

AIR FACILITY ORDER P11320.4C

From: Commanding Officer
To: Distribution List

Subj: STANDING OPERATING PROCEDURES (SOP) FOR THE AIRCRAFT RESCUE
AND FIRE FIGHTING (ARFF) BRANCH (SHORT TITLE: ARFF SOP)

Ref: (a) DoD Inst 6055.6
(b) NAVAIR 00-80R-14
(c) MCO P11000.11
(d) AFO P3700.1D

Encl: (1) LOCATOR SHEET

1. Purpose. To establish the Standing Operating Procedures (SOP) for the Aircraft Rescue & Fire Fighting Branch (ARFF) in performing the aircraft fire fighting and rescue functions at Marine Corps Air Facility (MCAF) Quantico.

2. Cancellation. AFO P11320.4B.

3. Information. Reference (a) provides criteria for the allocation, assignment, operation, and administration of fire departments and related fire protection functions at Department of Defense (DoD) shore facilities. Reference (b) provides the basic policy and organization for performing the aircraft fire fighting and rescue function at Navy and Marine Corps Air Station's. Reference (c) provides information and guidance concerning the Marine Corps fire protection program. Reference (d) is the MCAF Quantico Airfield Operations Manual.

4. Summary of Revision. This Manual contains a significant amount of changes and should be reviewed in its entirety.

5. Action. The Airfield Operations Officer will establish and maintain the ARFF capability per policies and procedures established herein. Due to the critical nature of the ARFF Branch's responsibilities, the Marine Corps Base Quantico Motor Transportation Maintenance Officer shall ensure that the highest priority is assigned to the repair of ARFF vehicles and related support equipment. MCAF Quantico is designated as a Category II airfield.

AFO P11320.4C

6. Certification. Reviewed and approved this date.

D. J. DONOVAN

DISTRIBUTION: A

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Location: _____
(Indicate locations of copy(ies) of this Manual.)

AFO P11320.4C

ARFF SOP

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CHAPTER 1

MISSION, ORGANIZATION AND STAFF RESPONSIBILITIES

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CHAPTER 1

MISSION, ORGANIZATION, AND STAFF RESPONSIBILITIES

1000. GENERAL. ARFF is an essential part of the overall Navy and Marine Corps fire protection effort. The constant threat of danger that fire poses to the safe operation of aircraft ashore demands that an effective program be established and maintained. Modern fire fighting has become a technical specialty that requires dedication and well-trained personnel. The fire fighter's efforts are devoted to preventing death or injury, limiting damage and preventing the spread of fire.

a. Horseplay and Hazing. ARFF Marines are expected to conduct themselves in a safe, professional manner at all times, on and off duty. Horseplay is strictly prohibited at any time. Hazing and other forms of conduct that are degrading and disrespectful of a Marine's basic dignity will not be tolerated. Marines suspected of hazing another Marine, or participating in horseplay or careless behavior that results in a Marine being injured will be prosecuted and, if found guilty, punished to the fullest extent possible.

1001. MISSIONS. The ARFF Branch has a number of missions which require immediate response and action. The ARFF program includes all measures relating to prevention, detection, control and extinguishment of fire resulting from aircraft operations including the rescue of personnel when endangered by such operations. The ultimate objective of the program is to prevent or minimize injury to personnel and loss or damage of property.

1. Primary. The primary duty of a fire fighter is saving lives. Fire suppression is an important supporting measure.

2. Secondary. The secondary responsibility is to extinguish fire and limit damage to the aircraft. This responsibility is further extended to include government and private property by employing assigned equipment and personnel per authorized procedures upon occurrence or threat of an aircraft mishap in the assigned area of responsibility.

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3. Additional. Additional responsibilities include, but are not limited to:

a. Mutual aid requests. Provide response to mutual aid requests from the Structural Fire Department and/or local civilian Fire-Rescue units when directed provided that the services requested are within, and do not degrade the capability to support flight operations.

b. Personnel. Manage appropriate personnel strength and qualifications to meet the minimum requirements of reference (b).

c. Vehicles/Equipment. Ensure all vehicles and support equipment assigned to ARFF are maintained in a high state of readiness.

d. Foreign Object Debris (FOD). Provide surveillance of all runways and taxiways for proper police of FOD and advise Quantico Tower.

e. Aircraft Salvage. Assist in the salvage of damaged aircraft aboard MCAF Quantico and off station, dependent upon capability.

1002. ARFF OFFICER. The ARFF Officer, Military Occupational Specialty (MOS) 7002, shall be assigned this billet in writing as a primary duty and is directly responsible to the Airfield Operations Officer for the operational and administrative readiness and performance of the ARFF Branch. Specific responsibilities include:

1. Provide ARFF support to all military aircraft mishaps within a 15 mile radius from the base of the control tower, as the situation requires.

2. Have direct command and control of the fire fighting and rescue operation upon arrival at the scene of an aircraft mishap except when the aircraft is located inside a hangar or building. In which case, a unified command shall be established with the Station Fire department and the MCAF ARFF.

3. Keep the Airfield Operations Officer informed of the status and overall effectiveness of the ARFF Branch with respect to its ability to accomplish the mission. Ensure the Airfield Operations Officer is notified of any situation which may require a decision above the ARFF Officer's authority.

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4. Conduct ARFF operations on the air facility to enable the airfield to resume normal flight operations. Assume the responsibilities as the Salvage Officer in aircraft salvage operations when requested by the assigned Squadron Safety Officer and as directed by the Airfield Operations Officer to any tenant squadron.
5. Maintain direct liaison with other branches within the Airfield Operations Division and other agencies as required for mission accomplishment. Maintain close liaison with other commands for technical assistance and logistical support to maintain a high state of readiness.
6. Initiate and supervise a comprehensive and continuous aircraft fire fighting and rescue training program for all ARFF Marines. Ensure ARFF NATOPS procedures are utilized per reference (b).
7. Initiate and ensure a comprehensive and continuous ARFF vehicle and related support equipment maintenance program relative to driver/operator or 1st echelon capability. Ensure that the appropriate amount of vehicles and personnel are available to support normal flight operations.
8. Submit to the MCAF S-4 Officer via the Operations Officer, budget requirements for acquisition of equipment, agents, protective clothing and all other related equipment needed for the proper maintenance, operation and training of the ARFF Branch.
9. Coordinate with the Station Fire Chief and civilian fire/rescue agencies to establish cross training and mutual aid programs.
10. Coordinate with the MCAF and Station Environmental and Safety Departments regarding all environmental issues.
11. Provide ARFF protection for all special flights (such as hazardous cargo and medical evacuation flights) which land or take off from this facility or the Naval Medical Clinic (NMCL), and to provide such protection for off station landing zones (LZ's), as directed by the Commanding Officer, MCAF.

1003. ARFF NONCOMMISSIONED OFFICER IN CHARGE (NCOIC). This billet is normally filled by the senior enlisted Marine, MOS 7051, assigned to the ARFF Branch. The NCOIC works under the direct supervision of the ARFF Officer and will assume the ARFF Officer duties when the ARFF Officer is absent. Specific responsibilities include:

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1. Coordinate all phases of operation of the ARFF Branch with the Crash Chief and supervise the operation of the Administration, Training, Material and Truck-Master departments. Duty watch section operations will be monitored through the Crash Chief.
2. Keep the ARFF Officer informed of all unusual situations.
3. Monitor and ensure completion of all training requirements, and ensure that a level of instruction is being attained which maintains proficiency in all ARFF skills.
4. Monitor all published instructions ensuring that they are current, complete and in compliance with all directives and established policies of senior echelons of command.
5. Review the daily log of operations (logbook/journal) and ensure its accuracy.
6. Coordinate with the Public Works Department (PWD) on all required repairs (work requests) to ARFF facilities.

1004. CRASH CHIEF. This billet is normally filled by the next senior enlisted Marine (MOS 7051) assigned to the ARFF Branch. The Crash Chief assists the NCOIC as directed and will assume the NCOIC duties when the NCOIC is absent. Other responsibilities include:

1. Inspections

- a. Vehicles/Equipment. Ensure daily vehicle/equipment inspections are conducted and ensure corrective action is taken.

- b. Field Day. Conduct weekly building field day inspection's ensuring all discrepancies are corrected prior to relief of the off-going section.

- c. Bunker Gear. Conduct periodic, unannounced (at least quarterly) bunker gear inspections reporting all discrepancies to the Section Leader and Material Section for corrective action.

2. Make formal relief with the off-going/oncoming Section Leaders. Ensure correct and concise log entries are made in the dispatch permanent logbook, initialing all action entries in the log and ensuring all required reports have been completed.

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GENERAL INFORMATION

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CHAPTER 2

GENERAL INFORMATION

2000. GENERAL. The information contained in this chapter is general in nature and applies to all ARFF Marines so that they know what is expected of them during their tour of duty at MCAF QUANTICO.

2001. ORIENTATION. New Marines reporting for duty with the MCAF QUANTICO ARFF Branch will receive an orientation of the policies and procedures of ARFF's daily operations. All ARFF sections will participate so the new Marine has the opportunity to meet supervisors and other Marines they will be working with during their tour of duty.

2002. EMERGENCY RESPONSE. All ARFF Marines will respond to all emergencies while on duty. Day duty Marines will stand by to assist the on-duty section as required.

2003. RECALL. All off-duty ARFF Marines will return to the ARFF building (Bldg 5156) when notified by proper authority that a recall is in effect. Therefore, all ARFF Marines are required to have a valid, current phone number or personal paging device where they can be reached. All Section Heads will receive a copy of this roster. ARFF Marines are to ensure Section Heads and the ARFF Admin NCO are notified of any changes.

2004. POST. Building 5156 is the designated post for all ARFF Marines. This post is expanded to include a 360 degree, 15 mile radius from the base of the control tower when required to perform the missions as specified in reference (b). This area of responsibility can be expanded on a case by case basis at the discretion of the Airfield Operations Officer.

2005. AIRFIELD CATEGORY. MCAF QUANTICO is currently designated a Category II airfield as approved by reference (b). Category changes are as directed by higher authority.

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2006. AIRFIELD OPENING REQUIREMENTS. In order to properly open the airfield, the following requirements must be met.

1. ARFF Vehicles. For category II airfields, references (a) and (b) requires major ARFF vehicles to have a (combined) capacity of 2000 gallons of water/Aqueous Film Forming Foam (AFFF) and capable of pumping at a rate of 1000 gallons per minute from the roof turrets only. Major ARFF vehicles are defined in Reference (b). This requirement is met when a combination of two A/S32P-19A vehicles are used.

2. Watch-standers. Watch-stander personnel required to open the airfield is 12 ARFF Marines per section as identified below.

Airfield Operations

Section Leader	1
Pin Man	1
Dispatcher	1
P-19A Crew Chief/Operator	2
P-19A Turret Operator	2
P-19A Handline Operator	2
P-19A Rescue Tech	2
Water Tanker/Nurse Truck Operator	1
Subtotal	<u>12</u>
	x 2 Sections
Total	24

3. In accordance with reference (b), a minimum of seven (7) ARFF Marines will remain on duty after normal flight operations in order to support flight line fire protection when aircraft are present at that activity. The reference also states "local conditions may dictate an increase in this minimum manning criteria." When the ARFF Section goes down to a minimum of seven, those personnel that are sent to their quarters are still in a duty status and are on standby in the event a recall is required. Their quarters are their appointed place of duty and there shall be no consumption of alcohol or of prescription medication that will impair their ability to perform safely. Any departure from their appointed place of duty shall be directly coordinated with the ARFF Section Leader.

