting holes, bunkers, culverts, caves, tunnels etc.
- .2 \_\_\_ Maintains or re-establishes chain of command and communications, Resumes mission if possible.
- .3 \_\_\_ Submits NBC-1 initial and follow-up reports to MAGTF headquarters. Reports are rapidly forwarded, by secure means, when possible.
- .4 \_\_\_ Administers casualties first aid and evacuates to a medical treatment station as the mission permits.
- .5 \_\_\_ Submits damage assessment by secure means to higher/supported command element par SOP.
- .6 \_\_\_ Continues monitoring using available survey instruments.

EVALUATOR INSTRUCTIONS: Evaluator will assess constructive casualties due to blast, heat, dazzle, radiation, and electromagnetic pulse (EMP). Communications systems (antennas, receivers/transmitters) that are exposed (not in a covered or hardened location/vehicle) during the simulated nuclear detonations, will be assessed as EMP casualties.

KEY INDICATORS: None.

---

TASK: 8G.7.4 RESPOND TO THE RESIDUAL EFFECTS OF A NUCLEAR ATTACK

CONDITION(S): A surface or subsurface nuclear detonation has occurred. The LAAM Bn/Btry location is within the predicted fallout zone. An M5A2 radiological fall-cut predictor, or substitute, is available. The unit gets effective downwind messages at least once every 3 hours. NBC-2 report is furnished to the unit about 15 minutes after the detonation, or prepared by the unit; NBC-3 report is furnished about 45 minutes after detonation; NBC-5 report and/or contamination overlay is provided about 4 hours after the detonation

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Performs mission concurrently with all other actions.
- .2 \_\_\_ Advises supervisors, and notifies subordinate elements of estimated time of fallout arrival.
- .3 \_\_\_ Maintains monitoring using available survey instruments.
- 4. \_\_\_ Protects equipment, munitions, POL, food, and water from fallout.
- .5 \_\_\_ Takes individual protective measures to minimize fallout effects as mission permits.
- .6 \_\_\_ Forwards NBC-4 reports, as required, to the higher command element.
- .7 \_\_\_ Records unit total dose information and reports this information to higher command elements, using available secure means.
- .8 \_\_\_ Minimizes exposure while commanding officer determines if relocation to a clean area is necessary or possible, calculates optimum time of exit.
- .9 \_\_\_ Handles casualties and provides first aid treatment in a nuclear environment.
- .10 \_\_\_ Assesses impact of casualties on unit mission.

EVALUATOR INSTRUCTIONS: Commander is advised of estimated time of fallout arrival.

KEY INDICATORS: None.

TASK 8G.7.5 PERFORM RADIOLOGICAL DECONTAMINATION

CONDITION(S): Fallout has ceased, and personnel and equipment are contaminated. The hazard to personnel does not allow time for the radiation to decay to a minimum level. Time and tactical situation permit decontamination.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Establishes decontamination priorities.
- .2 \_\_\_ Establishes decontamination point.
- .3 \_\_\_ Ensures decontamination personnel wear appropriate protective clothing, and equipment.
- .4 \_\_\_ Decontaminates equipment, personnel, and individual weapons using appropriate decontamination equipment.
- .5 \_\_\_ Decontaminates unit equipment and vehicles using appropriate expedient devices will be assessed as EMP casualties.

MCO 3501.9B  
5 JUN 1991

6. \_\_\_ Marks contaminated areas with NATO standard NBC markers.
- .7 \_\_\_ Determines adequacy of decontamination using available personnel and equipment monitoring instruments.
- .8 \_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provides location to the higher command element.
- .9 \_\_\_ Decontaminates decontamination personnel as necessary.
- .10 \_\_\_ Remains within operational exposure guidance (OEG).
- .11 \_\_\_ Records total dose information and reports to the higher command element.

EVALUATOR INSTRUCTIONS: FM 3-5 provides guidelines for the decontamination procedures.

