



DEPARTMENT OF THE NAVY

NAVAL AIR STATION OCEANA  
1750 TOMCAT BOULEVARD  
VIRGINIA BEACH, VIRGINIA 23460-2191

IN REPLY REFER TO:

NASOCEANAINST 8000.16B

N05VB

29 Feb 12

NAVAL AIR STATION OCEANA INSTRUCTION 8000.16B

Subj: NAVAL AIR STATION (NAS) OCEANA/DAM NECK ANNEX EXPLOSIVE  
ORDNANCE MANUAL

Ref: (a) U.S. Navy Regulations  
(b) OPNAVINST 8000.16  
(c) NAVSEA OP 5, Volume I

1. Purpose. To provide general and specific information for the safe and efficient handling, transportation and stowage of ammunition and explosives.

2. Cancellation. NASOCEANAINST 8000.16A.

3. Discussion. This instruction has been prepared per references (a) through (c). Regulations and safety precautions set forth herein do not change existing directives issued by higher authority, nor do they relieve cognizant personnel of their responsibility for the use of sound judgment and observance of safety precautions.

4. Scope. This instruction is applicable to military and civilian personnel of NAS Oceana and Dam Neck Annex squadrons, detachments and Temporary Additional Duty personnel whose duties require them to store, transport, handle or use ammunition, explosives or ordnance material.

5. Action. The Commanding Officer is tasked with the administration and enforcement of the provisions of this instruction. Departments and tenant activities are invited to submit, in writing, proposed changes or comments concerning the contents of this instruction.

6. Forms. Ammunition Requisitioning/Issue/Return Document, NMC DET Oceana Form 8010/1 and all other forms prescribed in the text may be obtained through regular supply channels and Navy Munitions Command Detachment Oceana (NMC DET Oceana).

  
J. D. WEBB

Distribution: Electronic only

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CHAPTER 1

RESPONSIBILITIES

SECTION 1

WEAPONS HANDLING AND SAFETY RESPONSIBILITIES

Ref: (a) NAVSEA OP 5, Volume I  
(b) OPNAVINST 8020.14  
(c) NOSSAINST 8023.11

The following responsibilities for maintaining safety at Navy facilities will be observed.

1-101. Commanding Officer. In addition to the duties and responsibilities inherent in the position of Commanding Officer as set forth in Navy Regulations, and as promulgated by higher authority, the Commanding Officer of a Navy activity is responsible for the safety of their command and training of assigned personnel. They will ensure that all ordnance-handling evolutions at their command (including assigned aviation units) are conducted safely, per references (a) and (b). They will also ensure the qualification and certification of personnel who perform or supervise any ordnance or explosive operation per existing directives.

1-102. Safety Department. The responsibilities of the Safety Department is to administer the Navy Occupational Safety and Health Program, Explosive Safety Program, Industrial Safety Program, Motor Vehicle Safety Program and other safety programs as assigned. The Safety Manager, as a staff advisor to the Commanding Officer for all safety matters, is responsible for implementing and managing the safety programs and will report their status directly to the Commanding Officer. An Explosives Safety Officer (ESO) is assigned to the Safety Department and is responsible for assuring compliance, per reference (a).

1-103. Officer in Charge (OIC), Navy Munitions Command Detachment (NMC DET) Oceana. The OIC NMC DET Oceana is responsible to the Commanding Officer, Navy Munitions Command (NMC) for supervision and direction of the proper requisitioning, safe handling, stowage, assembly, disassembly, delivery and issuance of all weapons. The OIC NMC DET Oceana will ensure that ammunition magazines and lockers are properly maintained and all personnel tasked to handle explosives are trained in proper and safe handling procedures pertaining to ordnance items they handle. The OIC NMC DET Oceana will also coordinate with assigned aviation unit commanders or their representatives in determining the type, quantity and delivery times for ordnance required in support of the unit's assigned mission.

1-104. Explosive Safety Standard Operating Procedures. In accordance with references (a) and (c), CO NAS Oceana shall retain final approval on all Explosive Safety SOP's unless otherwise delineated in a support agreement. Commands shall coordinate with the installation ESO when developing/revising and validating SOP's. The installation ESO shall approve SOP's prior to CO NASO signature.