2007. ARFF VEHICLE MINIMUMS. Minimum requirements are located in reference (b). Should the minimum requirement not be met, the NCOIC, Officer in Charge (OIC) and Operations Officer are to be notified immediately so a decision can be made to curtail or reduce flight operations.

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2008. TURNOVER FOLDERS

1. The continual rotation of officers and key enlisted personnel results in a lack of experience and continuity in many day-to-day operations. The proper use of desktop procedures and turnover folders greatly alleviates this situation. In order to maintain an efficiently operated unit in an atmosphere of constantly changing personnel, a means of standardizing positions is necessary. Each section is required to maintain a turnover folder.

2. A turnover folder is a file containing pertinent information about a key billet, which, when passed on to an individual newly assigned to the billet, will give that individual the basic information and data necessary to assume duties in a minimum amount of time. This folder should include, but not be limited to, the following:

- a. Organizational chart
- b. Billet description
- c. Special duties/tasks
- d. A history of pertinent references and command directives over which the individual has cognizance
- e. Personal contacts by billet, grade, name and phone number
- f. Problem areas sufficiently defined
- g. Status of pending projects
- h. Such other information as may be necessary to provide insight into all tasks incorporated within the billet. This may include policy, management controls, memoranda for the record, etc..

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CHAPTER 3

ADMINISTRATION

3000. GENERAL. This chapter defines the Administration Clerk's responsibilities and related administrative procedures.

3001. ADMINISTRATION CLERK. Marines normally assigned to this duty are selected from assigned MOS 7051 Marines for a period of time as determined by the NCOIC and OIC. The Administration Clerk works under the direct supervision of the NCOIC. The clerk will use current editions of SECNAVINST 5216.5_, Department of the Navy Correspondence Manual, as well as other related publications in the performance of duties.

3002. CORRESPONDENCE AND MAIL MANAGEMENT. Comply with the current edition of SECNAVINST 5216.5_ and MCBO P5112._, in the preparation of all ARFF correspondence and mail, respectively. Maintain close liaison with the H&HS Administrative Office in matters pertaining to duty assignments, leave, disciplinary actions, inspections and other areas affecting the status of Marines assigned to ARFF.

3003. ADMINISTRATIVE SUPPORT. Provide clerical support to all ARFF sections as required. All requests for support are to be cleared through the ARFF NCOIC first. Questions regarding the priority of the daily work load will be directed to the OIC. All Sergeants and below will have a Personnel Action Request (PAR) form signed by the NCOIC or Crash Chief for administrative support with S-1. The following steps will be strictly abided by:

Step 1 - Your immediate supervisor will be notified of the request.

Step 2 - A PAR form can be obtained from the ARFF Administration Clerk. If your SNCOIC is unavailable, the matter will be postponed until the next working day. In the event of an emergency, contact the NCOIC or Crash Chief for approval.

3004. FORMS. Maintain a file of current forms used by ARFF.

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3005. DIRECTIVES MANAGEMENT. Per Headquarters Marine Corps email letter 5215 of 23 March 1999 (NOTAL), a quarterly checklist of current directives is no longer required, due to the establishment of the Marine Corps Base, Quantico directive website. For automatic distribution of publications, consult the MCAF files/directives clerk. Guidance in maintaining Technical Publications is 00-25DRT-1. ARFF administration is responsible for the control and upkeep of all technical publications within the ARFF Branch.

3006. REPORTS, PERSONNEL STATUS AND BULLETIN BOARDS. Maintain reports, personnel status and bulletin boards. All are to be reviewed daily.

3007. REPORTS. Responsible for gathering and processing information, and for the timely submission of all reports.

3008. WORK REQUESTS/TROUBLE CALLS. To ensure a single source of information and strict accountability of work requests and trouble calls, the administrative clerk is the only person authorized to submit such requests. A logbook designed to track all requests shall be created and a reconciliation, with the MCAF S-4, shall be conducted on a monthly basis to ensure strict accountability of work completed/pending.

3009. ADDITIONAL TASKS. Carry out additional tasks assigned by the NCOIC/OIC.

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CHAPTER 4
OPERATIONS

4000. GENERAL

1. Fire fighting in and around an aircraft crash site is a highly technical profession. Prerequisites for assignment to this duty include alertness, courage, dedication, agility, physical strength and the ability to be an exacting team worker. Therefore, all enlisted Marines, MOS 7051, will be assigned to jobs on a watch section upon joining the ARFF Branch except for those Marines selected to administrative billets (day worker jobs). Watch section Marines are to be MOS qualified and will perform those duties required by higher authority.
2. Familiarity with alert positions and response routes is required of all crew chief's and Marines in supervisory billets.
3. Reveille. Reveille will go at 0600, Monday thru Friday. On weekends and holidays reveille will be at 0800.
4. Post and Relief. The duty watch section will remain on duty and be ready to respond to any situation until secured by the Duty Section Leader. The Section Leader will:
 - a. Have the entire section remain on duty at ARFF until the airfield closes for the evening and after all training, cleanup and other unfinished business is completed.
 - b. Notify the Crash Chief/NCOIC when the section's total effective personnel strength falls below 12.
 - c. Have at least 12 Marines aboard by 0600, or 1 hour prior to the airfield opening, in order to meet manning requirements and perform the mission.
 - d. Augment the duty section with day workers or other ARFF Section personnel by recall as necessary after coordinating with the Crash Chief or NCOIC.
5. Airfield Response. The duty section will always be within enough distance of the airfield to permit response to the center point of the airfield within 3 minutes for all inboard crews.

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4001. SECTION LEADER

1. The Section Leader is selected from assigned, qualified MOS 7051 SNCO's (or senior NCO) for a period of time determined by the NCOIC/OIC. The Section Leader is directly responsible to the Crash Chief or NCOIC for both the operational readiness and performance of assigned Marines, and maintenance of all ARFF equipment and facilities during the tour of duty. Either the Section Leader or the Assistant are to remain on duty at the ARFF Branch while the airfield is open. The Section Leader shall be thoroughly familiar with the contents of this Manual and applicable portions of references (a) and (b). A Section Leader, by virtue of the leadership position during an emergency, must be a quality Marine able to assess the emergency and employ sound judgment utilizing a strong base of MOS knowledge through well developed skills and training.

2. The Section Leader will perform the following before assuming duties:

a. Building and Grounds. Inspect the ARFF building and grounds area for proper police, function and acceptable state of order. Discrepancies will be taken care of prior to relief. Any building maintenance discrepancies requiring action will be brought to the attention of the Building Monitor (via the Crash Chief) to ensure the proper actions are taken to correct the problem.

b. Formations/Personnel Inspection. Ensure all oncoming watch section Marines are in formation with all fire fighting gear near them and in their designated work uniform. The on-coming section shall have a uniform inspection, prior to assuming the duties of duty section, to ensure proper fit and serviceability of their work station uniform.

c. Vehicle and Support Equipment. Inspect all vehicles and support equipment at ARFF ensuring all discrepancies found are rectified prior to relief being made.

3. After assuming the duty:

a. Take Charge. Be prepared to respond and take charge of any emergency or crash until relieved by a cognizant senior from within the ARFF Branch.

b. Safety Equipment Wear. The Section Leader will ensure that all Marines have been indoctrinated in safety procedures and precautions to take when responding to emergencies. Ensure

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protective clothing is worn by designated crew members participating in all standbys, emergencies and crashes, and that hearing protection is worn to include the wearing of protective head gear at any time a Marine is on the top surface of any major ARFF vehicle.

c. Unusual Situations. Ensure the Crash Chief, NCOIC or OIC is notified of all major or unusual situations that occur outside normal working hours.

d. Command Vehicle. Keep a senior Marine on or near the command vehicle monitoring the crash radio net at all times during emergencies. This Marine will keep other agencies informed of all information pertinent to the situation.

e. Driver Assignment/Responsibility. Ensure Marines assigned as drivers/operators have a valid and current government vehicle operators permit (SF-46), are qualified to operate the assigned vehicle, have a current emergency driver physical medical certificate, have attended an emergency vehicle operator course that is still current, and have attended the mandatory Airfield Indoctrination Safety Course provided by the Air Traffic Control Division. Drivers are to remain with their vehicles at all times until the emergency is secured. No vehicle will be left unattended while it is running.

f. Debrief/Critique. The Section Leader or Assistant is responsible for giving a debrief/critique to the section immediately following all emergency responses, mishaps and drills. The debrief/critique will be a review of the section's performance during the emergency, mishap or drill.

g. Airfield Orientation/Refamiliarization. Ensure an airfield orientation/refamiliarization is conducted on weekends for all crew chiefs and newly joined personnel. This is to familiarize the Marines with all access roads, buildings and equipment on or adjacent to the airfield. This should also be done for all Marine Reserves prior to being assigned on a crew who are reporting for their weekend drills or 2 week annual training duty (ATD).

h. Self Contained Breathing Apparatus (SCBA). SCBA's are to be checked out daily by Section ARFF Marines. Section Leaders are charged with the responsibility of reviewing check sheets daily and that noted discrepancies are corrected as soon as possible. SCBA's will be inspected during vehicle inspection.

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i. Radios. Ensure that functioning FM radios are available in all ARFF emergency and support vehicles and are checked daily for serviceability; that correct radio procedures are used and are secured after parking vehicles on line at ARFF.

j. Runway Alert ("Hot Spot") Position. Ensure the runway alert position is posted as soon as MCAF control tower notifies ARFF of aircraft turning up on line or aircraft inbound/outbound. NOTIFICATION TO POST AT THE RUNWAY ALERT POSITION IS NOT A RESPONSE. ALL PRECAUTIONS SHOULD BE TAKEN TO ENSURE SAFETY OF PERSONNEL AND EQUIPMENT WHILE ENROUTE. All "Hot Spot" relief's should be made in a timely manner as required. The Crew Chief will be held responsible for his/her assigned crew while assigned to the Runway Alert position.

k. Two minute standbye. During periods when the airfield is open but there are no military aircraft in flight in the immediate vicinity (inbound/outbound), the Section Leader has the discretion to contact the control tower to request a two minute standbye. A two minute standbye is defined as the relief of the "Hot Spot" crew from the Runway Alert Position. The "Hot Spot" crew will then post, and be on standye, at building 5156 (Crash Barn) until notified by the control tower that aircraft are due inbound/outbound. The "Hot Spot" crew will then resume their post at the Runway Alert Position within a two minute period.

l. Bunker Gear Drills. Bunker gear drills should be conducted by the Section Leader to maintain the proficiency in donning protective clothing and self contained breathing apparatus. Evolution's should be timed to test each crewmember's ability to respond to their assigned vehicle and prepare themselves to respond to an emergency situation.

m. Dry/Wet Rescue Runs. Section Leaders are encouraged to engage Marines in dry/wet rescue runs which provide them with experience in response, setup, and rescue. Drills should be such that they demand the Marines use all available resources so that when a real mishap occurs, Marines will be able to effectively deal with any situation. Care will be exercised due to potentially dangerous aspects of working with water under great pressure and slippery surfaces in and around jagged metal surfaces.