KEY INDICATORS: None.

TASK: 8G.7.6 CROSS A RADIOLOGICAL CONTAMINATED AREA

CONDITION(S): Tactical Situation forces the LAAM En/Btry to cross a radiological contaminated area while moving to a new site. Unit receives a NBC-5 report or contamination overlay from the higher command element.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Posts NBC-5 report and/or contamination overlay to situation map and determines route.
- .2 \_\_\_ Obtains route clearance and approval, if necessary.
- .3 \_\_\_ Provides turn back dose and dose rate to advance party and or reconnaissance team.
- .4 \_\_\_ Ensures vehicles receive additional shielding and personnel are provided all available protection from dust.
- .5 \_\_\_ Dispatches advance party and/or reconnaissance team to reconnoiter new areas.
- .6 \_\_\_ Crosses contaminated area while employing contamination avoidance technique.
- .7 \_\_\_ Operates within operational exposure guidance.
- .8 \_\_\_ Determines the degree of personnel and equipment contamination after clearing the contaminated areas, using monitoring instruments.
- .9 \_\_\_ Establishes and follows decontamination priorities.
- .10 \_\_\_ Records unit total dose information, using available total dose instruments, and reports to higher command element.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

---

VIII-G-34

ENCLOSURE (1)

TASK: 8G.7.7 PREPARE FOR A FRIENDLY NUCLEAR STRIKE

CONDITION(S): Unit receives a friendly nuclear STRIKWARN per FM 3-3, appendix G. The Bn/Btry is located within minimum safe distance (MSD) zones 2 to 3.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_\_ Applies the STRIKWARN accurately and completely to the situation map within 5 minutes after message receipt.
- .2 \_\_\_\_\_ Makes pertinent information regarding the planned detonation (time of burst, ground zero, fallout coverage, MSD, etc.) available to the commanding officer.
- .3 \_\_\_\_\_ Advises commanding officer on the vulnerability of the unit to the burst and residual contamination.
- .4 \_\_\_\_\_ Advises commanding officer of the measures needed to prevent casualties, damage, and extended interference with the mission.
- .5 \_\_\_\_\_ Implements protective measures, as directed by higher command element, consistent with the mission.
- .6 \_\_\_\_\_ Increases MOPP level consistent with mission, temperature, work rate, and guidance.
- .7 \_\_\_\_\_ Places vehicles behind masking terrain.
- .8 \_\_\_\_\_ Turns off duplicate electronic devices; disassembles erected antennas; ties down antennas. Bare minimum radio equipment remains erected.
- .9 \_\_\_\_\_ Places all loose items (small weapons, tools, etc.) and highly flammable/explosive items (POL, propellants, missiles, etc.) in vehicles or shelters.
- .10 \_\_\_\_\_ Acknowledges the warning before the expected time of burst. All subordinate units have been warned and protective measures implemented. (KI)
- .11 \_\_\_\_\_ Ensures personnel take cover in foxholes, bunkers, armored vehicles, existing shelters (basements, culverts, caves, tunnels, etc.), or lie prone on open ground.

EVALUATOR INSTRUCTIONS: Evaluator simulates nuclear detonation with an artillery or nuclear blast simulator, or informs the unit that nuclear blast has occurred. Evaluator assesses casualties and damage to unprotected personnel and equipment.

KEY INDICATORS:

WARNING

LAAM Bn/Btry should warn subordinate/detached elements of an impending nuclear detonation by using one of the following methods:

1. Using a coda word or brevity code from the CEOI to indicate the message is a nuclear strike warning.
2. A brief, prearranged message that directs the receiver to implement specific protective measures.
3. Encoded message with expected time of burst, sent by most expedient means of communication.