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SECTION 2

EXPLOSIVE MISHAP REPORT

Ref: (a) OPNAVINST 5102.1  
(b) OPNAVINST 8000.16

1-201. Explosive Mishaps. Conventional Ordnance Deficiency Reports (CODR) and Explosive Event Reports (EER) will be submitted to the applicable Cognizance Field Activity (CFA)/Fleet Support Team (FST) and processed, per reference (a). Engineering Investigations Requests (EIR) and Technical Publication Deficiency Reports (TPDR) will be submitted with the applicable CFA/FST and processed, per references (a) and (b).

1-202. Reporting Responsibilities. The Weapons or Ordnance Officer within a tenant command is responsible for the administration of CODRs, EMRs, EIRs and TPDRs as they relate to airborne weapons. In the absence of a Weapons/Ordnance Officer the cognizance department officer is responsible. NMC DET Oceana (NMC CED DET OCEANA VA//50//) and NAS Oceana Safety Department (NAS OCEANA VA//SAFETY//) will be addressed in all explosive related reports when mishaps occur on board NAS Oceana or Dam Neck Annex.

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CHAPTER 2

AMMUNITION SUPPLY PROCEDURES

SECTION 1

AMMUNITION ACCOUNTABILITY AND MANAGEMENT

Ref: (a) OPNAVINST 8000.16  
(b) NAVSUP P-724

2-101. Transaction Reports. All ammunition transaction reports for materials under the control of NMC DET Oceana will be prepared and released by the OIC NMC DET Oceana or a designated representative.

2-102. Inventory. All ammunition and ammunition components in stock will be inventoried by the OIC NMC DET Oceana or designated representative at least annually with a report of the results submitted to Commanding Officer, NMC. Ammunition and components designated in references (a) and (b) as Security Risk Category 1 will be inventoried quarterly. Geographical hosted items on sub-custody to squadrons will be inventoried monthly.

2-103. Expenditures. All supported activities are responsible for maintaining expenditures with their assigned fiscal year Non-Combat Expenditure Allocation (NCEA). Carrier Air Wings, Marine Air Groups, assigned squadrons and transient activities will submit daily expenditure reports to NMC DET Oceana Ammunition Stock Control Office.

2-104. Policies, Procedures and Responsibilities. Policies, procedures and responsibilities for supply management of conventional ammunition promulgated in reference (b) will be strictly followed.

a. The OIC NMC DET Oceana or designated representative will maintain stock records of all conventional ammunition in the custody of NAS Oceana via the Ordnance Information System Retail (OIS/R).

b. The OIC NMC DET Oceana or designated representative will manage the Notice of Ammunition Reclassification (NAR) Program, per reference (b). Additionally, other tenant commands and departments that process and use ordnance will maintain a NAR program.

c. Departments and tenant commands will be responsible for inventory accuracy of all ordnance items sub-custodied to them under the Geographical Hosting Program, per NMC DET Oceana Memorandum of Agreement.

SECTION 2

AMMUNITION ISSUE AND RECEIPT PROCEDURES

Ref: (a) LANTORDCOM DET Oceana Requisition Guide  
(b) NMC DET Oceana MOA  
(c) OPNAVINST 5530.13  
(d) NAVAIR 11-100-1.1 (CADPAD)

2-201. Signature List. Squadron Commanding Officers and applicable Department Heads will provide NMC DET Oceana Ammunition Stock Control Office with a specimen signature listing, on command letterhead, of personnel who are authorized to sign for receipt of ammunition and components, per references (a) through (c). Chits that are not signed by an authorized representative will not be accepted by the issuing activity.

2-202. Requisitioning

a. Ammunition requisitions will be delivered to NMC DET Oceana Ammunition Stock Control Representative, Building 1140, during normal working hours, and at least 72 hours prior (excluding weekends and holidays) to the required delivery date, per references (a) and (b).

b. Ammunition requiring assembly will be issued as an all-up-round in the configuration specified in the requisition and per applicable weapons assembly manuals. Requisitions must include all required components.

c. All-up-rounds will be issued on appropriate transport trailer.

d. Ammunition, other than all-up-rounds, will be issued/received in the original shipping container or an approved ammunition shipping container. Do not make any marks on the original container.