4002. ASSISTANT SECTION LEADER. The Assistant Section Leader will be directly responsible to the Section Leader and will carry out such tasks as may be necessary to aid in the accomplishment of assigned duties. The Assistant Section Leader will perform the duties of the Section Leader in his absence and as required.

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4003. P-19A CREW CHIEF

1. The most experienced and qualified licensed and responsible Marines will be assigned as Crew Chief of a major ARFF vehicle by and under the direct supervision of the Section Leader. The Crew Chief will remain alert when operating the vehicle and during any emergency or training fires. The Crew Chief will be held responsible for his/her assigned crew.

a. All ARFF vehicles are to remain on hard surfaces at all times unless responding to an emergency or mishap occurring off the runways or taxiways. Drivers must always contact Quantico Ground to request permission to cross runways and will acknowledge all clearance or "hold short" calls from Quantico Ground. Vehicles drivers must report when clear of active and inactive runway surfaces.

b. When driving within the runway area during the hours of darkness all drivers will ensure that their vehicle's headlights are on low beam or off and that the vehicle's marker lights are on. This will apply at all times with the exception of when vehicle headlights might interfere with a pilot's vision. In the event an aircraft is landing, taking off, or taxiing, and the vehicle headlights may interfere with a pilot's vision, the vehicle operator will:

1. Pull off to the side of the runway/taxiway and stop.
2. Turn off headlights.
3. Turn off parking and marker lights.

c. When enroute to an actual emergency, headlights will be left on; high or low beams may be used at the operator's discretion.

d. Vehicles will remain clear of aircraft taxiing or aircraft with rotors engaged or propellers turning.

2. Vehicle Checkout. Ensure that the assigned vehicle and equipment are properly inspected. Each vehicle is to be topped off with fuel, water, fire fighting agent, and wet checked daily, or as required. The following safety precautions will be adhered to by all ARFF personnel. All Halon extinguishers will be checked and inspected daily to ensure safety pin and anti-pilferage seal

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are in place at all times. Anytime the anti-pilferage seal has been broken/damaged the following guidelines will be strictly adhered to:

- a. Advise Section Leader via Crew Chief.
- b. Halon extinguisher will be inspected and weighed by material personnel.
- c. A damaged gear statement will be forwarded through the Material Section via the Section Leader and the Crash Chief.
- d. An entry will be made in the anti-pilferage seal log book, with weight, serial number and truck number. Only then will a seal be issued.
- e. If there is a difference between the current weight and initial weight, further investigation will be conducted by the Section Leader, via the ARFF Chain of Command.

3. Driver's Maintenance. Ensure maintenance and upkeep of the assigned vehicle, tools and equipment is performed.

4. Vehicles parked in the Barn. The Crew Chief will ensure that all vehicles will be guided in/out of the ARFF Barn. The crew chief and the guide shall ensure that the vehicle is free of obstructions and that the bay door is fully raised.

5. Runway Alert Position ("Hotspot") Readiness

a. Crews for the runway alert ("hotspot") position are assigned by the Section Leader from Section Marines. Hotspot assignment will not normally exceed 8 hours of duty in a 24 hour period. The Crew Chief is charged with responsibilities for the proper operational readiness of assigned equipment, safety and performance of the crew. The Crew Chief will advise Quantico Ground Control when the vehicle and crew are physically in position at hotspot via the FM radio.

b. The Crew Chief will ensure that the assigned crew is in a constant state of readiness and fully alert when posted as the runway alert position crew during all hours of flight operations. Drivers will have bunker gear aboard their assigned vehicle at all times.

c. Ensure that a lookout ("turret watch") is posted at the runway alert position at all times during flight operations. At the discretion of the section leader, a turret watch may not be

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required during periods of inclement weather. Notify Quantico Ground Control anytime animals or flocks of birds are seen on runways or taxiways, and when unauthorized vehicles are seen on the airfield.

6. ARFF Vehicle Speed Limits. Ensure that all vehicles are driven within the prescribed speed limits. These speed limits are: 5 mph for vehicles operating within aircraft parking ramps and fuel pits, vehicles towing aircraft, vehicles in vicinity of aircraft and night driving; all other areas are 15 mph.

4004. TURRET OPERATOR

1. This position is assigned by the Section Leader from assigned section Marines and is directly responsible to the Crew Chief in the performance of duties.

2. When an actual mishap occurs involving fire, create a rescue path immediately. After rescue and under the direction of the Section Leader or Crew Chief, extinguish the remaining fire.

4005. RESCUE PERSONNEL

1. These positions are assigned by the Section Leader from assigned section Marines and are directly responsible to the Crew Chief in the performance of duties.

2. Upon arrival at the scene of a mishap or fire, immediately start rescue operations as required. Once rescue is completed, assist with immediate first aid to victims until arrival of medical personnel.

3. Upon completion of rescue activities, assist handline operators in fire fighting operations.

4006. HANDLINE OPERATOR

1. This position is assigned by the Section Leader from assigned crew Marines and is directly responsible to the Crew Chief in the performance of duties.

2. Upon arrival at the scene of a mishap or fire, immediately deploy the entire handline providing fire protection for the rescue personnel and start rescue operations as required. Once

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rescue is completed, assist with immediate first aid to victims until arrival of medical personnel.

4007. NURSE TRUCK/WATER TANKER OPERATOR

1. This position is assigned to a qualified Marine by the Section Leader. The nurse truck/water tanker operator is directly responsible to the Section Leader in the performance of duties.
2. Be prepared to respond to all emergencies and any mutual aid request off station as required by higher authority. Therefore, it is imperative that the nurse truck/water tanker operator be very familiar with access roads, etc. within the MCAF QUANTICO area of responsibility.
3. The water tanker will be manned by an operator, started, and remain running while monitoring the FM radio until the emergency is secured.

4008. AIRCRAFT SALVAGE OPERATIONS

1. If crane support is required contact the Facilities Maintenance Division. During normal business hours contact Guad Maintenance at 784-5313; after normal business hours contact the Trouble Desk at 784-2702.
2. Lifting slings, for resident aircraft, should be made available by the tenant squadron. Prior to use, ensure all accessories (choker cables, lifting cables and slings, etc.) are checked and discrepancies corrected to ensure safety of salvage operations.
3. All ARFF Marines will be thoroughly familiar with all Navy/ Marine Corps aircraft, as well as other type aircraft, their lifting points and emergency access/egress systems, that frequently visit this Air Facility. Further information can be obtained by referring to NAVAIR 00-80R-20, U.S. Navy Aircraft Crash and Salvage Operations Manual for Shore Activities; NAVAIR 00-80R-14-1, Aircraft Emergency Rescue Information; U.S. Air Force T.O. 00-105E-9, Aircraft Emergency Rescue Information Manual, reference (b).
4. Crane support will not be requested unless authorized by the Section Leader, OIC/NCOIC, or tenant aircraft activities.

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5. Safety is the number one priority when conducting crane lift operations.

4009. RUNWAY ALERT (HOT SPOT) POSITION. This position is manned with a major ARFF vehicle and crew of four Marines assigned (minimum actual occupants in vehicle may be three Marines with the fourth coming from the rescue vehicle) at all times while flight operations are in progress. The runway alert position (Hotspot) provides immediate response to all unannounced emergencies or incidents which occur on the airfield. When the Hotspot crew observes good cause to respond to an emergency, the crew will notify Quantico Ground Control by radio providing the location and nature of the emergency. On an unannounced emergency, initial response will be down the side of the runway until clearance is granted.

4010. STANDBY ALERT

1. A standby alert shall be maintained at all times during flight operations. This alert must be maintained in a state of readiness that will permit response to an emergency within 3 minutes from standby positions to field alert positions. The purpose of the standby alert is to supplement the runway alert and to provide fire fighting capability necessary to minimize danger to flight crew personnel.

4011. DECLARED IN-FLIGHT EMERGENCY

1. The ARFF Branch is notified by means of the crash alarm public address (PA) and crash phone systems of an aircraft that has declared an in-flight emergency. All crash vehicles and personnel respond to pre-designated airfield positions and await instructions from the Section Leader.

2. Pertinent information is passed to the ARFF Dispatcher who then relays this information over the FM net to all ARFF Marines.

3. Permission to chase an emergency aircraft down the runway will be obtained from Quantico Ground Control by the Section Leader. If a chase is necessary, all vehicles will use the extreme side of the runway closest to their entrance.

4. Upon completion of the emergency response, obtain all pertinent information on aircraft emergencies and ensure all such information is entered on the response sheet and in the daily logbook.

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5. Bring all ARFF assets back to a standby ready status to support normal operations.

6. Resume normal operations and complete the required response reports.

7. The guidelines provided below are basic established tactics and procedures.

a. Alarm Notification. After an alarm has been received, the most direct route with the best travel conditions should be utilized. The speed of the vehicle when responding to an emergency/mishap must be that which will allow the vehicle to be maneuvered safely. Vehicle sirens and warning lights will be utilized when the response route is other than a taxiway or runway.

b. Basic Approach. Normally the first rescue vehicle to arrive at the scene will be the Hotspot Vehicle. All other vehicles take positions complementing the first arriving vehicle, enlarging on the pattern for rescue and total extinguishment.

c. Protective Clothing. All personnel directly assigned to fire fighting vehicles, except drivers, shall wear full protective clothing to include SCBA's. SCBA's are mandatory for all responses.

d. Ordnance Stores. The basic vehicle position should be adjusted to keep the vehicle from being in the line of fire of forward launch weapons as well as aircraft guns. The Section Leader will be aware of flash times/cook off times and establish a time that all rescue operations will cease due to ordnance cookoff. The Section Leader will also be aware of when rescue of all crew and passengers has been made. When the cook off time has expired, crash vehicles will withdraw on command of the Section Leader, who will then coordinate with the on-scene EOD representatives. The command to withdraw will be announced over the vehicle PA system and three long blasts of a vehicle siren or horn.

4012. DOWNLOCKING/PINNING. The Section Leader will ensure qualified pinmen are assigned to install pins/downlocks on all aircraft desiring/requiring this service. The following procedures or actions are to be taken when downlocking or pinning aircraft landing gear.

1. Most aircraft (with the exception of low fuel emergencies and

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hung ordnance), that declare an emergency and are serviced by ARFF Marines will be pinned or down locked at the earliest opportunity and only after receiving visual or verbal confirmation from the air crew that this service can be accomplished. A major ARFF vehicle and command vehicle will escort the emergency aircraft back to its flight line and will remain with the aircraft until the engines are shut down and chocks are in place before returning to the ARFF building. Retrieve pins and downlocks that belong to ARFF if they were installed to the emergency aircraft.

2. No ARFF Marine will approach the aircraft until the "point" person indicates that the pilots attention is gained and the Section Leader so directs the pinning/downlocking to proceed.

3. At least one handline will be out and ready to activate if any fuel or fluid is present and to provide coverage should it become necessary for the pilots to egress the aircraft.

4. All turrets will be manned.

5. All Marines enter from the point man position and return to the same point.

6. If a pin or downlock cannot be applied, all personnel will get out from underneath the aircraft. The point man will inform the pilot that the gear is unable to be pinned/downlocked.

7. All Marines will maintain eye contact with the point man and be aware of the aircraft danger areas (i.e. intakes, exhaust and ordnance).

8. In the event that the emergency aircraft cannot taxi safely under it's own power, downlocks/pins will be applied and the aircraft chocked. The pilot will then be given the signal to shutdown and standby to assist towing the aircraft clear of the runway.