MCO 3501.9B  
5 JUN 1991

TASK: 8G.7.8 PREPARE FOR A CHEMICAL AGENT ATTACK

CONDITION(S): LAAM Bn/Btry is informed that chemical weapons have been used in the theater of operations and that a chemical attack is imminent.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Implements the chemical defense SOP which addresses chemical defense/decontamination procedures.
- .2 \_\_\_ Increases MOPP level consistent with mission, temperature, and work rate.
- .3 \_\_\_ Identifies unit tasks requiring a high degree of manual dexterity, strength, and difficulty while in MOPP 4.
- .4 \_\_\_ Plans personnel rotation. or assigning additional personnel while in MOPP 4.
- .5 \_\_\_ Marines demonstrate the capabilities for donning the protective mask and chemical protective ensemble.
- .6 \_\_\_ Uses the buddy system to facilitate individual monitoring/treatment for chemical agent poisoning and emergency decontamination.
- .7 \_\_\_ Continues mission while implementing all actions to minimize casualties and damage.
- .8 \_\_\_ Covers essential equipment, munitions, POL, food, and water Supplies that cannot be placed in a shelter with readily decontaminated tarps, ponchos, etc.
- .9 \_\_\_ Ensures that M11's are filled and there is an available water source with a supporting road network.
- .10 \_\_\_ Reports potential decontamination sites to the higher command element.
- .11 \_\_\_ Erects and monitors available chemical agent alarm.
- .12 \_\_\_ Uses protective NBC equipment and supplies properly and maintains equipment in a high state of serviceability.
- .13 \_\_\_ Demonstrates a knowledge of chemical agent symptoms.

EVALUATOR INSTRUCTIONS: Unit is informed that chemical weapons have been used, and that attack is imminent.

KEY INDICATORS: None.

TASK: 8G.7.9 RESPOND TO A CHEMICAL AGENT ATTACK

CONDITION(S): LAAM Bn/Btry is subjected to a chemical agent attack. Site should support the type of activities being conducted and permit the safe use of simulators and devices.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Responds to a chemical alarm by taking immediate protective measures followed by treatment/decontamination of casualties. (KI)
- .2 \_\_\_ Personnel mask automatically upon notification of any enemy artillery, rocket, or air attack/overflight.
- .3 \_\_\_ Personnel mask automatically upon perceiving a suspicious odor, airborne droplets/mist, or smoke from unknown source.
- .4 \_\_\_ Marines unmask only when authorized. (KI)

VIII-G-36

ENCLOSURE (1)

- .5 \_\_\_\_ Performs mission for at least 4 hours while in MOPP 4.
- .6 \_\_\_\_ Identifies type of chemical agent using available detector kit.
  - IF PERSISTENT AGENT
- .7 \_\_\_\_ Locates and marks with NATO standard markers persistent agent contamination areas.
- .8 \_\_\_\_ Reports location and type of contamination to the higher command element, and plots the location per FM 3-3.
- .9 \_\_\_\_ Determines if immediate relocation to a clean area is necessary or possible and advises the higher command element.
- .10 \_\_\_\_ Determines decontamination priorities and requests decontamination support if required.
- .11 \_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns medical treatment facility.
- .12 \_\_\_\_ Wraps, marks as contaminated, and evacuates WIA's as mission permits. Warns graves registration collection point.
  - IF NONPERSISTENT AGENT
- .13 \_\_\_\_ Follows unmasking procedures. (KI)
- 14. \_\_\_\_ Evacuates WIA's to the medical treatment facility as mission permits.
- .15 \_\_\_\_ Evacuates KIA's to the graves registration collection point as mission permits.
- .16 \_\_\_\_ Services detector units and returns them to operation.
- .17 \_\_\_\_ Replaces expended chemical defense items as, required.
- .18 \_\_\_\_ Adjusts MOPP level, as required.
- .19 \_\_\_\_ Plans and provides first aid treatment to casualties in a chemical environment.

EVALUATOR INSTRUCTIONS: Selected personnel are presented decontamination training kits and first aid treatment training devices to "treat designated casualties". Every attempt must be made to provide a realistic situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator. Ninety percent of the personnel must successfully accomplish the tasks for the unit to receive a "yes" evaluation.