4013. ON-STATION MISHAPS

1. The current edition of Reference (d) will be used for all on-station mishaps.

2. All ARFF vehicles with crews will move out as quickly as possible utilizing the shoulder along the runway until clearance to cross or proceed on the runway is received from Quantico Ground Control.

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3. Pertinent information will be passed to the Section Leader by Quantico Ground Control. The Section Leader will then relay the information to all crews. Section Leader may repeat as necessary.
4. Personnel, other than ARFF Marines, are to remain clear of the crash area and aircraft until all fire hazards have been eliminated and the area has been declared safe by the On Scene Commander.
5. When approaching the mishap scene, all aircraft should be considered a hazmat site and appropriate measures should be taken for containment. All personnel directly assigned to fire fighting vehicles, except drivers, shall wear full protective clothing to include SCBA's and will be on air immediately.
 - a. Look for chutes/crew, passengers and other personnel who may have been ejected or injured on way to crash site.
 - b. Request any additional backup water, agent or support personnel (Medical, EOD, ARFF, MP's).
 - c. Thoroughly search the aircraft and the area surrounding the crash scene for personnel. Never stop search until all personnel are accounted for or when directed by higher authority.
 - d. Identify exactly what additional actions will be necessary.
 - e. After rescue and fire fighting operations are completed, secondary considerations include:
 - (1) Secure area until PMO arrives. Protect scene for aircraft mishap board. Photos are allowed by authorized personnel only.
 - (2) Reposition vehicles for airfield support.
6. The Station Fire Department will place available fire fighting equipment on standby alert at the request of the ARFF Officer or senior ARFF representative. These forces will proceed to the scene upon request of the Section Leader.
7. In the event of a hazardous materials/waste spill, the Station Fire Department shall be notified immediately.

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4014. OFF-STATION MISHAPS. The following procedures will be followed for all off-station mishaps:

1. Response to an off-station mishap is made with the objective that the rescue of personnel is never hopeless, and all efforts and actions required will be devoted to the rescue. All ARFF vehicles will have off-station maps and a complete accident package aboard the vehicle.
2. When notification of an off-station mishap is received over the crash alarm system by the Control Tower, reference should be made to the grid map with the location of the crash site clearly stated so that all personnel concerned will be able to readily locate and choose the best response route. These maps depict the area surrounding MCAF QUANTICO for which ARFF has primary responsibility for providing fire fighting services.
3. When a mishap occurs within a 15 mile radius of the airfield (the response radius can be extended with the Operation's Officer authorization), normally one command/rescue vehicle and one major ARFF vehicle with equipment will respond immediately when the location of the mishap is known. An ambulance and military police vehicle will rendezvous at the base of the control tower and proceed to the crash.
4. The Assistant Section Leader will respond to off-station mishaps with two hand held radios and a cellular phone and shall have primary communication with Quantico Ground Control and the designated Search and Rescue (SAR) helicopter. The SAR helicopter will be instructed to use frequency 140.1 mhz to guide ARFF personnel to the mishap site. The Assistant Section Leader will be responsible for the firefighting and rescue efforts and will be designated the on scene commander upon arriving at the mishap site until relieved by a cognizant authority. Any request for assistance will originate from the On Scene Commander and be directed to the ARFF Dispatcher via radio/cellular phone.
5. In the event additional ARFF Marines and equipment are needed at the mishap site, off-duty and day worker assigned Marines will report to the Section Leader to provide support as needed. This will be accomplished by recall as necessary. The Station Fire Department will also provide available equipment if available and as requested.

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4015. MUTUAL AID SUPPORT1. MCAF FIRE DEPARTMENT

a. General. This mutual aid support plan is intended to furnish assistance between the MCAF QUANTICO ARFF Branch and Station Fire Department in emergency situations whenever mutual support would be in the best interest of this Command and is on a not-to-interfere basis with fire protection for air operations aboard MCAF. To effectively utilize the expertise and experience of both branches, the ARFF Officer and Fire Chief will act as technical advisors to each other upon request. The current edition of DODI 6055 provides details in areas of fire response, requests for assistance, and cooperation between the Fire Department and ARFF. In the event mutual aid is provided by either party it is recommended that a unified command be established as a means of identifying available resources.

b. Responsibility. The ARFF officer, or designated representative, has command/control of all fire fighting operations involving aircraft except when the aircraft is located inside a structure. In the latter case, the Fire Chief will have command/control at the scene.

c. ARFF Supporting the Fire Department. The ARFF Branch is authorized to furnish assistance to the Station Fire Department whenever the situation is deemed necessary and upon request of the Fire Chief or other competent authority. However, the ARFF Branch will maintain sufficient personnel and equipment on the airfield to meet the minimum response requirements dictated by reference (b). Should the airfield be closed by appropriate authority and assistance is required to support the Fire Department in an emergency situation, then all other assistance is authorized.

d. Fire Department Supporting ARFF. The Station Fire Department is authorized to furnish assistance to the ARFF Branch whenever necessary and upon request of the ARFF Officer.

2. Other Agencies

a. Agreement. MCAF Quantico does not have a standing mutual aid agreement with the surrounding communities. However, an agreement for mutual aid support is in place between the Station Fire Department and MCAF Quantico. This agreement is outlined in Interservice support agreement No. M00264-92274--052. Copies are kept as part of the OIC/NCOIC and Section Leader turnover

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requirements. Additional copies are held by the MCAF QUANTICO Fire Department and the MCAF Joint Law Center.

b. Requests for Assistance. Calls for mutual aid normally come from the Station Fire Department to the MCAF Quantico Dispatcher. However, there may be a time when ARFF assistance is requested directly from a fire department within the local community. In this case, the ARFF Dispatcher is to direct the caller to first notify the Station Fire Department and the base fire department will subsequently notify MCAF ARFF to request mutual aid assistance. Immediately following the request for mutual aid, the Section Leader will first notify the Crash Chief/NCOIC/OIC prior to sending Marines or equipment. (Note: The sending of these assets cannot effect the operation of the airfield. If the requested aid will affect the operation of the airfield the Airfield Operations Officer must give approval for response by ARFF assets).

4016. STRUCTURAL FIRE ALARMS. The Station Fire Department is responsible for response to structural fire alarms. However, MCAF ARFF will respond to all structural fire alarms aboard MCAF. The following procedures will be taken by ARFF when responding to all fire alarms and/or calls from the Station Fire Department.

1. Crew Section. When assigning vehicles for responses to a structural fire alarm, all efforts will be made to man such response vehicles with adequately trained personnel.

2. Priority Condition. As the ARFF Branch has a primary mission of support for the airfield, response to structural alarms shall not jeopardize vehicles or manning minimums per reference (b). In times of severe or impending disastrous circumstances, additional structural fire support may be requested that would not permit adequate response to airfield emergencies. The Section Leader will contact the Operations Officer and obtain authority to provide such support.

4017. HAZARDOUS CARGO (RED LABEL). When notification is received of an aircraft landing with hazardous cargo, the Section Leader will ascertain the arrival time (from the Tower Watch Supervisor (TWS) or Flight Clearance personnel), type aircraft, category of cargo and take the following actions:

1. Advise the Hotspot Crew to observe the touchdown and roll out of the aircraft until crossing in front of their position.

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2. Dispatch one A/S32P-19A ARFF vehicle with appropriate crew, forcible entry equipment and breathing apparatus to the designated Red Label Area. This vehicle will remain with the aircraft during the loading or unloading operations and will maintain a minimum distance of 100 feet. The Crew Chief will position the ARFF vehicle in such a manner as to fully observe the entire operation. All crew members will be in full protective clothing, including breathing apparatus, ready for immediate action.

3. In the event of fire, all ARFF vehicles will respond to the scene to rescue personnel and extinguish the fire. After the fire has been extinguished, all equipment and personnel, except one ARFF vehicle and crew with breathing apparatus, will withdraw to a distance of 2000 feet. This vehicle will remain with the aircraft until secured by proper authority or until the aircraft departs. All crews involved with fire fighting operations will report to a pre-designated point and be checked by a monitor team for contamination.

4. There may be an occasion when the ARFF Branch is called upon to furnish a vehicle for the loading of special ordnance or other hazardous cargo. The Section Leader will brief the crew chief on the type of hazard, action to be taken and tactics to be implemented should an accident occur.

4018. MEDICAL EVACUATION (MEDEVAC). The following procedures will be observed as per NAVAIR 06-5-502 during the landing, take-off, taxiing, refueling, loading/unloading of all aircraft with litter patients aboard:

1. Prior to loading/unloading litter patients in the designated area, a major ARFF vehicle and an ambulance will be positioned at the rescue side of the aircraft approximately 50 meters away. When the aircraft is taxiing out for takeoff, the ARFF vehicle will follow the aircraft to the warm-up position and then standby until the aircraft has departed.

2. A minimum of one major ARFF vehicle will be dispatched to afford ARFF protection during takeoff and landing. The ARFF vehicle will be stationed in a safe position readily accessible to the runway in use by the taxiing aircraft and will follow the aircraft until parked and chocked. The vehicle will standby until all litter patients are loaded/unloaded. Whenever practical, the aircraft will be parked with the exit door on the upwind side and the vehicle positioned facing the exit. When litter patients cannot be removed and refueling is to be

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conducted, the positions will be altered to ensure that the ARFF vehicle is between the refueling operation and the cargo door. Two ARFF Marines in full protective clothing and utilizing breathing apparatus will be stationed aboard the aircraft to effect rescue in case of emergency.

3. When performing rescue operations on cargo or passenger aircraft, one ARFF Marine in protective clothing will remain at the access door to serve as a communication link between interior/exterior ARFF Marines.

4. Prior to refueling, one ARFF Marine will standby with a hand held dry chemical extinguisher. One ARFF Marine will man a handline with handline extended and the turret will be manned to provide immediate extinguishment and rescue in case of emergency.

5. Receive ambulatory patient report from crew member.

4019. AIRCRAFT FUEL SPILLS. When a request is received for ARFF response to a fuel or oil spill in a hangar or flight line area, the Section Leader will dispatch a major ARFF vehicle to the spill scene to assess the situation and provide fire protection or assistance as required. Large spills require notification of both the Marine Corps Base (MCB) QUANTICO Environmental Department and the Station Structural Fire Department. Cleanup will be done by personnel responsible for spill. When cleanup is complete, ensure a response sheet is completed with all pertinent information. Fuel spills are not to be washed down unless there is an immediate threat of damage to aircraft. ARFF is responsible for containing the spill, but it is the responsibility of the unit owning the aircraft to comply with required cleanup procedures. Fuel is to be picked up by use of absorbents or other methods and disposed of as directed by the MCB Environmental Department or Station Fire Department.

4020. SURFACE CHECK. The duty Section Leader and one other Marine will make a daily visual morning surface check of the airfield at least an hour prior to airfield opening.

4021. DESTRUCTIVE WEATHER. The Duty Section Leader upon notification from the Weather Section or Tower Watch Supervisor that a hazardous weather condition is in effect will take the following action:

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1. Alert all duty personnel concerning hazardous weather conditions, and established readiness conditions. This should be done by the ARFF Dispatcher via the ARFF Public Address (PA) System, for occupants of Bldg. 5156, and a phone call to the ARFF Material/Training Departments, Bldg 5157/5158.
2. Secure all nonessential married personnel to their quarters (at the discretion of the OIC/NCOIC and Crash Chief). Secure all other personnel and ARFF vehicles in ARFF barn.
3. Tie down all loose equipment and secure all building windows.
4. Stand by to assist the Station Fire Department in case of structural fire, major structural damage response or any other unusual destruction that they may respond to.
5. When the "All Clear" has been given, make a visual runway and flight line check and report any damage to the MCAF Operations Division.

4022. CLOSED FIELD OPERATIONS. Reference (d) and a Letter of Agreement between MCAF CO and HMX-1, explains ARFF involvement in this procedure. Additional ARFF requirements include informing section Marines of a scheduled closed field takeoff with estimated time of departure/arrival, type aircraft and call sign.

1. ARFF personnel observing any military or civilian aircraft landing or taking off without a Prior Permission Request (PPR) will notify the ARFF dispatcher. Dispatchers will obtain as much information as possible on the aircraft (Time, BuNo, Squadron, etc.) and make a log entry.
2. Closed Field PPR's are assigned through Airfield Operations.

4023. Unexpended and Hung Ordnance Procedures. Whenever an attempt to release, fire or jettison practice, or live ordnance fails, that ordnance is considered to be hung ordnance. Examples include, but are not limited to, missiles, rockets, bombs, flares, drop tanks, pods, containers, racks, and launchers. If no attempt has been made to release or fire ordnance, then this ordnance is defined as unexpended ordnance, and no special aircraft handling or routing is required: however, no overhead breaks are allowed for aircraft with unexpended ordnance. All aircraft arriving at MCAF QUANTICO with "hung ordnance", live or inert, will be considered an EMERGENCY situation and treated as such.

ARFF SOP**a. Pilots of aircraft arriving at MCAF QUANTICO with Hung Live Ordnance (including Hung Inert Forward Firing Ordnance) shall:**

1. Advise MCAF Quantico Approach that their aircraft has "hung ordnance" and request a GCA or visual straight-in approach for a full stop landing.
2. The tower will notify ARFF and Station Explosive Ordnance Disposal (EOD) by regular/crash phone of all aircraft inbound to MCAF QUANTICO with "hung ordnance". ARFF will respond immediately. EOD will assume a standby alert status at their work space.
3. All aircraft with hung ordnance after landing and roll out will proceed directly to the red label area. The aircraft will hold in the red label area until the hung ordnance is inspected and safed (in the red label area) by Explosive Ordnance Disposal (EOD) personnel.

a. Responding ARFF units will follow the aircraft to the red label area and wait for further instruction from EOD personnel. If EOD personnel safe the hung ordnance so that an unsafe situation no longer exists, the responding ARFF units will stand down from the emergency (with the concurrence of the aircraft commander), and the aircraft is free to taxi on its own to the Visiting Aircraft Line (VAL).

b. Should EOD personnel be unable to safe the ordnance or encounter ordnance conditions that are outside their area of expertise, they will inform the on-scene ARFF personnel who will in turn contact the MCAF Operations Officer.

4. All unexpended or hung ordnance shall be downloaded in an authorized loading area unless the hung ordnance is considered unsafe. If considered unsafe to move an aircraft with hung ordnance, it will be downloaded at its current location on the airfield; or, if possible, moved to the red label area for downloading in accordance with appropriate weapons checklist.
5. Aircraft carrying any type of ordnance that cannot be safed in accordance with the applicable NAVAIRSYSCOM weapons and stores loading manual and checklist will not be refueled ("hot" or cold) at MCAF QUANTICO.
6. Aircraft Rescue and Fire Fighting (ARFF) safety regulations forbid installing landing gear downlocks, conducting hot brake checks, or cooling hot brakes on aircraft loaded with live or

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"hung" ordnance. These evolution's can be conducted only after the ordnance has been safed by qualified ordnance personnel. Exceptions may be made in the case of 20mm ammunition or in circumstances when the flight crew is endangered.

7. Aircraft gun jams/malfunctions (except for crew-served weapons) shall be cleared in the red label areas described above. Aircraft with jammed guns shall notify ground control when clear of the runway. Once the ordnance crew has safed the guns, the aircraft may taxi to the red label area for further downloading. Jammed guns with any type of 20mm ammunition (HEI, TP, TPT) require setting a HERO condition if applicable before commencing downloading operations.

8. Crew-served weapons. An aircraft with a jammed crew-served weapon shall render that weapon safe prior to returning to MCAF QUANTICO.

b. Straight-in full stop landings are required for all aircraft carrying either hung or unexpended ordnance.

c. All **Forward Firing Ordnance, unexpended or hung**, will proceed to the red label area for safing.

d. All **Unexpended High Explosive Ordnance** will proceed to the red label area directly for downloading.

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CHAPTER 5
MAINTENANCE MANAGEMENT

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CHAPTER 5

MAINTENANCE MANAGEMENT

5000. GENERAL

1. The ARFF Branch requires specific vehicles and equipment in order to perform its mission. To aid in this effort, it is imperative that vehicles and equipment are made available and maintained in a high state of readiness to support this mission.

2. Unauthorized Use. Major ARFF vehicles and support equipment will not depart the airfield without permission from the NCOIC/OIC or Crash Chief.

5001. TRUCKMASTER

1. The Truck Master is designated from assigned MOS 7051 Marines as a primary duty and is responsible to and under direct supervision of the NCOIC and OIC in the performance of duties. However, MOS 3525 Marines may be assigned the duties of Truck Master, as directed by the NCOIC/OIC.

2. Vehicles. Ensure an adequate number of ARFF vehicles and support equipment are maintained and operationally capable to perform the mission as required by references (a) and (b).

a. Daily Checkout Monitoring/Inspection

(1) Monitor/supervise the daily check out and inspection of all vehicles, preventive maintenance (PM) and repair of all ARFF equipment. Maintain continuous liaison with the Station Motor Transportation Division and the designated civilian ARFF vehicle mechanic to ensure PM of equipment is accomplished in accordance with existing directives and to ensure maximum availability of required equipment.

(2) Truck Master will ensure that any vehicle considered unsafe (worn tires, electrical or pump problems, etc.) is placed in a down status. Notify the Section Leader immediately in these cases.

b. ARFF Vehicle Maintenance/Truck Turn In. Ensure that certain items such as tools, rescue kits, power saws, extinguishers, wheel fans, ladders and air packs are removed from the vehicle and properly stored in the ARFF's Truckmaster storage facility before the vehicle is turned into Motor Transportation

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for repairs. This effort will also be coordinated with the Material Section prior to removing any equipment from the vehicle.

c. Escort to Maintenance Facility. After first ensuring the vehicle or piece of equipment being turned in is clean and all first echelon maintenance is performed, personally accompany ARFF vehicles with discrepancies to the respective Motor Transportation repair facility and furnish the maintenance inspector with a detailed list of discrepancies beyond 2nd echelon maintenance requirements and substitute vehicle requirements. The ARFF OIC/NCOIC will be informed of any actions taken by the Motor Transportation Section in each instance, including estimated out-of-service time.

d. Vehicle Status Notification

(1) Keep the Section Leader, Crash Chief, NCOIC and OIC continually informed of the current status of all ARFF vehicles and related support equipment so that the minimum response requirements are met as outlined in references (a) and (b). This will be accomplished by reviewing, and initialing the vehicle status report prepared daily by the Section Leader, and updating the vehicle status board located in the NCOIC/Crash Chief's office.

(2) Maintain a management program to project truck availability over an extended period of time and to ensure an equal distribution of time/hours is achieved on each vehicle.

3. Records

a. PM/Checkout Sheets. Review vehicle checkout sheets and preventive maintenance records daily and initiate action to correct discrepancies per established procedures. Maintain vehicle checkout sheets and PM sheets on file as required.

b. Maintenance Logs. Keep vehicle maintenance logs on all ARFF equipment assigned noting all preventive maintenance and repairs performed, time/date of delivery to other controlling agencies, and the time returned to ARFF custody.

c. Work/Part Orders. Maintain a log of pending work/part orders at Motor Transport and ensure prompt follow-up action is taken as required.

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4. Maintenance

a. Corrosion Control. Establish an internal rehabilitation program to ensure all corrosion and maintenance related items are performed as required. Any rust or corrosion on outer surfaces, undercarriage, compartments, or inside cab will be repaired. Chips in paint will be spot painted. Dents and dings in vehicle body will be corrected under the supervision of the Truck Master and approved by the Station Motor Transportation Officer. Vehicle tools and equipment will be checked daily for corrosion, serviceability and operation.

b. Aircraft Lifting Slings. Tenant aircraft squadrons maintain and perform routine maintenance and inspections on the slings that the ARFF would use to assist in a salvage effort.

c. Technical Assistance. Provide technical assistance to section Marines when 1st echelon maintenance is performed.

d. Small Engines. Ensure a maintenance schedule is published and maintenance on all small engine equipment performed as required. All small engines are maintained by a service contract which states PM's (frequency is detailed in the service contract) and repairs will be performed to allow minimum down time of equipment.

5. Inspection. Assist the Crash Chief in inspecting vehicles and associated equipment.

6. Tool Control. Maintain a tool control program. Ensure that authorization for a special tool kit, to be maintained in this department, is given by the Commanding Officer and that a copy of this authorization is maintained in the department's turnover binder.

7. Equipment PM's. Ensure that PM's are performed on all rescue equipment as required.

5002. MAJOR ARFF VEHICLES

1. Major ARFF vehicles are used primarily to extinguish aircraft fires by engaging the roof and bumper turrets and hand lines. If any of these systems are inoperable the vehicle is not capable of performing the mission. The vehicle will be immediately placed in a down status and replaced with a back line vehicle. The Section Leader and Truck Master are to be notified immediately in these instances.

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2. Station. MCAF Quantico is required to have the following vehicles in support of airfield operations.

a. A/S-32P-19A ARFF Vehicle. These vehicles are the primary ARFF vehicles currently in use by the Marine Corps. MCAF Quantico has (4) of these vehicles currently assigned.

b. P-26 Water Tanker/Nurse Truck. This vehicle is a 5000 gallon capacity Tanker/Nurse Truck. It is the primary source of refilling the A/S32P-19A ARFF vehicles with water during fire fighting operations.

c. 4-Door Crew Cab Pickup (ARFF 1). This vehicle is a 4-wheel drive crew cab used by the OIC/NCOIC and is the primary Incident Command System vehicle.

d. Twin Agent Unit (ARFF 3). This vehicle is a Twin Agent Unit, which contains Aqueous Film Forming Foam (AFFF) and Halon 1211. The vehicle is also used, by the Section Leader, as an incident command vehicle.

e. P-10 Primary Rescue Vehicle (ARFF 4). This vehicle contains the majority of the rescue equipment used by ARFF, e.g. equipped with assorted power and hand operated forcible entry tools, smoke ejectors, and field lighting equipment.

f. 4-Door Crew Cab Pickup Truck (ARFF 10). This vehicle is a 4-wheel drive crew cab, used as a secondary rescue vehicle for off-station responses.

g. 2 Door Pickup Truck (ARFF 12). This vehicle is a 4X2 2-door, used by material department personnel to provide supplies and equipment to the Emergency Response Sections during emergency situations.