KEY INDICATORS:

CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it.
2. Then they clear their masks, re-establish the seal, and wait 10 minutes.
3. If no Symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and rascal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

---

TASK: 8G.7.10 PERFORM HASTY DECONTAMINATION

CONDITION(S): Personnel and equipment have been contaminated by a chemical agent. Time is not available for complete decontamination. The hazard is such that hasty decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Decontaminates individual weapons and LAAM Bn/Btry equipment using appropriate decontamination kits.
- .2 \_\_\_ Determines extent of decontamination and establishes decontamination priorities.
- .3 \_\_\_ Removes contaminated protective covers and decontaminates, or discards.
- .4 \_\_\_ Uses appropriate decontamination procedures for items being decontaminated. (KI)
- .5 \_\_\_ Decontaminates equipment and vehicles using appropriate expedient devices.
- .6 \_\_\_ Determines adequacy of decontamination.
- .7 \_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provides locations to higher command element.
- .8 \_\_\_ Reduces MOPP level, if required.

VIII-G-38

ENCLOSURE (1)

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### DECONTAMINATION PROCEDURES

If support is not available for conducting hasty decontamination, initial decontamination of unit equipment, vehicles and weapons may be accomplished by situation through devices, scenarios, or other aids developed through innovation. The key to a thorough evaluation is a realistic, believable, well supported situation imposed by the trainer/evaluator. Ninety percent of the personnel must successfully accomplish the tasks for the unit to receive a "yes" evaluation.

#### CHEMICAL CASUALTIES

Chemical casualties are described as:

1. Personnel without mask and hood within arms reach without decontamination kits, or not wearing chemical protective clothing.
2. Personnel not taking immediate corrective actions upon perceiving the attack, hearing a chemical agent alarm, being ordered to mask, or using incorrect masking procedures (not masking within 9 seconds), or making incorrect use of decontamination kits/first aid treatment items.
3. Marines who unmask or otherwise assume a lesser degree of MOPP without being authorized to do so.

#### UNMASKING PROCEDURES

When a detector kit is available, the following unmasking procedures will be adhered to:

1. After determining absence of agents, two or three Marines unmask for 5 minutes.
2. Marines remask and are examined in a shady area for symptoms for 10 minutes.
3. If no symptoms appear, remainder of unit may unmask.

When no detector kit is available, the following unmasking procedures will be adhered to:

1. Two or three Marines take a deep breath, hold it.
2. Then they clear their masks, reestablish the seal, and wait 10 minutes.
3. If no symptoms appear, the same Marines break the seal of their masks, take two or three deep breaths, clear and rascal their masks.
4. If after 10 minutes no symptoms have appeared, the same Marines unmask for 5 minutes and then remask.
5. If after 10 more minutes no symptoms have appeared, the rest of the unit may unmask.

---

TASK: 8G.7.11 PERFORM HASTY DECONTAMATIONS

CONDITION(S): Personnel and equipment have been contaminated by a chemical agent. Time is not available for complete decontamination. The hazard is such that hasty decontamination is required. All personnel are maintaining a maximum MOPP.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_\_ Decontaminates individual weapons and LAAM Bn/Btry equipment using appropriate decontamination kits
- .2 \_\_\_\_ Determines extent of decontamination and establishes decontamination priorities.
- .3 \_\_\_\_ Removes contaminated protective covers and decontaminate, or discards.
- 4 \_\_\_\_ Uses appropriate decontamination procedures for items being decontaminated. (KI)
- .5 \_\_\_\_ Decontaminates equipment and vehicles using appropriate expedient devices.
- .6 \_\_\_\_ Determines adequacy of decontamination.
- .7 \_\_\_\_ Discards contaminated materials according to tactical SOP, marks as contaminated, and provide locations to higher command element.
- .8 \_\_\_\_ Reduces MOPP level, if required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS:

#### DECONTAMINATION PROCEDURES

If support is not available for conducting hasty decontamination, initial decontamination of unit equipment, vehicles and weapons may be accomplished by:

1. Removing all gross liquid contamination with sticks or other improvised devices which are buried after use.
2. Utilizing will decontamination apparatus filled with DS2 to spray areas frequently used or touched (water is used to simulate DS2 in a training environment).