5003. ARFF VEHICLE/EQUIPMENT SAFETY. All ARFF Marines will:

a. Use hearing protection and safety shoes when required to work around aircraft or operating rescue equipment.

b. Use eye and hearing protection when operating rescue tools.

c. Wear protective clothing and breathing apparatus during all crashes, emergencies, standbys, medevacs, and red label responses.

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d. Wear hard hat and leather gloves when involved in salvage or lifting operations.

e. The use of head protection (cranial) is required when performing any function on top of any emergency vehicles.

f. When backing vehicles, back-up personnel are required.
NOTE: Any vehicle driven in or out of the ARFF barn will have a guide to ensure the bay door is in the full up position and that there are no other obstructions.

g. It is the responsibility of each vehicle operator to conduct a walk-around of their vehicle prior to moving the vehicle to ensure the vehicle is free of obstructions.

h. All driver operators must strictly observe the airfield speed limits and all other applicable regulations as stated in the Airfield Operations Manual, reference (d). The driver operator is responsible for the safe operation of his assigned vehicle at all times regardless of external factors.

i. Any ARFF vehicle or equipment that is determined not to be in accordance with proper operating specifications will be reported and placed in a down status until such time as the discrepancy is corrected. It is the direct responsibility of the operator of the ARFF vehicle or equipment to be knowledgeable as to the proper safe operation of the equipment and or vehicle.

5004. MAINTENANCE PROCEDURES

1. First Echelon Maintenance. ARFF Marines are not vehicle mechanics by MOS and are therefore limited in the type of work they can perform on the vehicles.

a. First Echelon Maintenance shall be conducted by the Operator or P-19 mechanic (MOS 3525). The P-19 mechanic is authorized to conduct 2nd echelon maintenance as prescribed by a local Letter of Agreement (LOA) between the ARFF OIC and the Motor Transportation Officer. Truck Master will provide Crew Chief's assistance when 1st echelon maintenance is performed.

b. No batteries shall be removed from any ARFF vehicles for any reason without prior authorization of the ARFF Truck Master.

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c. All repairs of vehicle radio discrepancies shall be brought to the attention of the ARFF Truck Master prior to turning radio's in to Ground Electronic Maintenance Division.

2. Inoperative ARFF Vehicle. Anytime a crash vehicle or support vehicle becomes inoperative due to mechanical failure, it will be parked and "dead-lined" until the Truck Master can diagnose the necessary repairs to be made. The Section Leader will call the Truck Master after hours if the situation cannot wait until the next duty day. In no instance will unqualified personnel be permitted to perform unauthorized maintenance on ARFF vehicles.

3. Weekly Preventative Maintenance (PM). Ensure all weekly vehicle PM's are conducted during normal working hours and as per the published schedule.

4. Fueling. Refueling operations will be conducted at the MCAF Fuels Division Fuel Farm located adjacent to building 5156 (ARFF Station). The ARFF Dispatcher will notify all Marines, via the PA, when the fuel farm is open. The Section Leader will begin the coordination to get all vehicles refueled. As each vehicle completes its refueling operation, the Crew Chief is to notify the ARFF Dispatcher, via the FM, the vehicle call sign and the number of gallons the vehicle received. The dispatcher will annotate this information on the ARFF Weekly Fuel and Vehicle Status Report.

a. All ARFF vehicles and support equipment are to be filled daily. Commercial pickups using unleaded fuel will be filled when the gauge registers 3/4. No vehicle will be operated with less than 3/4 of a tank of fuel. The Section Leader will ensure that log book entries for refueling ops are conducted.

NOTE: When the P-19A is being fueled, ensure the fuel cap is not stripped or cross threaded when placing back on the tank and that the cap is securely fastened so that the gasket in the cap contacts the neck of the tank. If cap is not secured properly, fuel will splash in the compartment and the rubber gasket will come off the door.

5. Fluid Replacements. There will be no fluid replacements in any hydraulic reservoir, brake system, engine, transmission, etc. on any vehicle unless authorized by a Section Leader or Truck Master. The Section Leader or Truck Master will ensure that the proper fluid is being used and the proper level is obtained.

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6. Tires. When tires require replacement, the Truck Master will ensure the proper maintenance facility is notified and arrangements are made for this action to be completed.

5005. AFFF SYSTEM CHECK

1. The A/S32P-19A is the primary aircraft fire fighting vehicle in the Marine Corps's inventory. To ensure all major fire fighting systems, in particular the AFFF system, are functioning properly, it is imperative each system be checked, at least weekly, to insure the system is functioning as designed and is capable of providing agent during emergency responses.

2. Testing shall only be conducted in the designated area of the Air Facility and under the following conditions:

a. No standing water is present in the designated test area.

b. No heavy rain storm is anticipated.

c. Truck master will be present for all AFFF system checks. At no time will the AFFF system be conducted without the presence of the Truck Master.

3. The following procedures for testing shall be utilized:

a. The on-duty Section shall wet check all P-19's that are in operational status.

b. Testing shall be done one discharge point at a time in the following order:

1. Hand-line
2. Bumper Turret
3. Roof Turret

c. A crew member shall be positioned at the battery compartment to view the metering valve to ensure that each actuator point opens as required.

d. Each discharge point shall remain open until effective foam is seen then shut down and the next discharge point is tested.

e. Upon completion of the testing, the system shall be switched to water to flush any residual AFFF from the system.

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5. The test area will be rotated weekly so that no one area is used more than once monthly. Test area's will be coordinated with the MCAF S-4 department (Mr. Scott). At no time will an alternate test location be used without prior coordination with the S-4.

6. ARFF personnel are reminded that although AFFF is an effective fire fighting agent, it may be harmful to the environment. Therefore, care shall be taken at all times to protect the environment. Any spill or use of AFFF in a non-designated area shall be reported immediately to the chain of command.

7. Immediately following the AFFF system check, the Crew Chief will submit an "AFFF usage Chit" and route it through the respective departments. It is the Crew Chief's responsibility to follow up on this paperwork and to replenish the AFFF used during this system check.

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CHAPTER 6

TRAINING

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CHAPTER 6

TRAINING

6000. GENERAL. Constant training provides ARFF Marines with teamwork and the ability to maintain a continuous alert status for split second response that is required for ARFF emergency response operations at any time.

6001. TRAINING CHIEF

1. The Training Chief performs duties within the framework of the Training Section and under the direct supervision of the OIC and NCOIC. These duties include:

a. Indoctrinating all assigned Marines with limited ARFF experience as a basic aircraft rescue and fire fighter for the ARFF Branch.

b. Conduct continuous training in accordance with published ARFF training schedules and ensure that technical training is compatible with standard accepted procedures developed by appropriate Naval agencies for ARFF operations. All scheduled classroom training will consist of classroom periods of instruction followed by practical application on the subject being taught.

c. Schedule and monitor all of the following areas of military training ensuring 100 percent completion by the end of each area's appropriate calendar or fiscal year requirements:

CALENDAR

Basic Skills Training (BST)

Water Survival

Leadership Training

Troop Information

Physical Fitness Test (PFT)

Remedial PT/Military Appearance/Weight Control Programs

Gas Chamber/NBC

FISCAL

Rifle Range

Pistol Range

d. Submit annual and monthly training schedules.

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2. Licensing classes are to be scheduled routinely to ensure an adequate amount of qualified drivers/operators are licensed for ARFF vehicles and associated equipment. Driver/operators must have an airfield familiarity class given by ATC personnel before they can drive on the airfield.

3. Schedule Emergency Drivers Physicals with Occupational Health at the MCAF QUANTICO Branch Medical Clinic for each ARFF Marine annually (calendar year) and file it in the Marine's training jacket.

6002. DRILLS

1. Live fires, and drills not involving live fires, are for the purpose of training and will last the shortest possible duration so as to complete the training required. The fatigue factor will be watched closely by the Section Leader so that Marines will not become fatigued to the point that they are not able to accomplish the primary mission of the ARFF Branch.

2. Training fires and drills are normally scheduled and conducted by the Training Section.

a. Extinguishing Agent Minimum Requirement. Extinguishing agent will not fall below the minimum requirement established in reference (b) for normal operational requirements. Agent usage chits are to be properly filled out and turned into the Crash Chief with the daily paperwork when a fire extinguishing agent is used.

NOTE: Aqueous Film Forming Foam (AFFF) is now considered a Hazardous Material in certain quantities. The ARFF HAZMAT representative will determine if additional paperwork will be required on a case by case basis.

b. The following safety precautions will be adhered to by all ARFF personnel. All Halon extinguishers will be checked and inspected daily to ensure safety pin and anti-pilferage seal are in place at all times. Anytime the anti-pilferage seal has been broken/damaged the following guidelines will be strictly adhered to:

(1) Advise Section Leader via Crew Chief.

(2) Halon extinguisher will be inspected and weighed by materiel personnel.

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(3) A damaged gear statement will be forwarded through the Material Section via the Section Leader and Crash Chief.

(4) An entry will be made in the anti-pilferage seal log-book, with weight, serial number and truck number. Only then will a seal be issued.

(5) If there is a difference between the current weight and initial weight, further investigation will be conducted by the Section Leader, via the ARFF Chain of Command.

c. Protective Clothing. Marines are to be fully dressed with protective clothing that is in good repair and proper fitting.

d. Notification. Ensure the ARFF dispatcher has notified appropriate agencies by using the ARFF Training Fire/Drill call-down sheet before and after all fires.

e. Propane. Ensure there is an adequate amount of propane available to conduct live fire training drills. At no time will any other fuel/material be burned without the authorization of the OIC.

f. Training Area Cleanliness. Ensure that the training (mock-up) pit is properly policed to prevent damage to fire fighting vehicles and equipment.

g. Vehicle Usage. Two major ARFF vehicles will always respond during live training fires

3. Bunker gear drills should be conducted by the Section Leader to maintain proficiency in donning protective clothing and self contained breathing apparatus. Evolution's should be timed to test each crewmember's ability to respond to their assigned vehicle and prepare themselves to respond to an emergency situation.

4. Section Leaders are encouraged to engage Marines in dry/wet rescue runs which provide them experience in response, setup and rescue. Drills should be such that they demand the Marines use all available resources so that when a real mishap occurs, Marines will be able to effectively deal with any situation. Care will be exercised due to potentially dangerous aspects of working with water under great pressure and slippery surfaces in and around jagged metal surfaces.

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5. Simulated emergencies/crashes will be scheduled as directed by ARFF Training to ensure the optimum readiness and performance of assigned Marines. Emphasis will be placed on:

a. Response routes, proper speed, approach and spotting vehicles with respect to type of aircraft and situation being simulated.

b. Initial attack, approach, fire fighting and rescue techniques and tactics employed at the scene.

c. Use of prevailing wind conditions and direction when setting up.

d. Use of terrain in effecting setup and rescue.

e. Proper equipment carry and usage during rescue operations.

f. Confidence, control, management and teamwork of Marines at the fire scene.

6003. SAFETY

1. Strict safety precautions will be followed while in the training pit area. An experienced Safety SNCO/NCO will be available at all training fires. The Safety SNCO/NCO will enter the pit in full protective clothing with all handline/rescue operators for each training fire. The Safety SNCO/NCO will immediately correct all safety violations. Safety is the responsibility of every ARFF Marine. However, the Section Leader or Training Chief has overall responsibility for ensuring that all drills and training are conducted safely.