Contaminated items that may need special decontamination treatment are:

1. POL, food, and water containers and munitions, these are washed with soapy water, rinsed, and thoroughly air dried.
2. Communications equipment, electronic vans, and other electronic equipment are decontaminated with hot air, by weathering, or all metal parts are wiped with rags soaked with DS2 (water is used for training purposes).
3. Optical instruments are blotted with rags and then wiped with lens cleaning solution of organic solvent.

Adequacy of decontamination is determined using the chemical agent detector kit. If contamination is still present, procedures can be repeated, decontamination support can be requested, or the risk of using the equipment can be accepted.

TASK: 8G.7.12 COORDINATE FOR DELIBERATE DECONTAMINATION OF EQUIPMENT

CONDITION(S): Equipment has been contaminated by a chemical agent. Hasty decontamination has been accomplished. Tire is available for complete decontamination. Decontamination support from a decontamination unit is available upon request.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Coordinates with decontamination unit for arrival time, location, supplies, equipment, and personnel support to be furnished and estimated time of completion.
- .2 \_\_\_ Dispatches advance party following receipt of route clearance to personnel/equipment decontamination stations (PDS/EDS) assembly area.
- .3 \_\_\_ Moves main body to PDS/EDS assembly area and organizes for processing.
- .4 \_\_\_ Begins decontamination as scheduled.
- .5 \_\_\_ Reorganizes LAAM Bn/Btry personnel in a clean area upwind of residual effects for the resumption of their mission.
- .6 \_\_\_ Adjusts MOPP level, as required.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK: 8G.7.13 EXCHANGE PROTECTIVE CLOTHING

CONDITION(S): The protective clothing is contaminated and a suitable uncontaminated area is available.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Removes contaminated clothing without transfer of contamination.
- .2 \_\_\_ Changes to new protective clothing.

EVALUATOR INSTRUCTIONS: None.

KEY INDICATORS: None.

TASK:: 8G.7.14 SCORE THE NBC EXAM

CONDITION(S): An exam not to exceed 30 minutes, will be prepared at the Wing/Group level. All available personnel will take the exam.

STANDARDS: EVAL: Y; N; NE

- .1 \_\_\_ Unit averaged 10 percent or higher.
- .2 \_\_\_ Unit averaged 20 percent or higher.
- .3 \_\_\_ Unit averaged 30 percent or higher.
- .4 \_\_\_ Unit averaged 40 percent or higher.

MCO 3501.9B  
5 JUN 1991

- 5 \_\_\_\_ Unit averaged 50 percent or higher.
- .6 \_\_\_\_ Unit averaged 60 percent or higher.
- .7 \_\_\_\_ Unit averaged 70 percent or higher.
- .8 \_\_\_\_ Unit averaged 80 percent or higher.
- .9 \_\_\_\_ Unit averaged 90 percent or higher.
- .10 \_\_\_\_ Unit averaged 100 percent.

EVALUATOR INSTRUCTIONS: Standards will be marked either Y or N, as appropriate. As an example, if the team average was 76 percent, Task 8G.7.13.1 through 8G.7.13.7 would be marked Y (Yes) and the remainder would be marked N (No).

REQUIRED DATA.

- 1. Number of personnel in unit: \_\_\_\_
- 2. Number of personnel taking exam: \_\_\_\_
- 3. Unit average: \_\_\_\_

KEY INDICATORS: None.

---

\*U.S. GOVERNMENT PRINTING OFFICE:1996 - 404-632/20161

VIII-G-42

ENCLOSURE (1)