2. When operating in the training area, the following safety precautions will be followed:

a. Ensure all phone notifications are made.

b. Smoking is prohibited except in designated areas (at least 200 feet from the edge of the pit).

c. Ensure all preventive measures are taken to eliminate static electricity or sparking when using fuel of any type in the training pit.

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- d. Ensure all Marines handling fuel or lighting fires are in full protective clothing, including helmet.
- e. Ensure additional safety personnel are situated outside the pit area.
- f. A Marine from the Training Section will be in attendance at all live fires.
- g. The Training Chief or designee is responsible for all training drills and the proper conduct of personnel involved and will act as an advisor to the Section Leader during drills/fires. The Section Leader will coordinate ARFF Marines' fire fighting effort.
- h. After each training fire, the Training Chief will ensure that the fire area (training pit) is washed down and cooled prior to adding additional fuel for the next fire.
- i. Fuel will not be ignited until the Training Chief is sure that all Marines, equipment, combustible materials, fuel containers and hoses are clear of the fire area.
- j. Fuel fires will be ignited by flare and the individual lighting the pit will be in full protective clothing. An additional Marine will be in full protective clothing with a portable extinguisher.
- k. The training area will not be used for training fires at any time without prior consent from the Training Chief, Crash Chief or NCOIC.
- l. Due to the age of the ARFF propane trainer, it is imperative that the duration of any live fire training drills be minimized to prevent warping/damage to the propane trainer. Therefore, prior planning and coordination is essential to maximize the benefit of live fire training drills.
- m. At any time any warping/damage is detected on the propane trainer, by any ARFF Marine, they are to immediately report it to their chain of command and the Training Chief. The training chief will then notify the Crash Chief/NCOIC/OIC. If the warping/damage is noted after normal working hours, a logbook entry is to be made identifying the damage and any other pertinent information.

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6004. TRAINING AND READINESS. The T&R Program provides the fundamental tools for commanders to build and maintain unit combat readiness. Using these tools, unit-training managers can construct and execute an effective training plan, which supports the unit's mission essential tasks.

1. Purpose of the Marine Aviation Training and Readiness (T&R) Program is to provide commanders with standardized programs of instruction for all aviation personnel.

2. The goal is to develop unit warfighting capabilities, not to measure the proficiency of individuals. Syllabi are based on specific performance standards designed to ensure proficiency in core competencies.

3. The training of Marines to perform as an integral aviation unit in combat lies at the heart of the T&R Program. Unit readiness and individual readiness are directly related. Individual training and the mastery of individual core skills serve as the building blocks for unit combat readiness. A Marine's ability to perform those critical skills required in combat is essential.

a. Evaluation of Training. Evaluation of those portions of the syllabus which are academic in nature will be conducted by either written/oral examination or a combination of the two means. Operational and system related subjects will be evaluated by practical application means whenever possible. Performance evaluation to qualify for mission qualifications and designations will be conducted per MCO P3500.14, Aviation T&R Manual, Volume 1, and standardized evaluation forms provided by the MOS sponsor.

b. Combat Capable Training. The Combat Capable tier will in most cases be accomplished at the completion of initial MOS skills training. With successful completion of the combat capable tier, unit personnel are assigned basic MOS qualification and progress to the Combat Ready tier.

c. Combat Ready Training. On the combat ready tier, qualifications that are normally made available to fairly inexperienced personnel will be delineated. This tier should take the individual who has completed initial MOS skills training and make them proficient in core competencies. With successful completion of the combat ready tier, unit personnel move to the Combat Qualification tier.

d. Combat Qualification Training. The Combat Qualification

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tier will be the portion of the model that produces combat

leaders and fully qualified crewmembers. The personnel being trained in the combat qualification tier are those Marines a Commanding Officer feels are capable of directing the actions of subordinates during wartime scenarios.

e. Full Combat Qualification Training. The Special Skill Qualification tier will contain special skills, and qualification. These skills or qualifications are not prerequisites to combat qualification or the ability to function as combat leaders, but are those for which a certain number of trained individuals or crews must be maintained to accomplish special missions or tasks.

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CHAPTER 7

MATERIAL

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CHAPTER 7

MATERIAL

7000. GENERAL

1. The Material Section is responsible for the procurement, storage, and control of all material required for the effective operation of the ARFF Branch. The Material Section is responsible to the OIC and NCOIC in the fulfillment of their duties. They are also responsible for maintaining all programs that pertain to the ARFF Branch. The Material Chief is the responsible officer for ARFF's Custodial Memorandum Receipt (CMR) account, Y-09.

7001. MATERIAL CHIEF

1. Material Chief responsibilities include:

a. Requisitioning the supplies and materials required for proper support of the ARFF Branch.

b. Submit forms to the ARFF NCOIC/OIC when ordering supplies for initial approval.

c. Maintain a running account of funds expended, description of items ordered, quantity and estimated cost.

d. Make recommendations to the ARFF NCOIC/OIC concerning the composition of the budget for each quarter and fiscal year.

e. Maintain liaison with the MCAF Fiscal Officer, or designated representatives, to help expedite the requisition of needed supplies.

f. Maintain the CMR by conducting quarterly inventory to ensure on hand allowances, and reconcile with the respective property officer as prescribed by local directives.

g. Maintain an adequate supply of protective clothing at all times in accordance with reference (b).

h. Maintain an adequate supply of fire fighting agents, tools, and equipment in accordance with reference (b).

i. Maintain up to date records on all accountable

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items issued or on loan to ARFF from other departments.

j. Ensure all new personnel are properly outfitted with all required gear.

k. Maintain the air quality program. (Refer to Respiratory Protection Program Manager (RPPM) Desktop Binder)

l. Maintain the respiratory protection program. (Refer to (RPM) Desktop Binder)

m. Maintain the SCBA maintenance program. (Refer to (RPM) Desktop Binder)

n. Perform quarterly protective clothing inspections.

o. Maintain calibration program. (Refer to turnover Binder)

p. Maintain the hydrostatic testing program. (Refer to Extinguisher and Agent Desktop)

q. Maintain a turnover and desktop procedures for the material section.

r. Maintain a hose-testing program. (Refer to Hose Testing Binder)

s. Maintain the Halon 1211 Anti-Pilferage Program.

t. Collect and dispose of all materials that are no longer required to support the mission of this Branch. Coordinate with the S-4 department for disposal of this equipment/material. (Refer to Section 5, specific functions, of department turnover binder)

u. Review vehicle checkout sheets on the first business day of the week for material discrepancies.

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CHAPTER 8
COMMUNICATIONS

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CHAPTER 8

COMMUNICATIONS

8000. GENERAL

1. An emergency communications system is required by reference (b) and consists of a crash radio net, wire communications (public address and crash alert telephone) systems and the public telephone.
2. Communications are extremely vital to the safe operation of ARFF operations. It is imperative that the ARFF Branch is provided and maintains a communications system that is capable of supporting this vital mission.

8001. CRASH RADIO NET

1. The crash radio net operates on frequency 140.1 megahertz (MHZ FM) and is usually assigned for specific use by the ARFF Branch. This net is for emergency communications and is not to be used for industrial or other purposes.
2. The crash radio net shall be tested daily at 0800 by the Control Tower with results logged in the logbook.

8002. RADIO MALFUNCTION

1. At no time will an ARFF vehicle of any type be on the airfield without radio communication. If a vehicle radio becomes inoperative, the following procedures shall be followed:
 - a. Clear the runways or taxiways.
 - b. Point front of vehicle towards the control tower.
 - c. Flash headlights on and off.
 - d. Remain in position until a green light is observed from tower.
 - e. All ARFF vehicles should have radio communication with Quantico Ground Control if possible. Vehicles without radios should obtain permission to operate on the airfield from Airfield Operations. Personnel or vehicles authorized to enter taxiways

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or runways shall proceed as directed by light signals from the Control Tower. The meaning of light signals utilized are as follows:

<u>COLOR AND TYPE SIGNAL</u>	<u>MEANING</u>
Green Light	Cleared to cross the runway you are approaching.
Steady Red Light	Hold present position. Do not enter or cross runway.
Flashing Red Light	Clear the Taxiway/Runway.
Flashing White Light	Return to starting point on airport.

8003. CRASH ALERT PUBLIC ADDRESS (PA) SYSTEM

1. Primary (Crash PA). In addition to radio equipment, this system is the primary method to notify all ARFF personnel of pending emergencies or actual mishaps.

8004. CRASH ALERT TELEPHONE SYSTEM

1. This system is the secondary method in which notification is given of pending emergencies or actual mishaps. This system, located in the Control Tower, is utilized for simultaneous notification of essential support agencies (e.g. Navy Medical (Base and HMX-1), PMO, Station Fire Department, HMX-1 ODO, PAO, Photo Lab, Flight Clearance, Weather, and MCAF Dining Facility (for ARFF personnel while dining). It is activated by the Control Tower.

2. Crash phone tests occur 15-30 minutes prior to the airfield opening. All agencies are to remain on the circuit until instructed by Tower to secure.

8005. CELLULAR TELEPHONE. MCAF ARFF has two cellular telephones in its inventory. These phones are provided to the Section Leader for use at a crash site when other forms of communication are unavailable (TBS, off base responses, etc.). These cell phones are kept in the dispatchers office and are checked out

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(annotated in a cell phone logbook) as needed, by MCAF Fuels/Motor Transportation Division for off-station operations.

8006. NOTIFICATION

1. Contact the OIC/NCOIC/CRASH CHIEF on beeper/pager or cell phone if needed after hours.
2. Contact Day Shop Section Heads on beeper/pager if needed after hours.

8007. CALL SIGNS. To ensure clear and effective communication, the following call signs are assigned to those personnel/vehicles that operate aboard MCAF Quantico:

<u>CALL SIGN</u>	<u>DEPARTMENT</u>
QUANTICO TOWER (OR GROUND)	MCAF CONTROL TOWER (NET CONTROL)
ARFF DISPATCH	ARFF DISPATCH (BLDG. 5156)
ARFF 1	ARFF OIC
ARFF 3	ARFF SECTION LEADER (INCIDENT CMDR)
ARFF 4	ARFF RESCUE VEHICLE
ARFF 5	P-19 CRASH TRUCK
ARFF 6	P-19 CRASH TRUCK
ARFF 7	P-19 CRASH TRUCK
ARFF 8	P-19 CRASH TRUCK
ARFF 9	P-26 5K NURSE TRUCK
ARFF 10	ADMIN/TRAINING DEPT SUPPORT VEHICLE
ARFF 12	MATERIAL DEPT SUPPORT VEHICLE
OPS 1	OPERATIONS OFFICER
OPS 2	OPERATIONS CHIEF
OPS 12	MCAF VAL LINE (FOLLOW ME VEHICLE)
MED 1	MCAF AMBULANCE
MED 2	FLIGHT SURGEON
NIGHTHAWK MEDEVAC	HMX-1 MEDEVAC AIRCRAFT
SWEEPER 18	RUNWAY SWEEPER
MAINT 1 (GEMD)	MCAF GROUND ELECTRONICS
QUANTICO 21	MCAF REFUELERS DISPATCH
QUANTICO 22	MCAF DUTY REFUELERS VEHICLE

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CHAPTER 9

RESPIRATORY PROTECTION PROGRAM

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CHAPTER 9

RESPIRATORY PROTECTION PROGRAM

9000. GENERAL. NAVAIR 00-80R-14 (Reference (b)) requires the establishment of a respiratory protection program.

9001. RESPIRATORY PROTECTION PROGRAM MANAGER (RPPM)

1. The Material Chief is assigned the additional duty of RPPM and is responsible for the coordination of the repair of all related equipment.
2. Air used to replenish Self Contained Breathing Apparatus (SCBA) will meet federal specification (FEDSPEC) BB-A-1034a for grade "D" breathing air.
3. An accurate and up-to-date log will be maintained showing status, location and maintenance performed on all respirators.
4. All respiratory protection equipment will be maintained in a safe, clean and ready-to-use condition.
5. All respiratory protection equipment requiring repair will be turned into the material chief.

9002. TRAINING PROGRAM. The ARFF Training Section will implement a training program which will include all respiratory protection that ARFF Marines may use during their tour of duty. This program will include the use, cleaning and practical application of each type of respiratory protection equipment maintained by ARFF.

9003. PULMONARY FUNCTION TEST. The ARFF Training Section will schedule all ARFF Marines who use a respiratory protection device to receive a pulmonary function test which will be provided by Occupational Health, Marine Corps Base Quantico Branch Medical Clinic. This test is to ensure all ARFF Marines are physically fit to perform the work required and understand the proper use of the respiratory equipment without endangering themselves.

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9004. INSPECTIONS

1. Selection of proper respiratory protection devices on the basis of the hazards to be encountered is of prime concern, and require the following inspections:

a. Annually, a knowledgeable person from Station Safety or the Branch Medical Clinic, shall conduct an inspection to determine if the correct respiratory protection is being used. Ensure this protection is selected and certified by the National Institute of Occupational Safety and Health (NIOSH) or Occupational Safety and Health Act (OSHA) standards.

b. The RPPM shall hold a monthly inspection of all respiratory protection devices.

c. All respiratory protection equipment shall be inspected daily to ensure equipment is clean and free of defects. If defects are noted during this inspection, the Crew Chief/Section Leader shall be notified immediately.

9005. RESPONSIBILITY1. Section Leader

a. Ensure proper respiratory protective equipment is used when ARFF Marines encounter respiratory dust or vapors.

b. Ensure all ARFF Marines receive adequate instruction in the proper use of respiratory protection equipment.

c. Do not permit ARFF Marines to use the equipment if these standards are not met.

2. ARFF Marine

a. Don respiratory equipment during all emergencies and training drills or when situations where respiratory hazards may exist.

b. Clean and disinfect all respiratory protective equipment after each use and at least once monthly. Commercial cleaners and disinfectants may be used to clean and disinfect facemasks.

(1) Clean facemask inside and out with mild soap and water.

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(2) Rinse in fresh tap water.

(3) Disinfect by immersing the facemask in a disinfectant solution which may be prepared by adding 1 cap full of laundry bleach to 1 gallon of water.

(4) Dry facemask with a soft towel or air dry.

9006. MAINTENANCE

1. Maintenance Classes will be set up by the RPPM with a manufacturer's representative.
2. All air bottles, regulators, and face piece assemblies will be assigned serial numbers. Any maintenance performed on the regulators or air bottles will be recorded on the equipment's respective Maintenance Record Card (MRC).
3. The air pack refilling station will be checked-out prior to use.
4. Quarterly maintenance will be done on the Air Pack Refilling Station by a civilian contractor. Other maintenance that needs to be done will be brought to the attention of the RPPM so that a maintenance person can repair the problem. At no time will ARFF personnel attempt to fix the air compressor or its components.
5. There will be no painting of air bottles without the direct supervision of the RPPM.

9007. STORAGE. The SCBA will be stored so that it will not come in contact with excessive heat, direct sunlight, or harmful chemicals. The SCBA should be kept in the cab of the ARFF vehicle or in the storage box. All face pieces will be kept in a plastic bag to prevent damage and to keep them clean.

9008. INVENTORY. The RPPM will conduct a quarterly inventory of all air pack equipment ensuring that there are adequate supplies on hand to perform the mission. Any equipment that cannot be repaired or is out of hydrostatic test will immediately be taken out of service, tagged "OUT OF SERVICE", and turned in to the RPPM.

9009. AIR SAMPLE. The RPPM will ensure that a quarterly air

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sample is taken from the compressor using the approved sampling kit. This sample will then be sent to a certified agency for proper evaluation. The results will be kept on file and the certificate posted for public viewing by the Air Pack Refilling Station.

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CHAPTER 10

DISPATCH PROCEDURES

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CHAPTER 10

DISPATCH PROCEDURES

10000. GENERAL. In accordance with reference (b), ARFF is required to maintain a manned 24 hour dispatching post. This post is a centralized point for incoming emergency calls to be taken and dispatching the appropriate response to the emergency. The dispatcher is directly responsible to the Section Leader for performing all dispatching duties. The following is a detailed listing of the dispatcher's duties:

a. Dispatchers will not be relieved until the Section Leader has reviewed the official logbook for neatness and correctness.

b. Dispatchers will remain in the dispatch office during their shift. They may be relieved for a head call or chow break. At no time is anyone, other than the dispatcher, authorized in the dispatcher's office. During emergency responses or training drills, when the dispatcher may need additional assistance, the ARFF administrative clerk is to provide assistance.

c. Dispatchers will remain awake and alert during their shift.

d. There will be no personal phone calls made from dispatch.

e. There will be no personal reading material in dispatch other than official military reading material (e.g. NATOPS, MCI's, etc.).

f. There will be no AM/FM radios, cassette or CD players allowed in dispatch.

g. Dispatcher will ensure all visitors to the ARFF area are logged in to "ARFF Visitor Log", maintained in the dispatch office.

10001. LOGBOOK

1. The ARFF log book is an official record and shall be handled as such. It may be used in a mishap investigation, Judge Advocate General (JAG), or other official investigations. The dispatcher is responsible for maintaining an accurate and concise record of all emergencies, standby's, and the daily dispatching of ARFF vehicles and crew personnel. The dispatcher is also

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responsible for receiving information from external and internal sources which could have a bearing on the ability of the ARFF Branch to accomplish it's assigned mission. All entries will be made in the appropriate color(s) of ink. The only colors of ink authorized for the ARFF Logbook is RED and BLACK. If log book entries need correcting, a single line shall be made through the mistake, then initialed by the Section Leader. The list below dictates what entries receive RED ink and what entries receive BLACK ink:

RED INK ENTRIES:

- Emergencies (in-flight emergencies, ground emergencies and mutual aid emergencies)
- Standby's (MEDEVACS, mutual aid standby's, and red label standby's).
- Tower, crash phone, klaxon, and P.A. test: Result of test.
- Dispatch, klaxon, P.A. test: Result of test.
- Response numbers
- Closed field operations (HMX-1 or other military aircraft)

BLACK INK ENTRIES:

- All other entries not covered in the red ink entry section above.

10002. **EMERGENCIES**

1. In accordance with reference (b), the following information must be obtained and disseminated to all agencies responding to an emergency:

ON STATION

- Location
- Type of aircraft
- Nature of emergency
- Fuel status
- Number of souls aboard
- Ordnance stores or other hazardous cargo
- Landing runway and ETA
- Any other pertinent information

OFF STATION

- Location of mishap and direction to the scene.
- Type of aircraft and whether fire is present.
- Reporting persons name and phone number and request that they remain at a designated location to act as a guide for responding crews.

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2. Dispatch Procedures for Drills and Emergencies. The following procedures shall be followed, by the ARFF dispatcher, when alerting ARFF personnel of an impending emergency or drill:

a. For an actual crash, the Klaxon Horn is to be rung three times. The response on the PA and FM Radio (simultaneously) will be "CRASH...CRASH...CRASH...", followed by any pertinent information.

b. For an inbound aircraft declaring an emergency, the Klaxon Horn is to be rung two times followed by "CRASH CREW STANDBY...CRASH CREW STANDBY...", followed by any pertinent information.

c. For an aircraft on deck declaring an emergency and fire structural alarms, the Klaxon Horn will be rung two times. The response on the PA will be "CRASH CREW DISPATCH...CRASH CREW DISPATCH..." followed by any pertinent information.

d. Simulated drills and emergencies along with bunker gear drills rate one klaxon horn, followed by the appropriate response.

e. If ordnance is involved, the dispatcher will note the time of response to keep track of the potential cook-off times.

10003. EMERGENCY RESPONSE SHEETS. Complete an emergency response data sheet with a response number (in red ink) assigned for all standbys when a crash vehicle responds to an emergency. The Section Leader is responsible for submission of the smooth report to the Crash Chief.

10004. TRAINING FIRES. When the training area is used for training fires ensure proper departments are notified via the Training Fires/Drill notification sheet located in dispatch.

10005. PHONE LISTING. Maintain an up-to-date telephone number listing of all departments which support functions of the ARFF Branch.

10006. AIRFIELD OBSERVATION. Keep the Section Leader advised of the duty runway and all requests for services. The dispatcher will notify all ARFF personnel, via the PA system and the FM, the duty runway when the airfield opens and any changes to the duty runway.

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10007. CLOSED FIELD LANDINGS

1. ARFF personnel observing any military aircraft landing or taking off when the airfield is closed, without prior notification of HMX-1 ODO, shall notify the Section Leader immediately. Dispatchers will obtain as much information as possible on aircraft (time, BuNo, squadron, etc.) and make log entries in the official log book and in the "Closed Field Operations" Logbook maintained in the dispatcher's office. After obtaining the required information the Section Leader will notify the Crash Chief/NCOIC. The Crash Chief/NCOIC will notify MCAF S-3 Operations Department. If such operations occur after normal business hours, the Crash Chief/NCOIC shall notify the S-3 Operations Department the next business day.

2. In most cases, closed field operations will be conducted by MCAF Quantico's resident Squadron, HMX-1. The Section Leader shall notify the HMX-1 ODO to determine duration of the flight operations to determine if a recall of ARFF personnel is warranted.

10008. MASTER ALARMS (ABOARD MCAF)

1. Upon receipt of a Master Alarm for a building/hangar aboard the Air Facility, the following procedures shall be followed:

LOCATION OF STRUCTUREPROCEDURE

HMX-1 Restricted Area

Dispatch (1) P-19A and (1) command vehicle.
Immediately contact HMX-1 Security (X-2705/3302) to notify ARFF vehicles are enroute to the secured area for a Master Alarm. All other response vehicles will be on standby at the base of the tower.

HMX-1
(Remaining buildings/hangars)

Dispatch ARFF vehicles. Subsequently contact HMX-1 Security (X-2705/3302) to notify ARFF vehicles

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LOCATION OF STRUCTUREPROCEDURE (Con't)

are enroute to hangar...
 (state respective hangar)
 for a Master Alarm.

All other remaining structures
 aboard MCAF

Dispatch ARFF vehicles.

10009. DEFENSE FIRE INCIDENT REPORTING SYSTEM (DFIRS)

1. The ARFF Dispatcher is responsible for entering all required information into the DFIRS program. This information is collected from the official logbook. The following procedures will be followed when processing this information:

a. All DFIRS entries are to be entered at the end of each day, ensuring all responses are complete.

b. On the 1st and 15th of each month, the ARFF Admin Clerk will download all data to disk, for the past two weeks, and prepare disk for mailing. DFIRS data is sent to the following agency:

Commander
 Attn: Code 44
 Naval Safety Center
 375 A Street
 Norfolk, VA 23511-4399