2-203. Request Controls. The following guidance will be utilized in controlling ammunition requests:

a. Chaff, decoy flares and associated impulse cartridges are prohibited outside the confines of their assembly area, or Building 2020, unless properly loaded inside the dispenser unit or in an approved shipping container. Normal build time is 0700-2100. Coordinate build times with the NMC Duty Office.

b. Inert bombs, signal cartridges and rack/launcher associated Cartridge Actuating Device (CAD) requisitions are limited to mission essential quantities (MEQ).

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c. Rockets, guided missiles other than captive-carry, high explosive munitions and parachute flare and marine marker requisitions are limited to a maximum on-hand of one day's requirements. All unexpended ordnance will be returned to NMC DET Oceana at the end of the ordnance evolution or the day's flight operations, whichever occurs first.

2-204. Aircrew Escape Propulsion System Requisitioning. Aircrew Escape Propulsion System (AEPS) device requisitioning policy is described in reference (d). Because they are manufactured in limited quantities and are not standard stock items, AEPS requisitions will be processed as follows:

a. Submit a request for required items via the <https://cadpad.ih.navy.mil> website.

b. While based ashore, and when directed by Commander, Naval Air Force, U.S. Atlantic Fleet, operating units may be authorized early replacement of AEPS that will expire during deployment. When requisitioned for this purpose, the statement "for pre-deployment replacement will be entered in the "remarks" section of reference (a).

c. Requisitions for replacing damaged or corroded AEPS and CADS must cite the applicable EMR, CODR or Quality Deficiency Report (QDR) serial number and date-time-group of the message report.

d. Requisitions for AEPS must reflect only the actual replacement quantity.

2-205. Requisitioning Step-By-Step Procedures. To requisition and receive ammunition from NMC DET Oceana, operating units will complete the Ordnance Requisition Form as follows:

a. Enter the document identifier in Block 1. This identifies the purpose and use of the document being submitted. For ammunition requisition, use "AOA."

b. Enter the routing identifier in Block 2. For ammunition requisitions, use "PET."

c. Enter the document number in Block 3. This number consists of four elements: A service code, unit identification code, Julian Date and serial number.

NOTE: The serial number will be entered in Block 12. Example: V09084/3100/0001.

d. Enter the fund code in Block 4. This identifies the expense element and allotment to which requisitioned material will be charged. For ammunition requisitions, use "Y6."

e. Enter the distribution and cognizance codes in Block 5. The distribution code designates activities eligible to receive additional status, followed by the cognizance code which identifies the item manager. Example: N/2E.

f. Enter the project code in Block 6. This identifies the purpose for which the ammunition was requisitioned. Example: 876-TRAINING / 821 CADS and PADS.

g. Enter the required delivery date in Block 7.

h. Enter the preferred delivery time in Block 8.

NOTE: At least 72 working hours prior to requested date if weapon assembly is required.

i. Enter the nomenclature of the items being requisitioned on Block 10.

j. Enter the quantity in Block 11.

NOTE: The quantity requested must not exceed the requesting command's authorized NCEA.

k. Enter a four-digit serial number for each item requested in Block 12. The unit's Supply Department must authorize this serial number for use. Enter the four digit Navy Ammunition Logistics Code (NALC) and the nine digit National Item Identification Number (NIIN) in block 4. Example: A688/012139656

l. Enter any special instructions or amplification data in Block 24. Example: Flare settings, FUSE settings, number of rockets per pod, a special delivery place, bureau number, CODR/EER serial numbers, etc.

m. Upon completion of Blocks 1-8, 11-12, 14 and 24, the authorizing official will conduct a quality review of the entire document. Following this review, they will enter their printed name and signature in Block 9.

n. The completed document will be submitted to NMC DET Oceana's Inventory Accuracy Officer where it will undergo a second quality review. Following this review, an Ammunition Accounting Squadron representative will enter a receipt signature and date in block 18.

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o. Prior to accepting any ammunition, it is imperative operating unit personnel ensure that each unique item is validated against the requisition document for accuracy. Check the item nomenclature, serial number, lot number, NALC/NIIN and quantity for each item listed. Upon completion, operating unit personnel will enter a "received by" signature in block 22 on 1348-1.

2-206. Expenditure. To report the expenditure of ammunition, operating units will submit a LANTORDCOM Oceana Form 8024.1 as follows:

NOTE: Expenditure reports must be submitted to NMC DET Oceana Ammunition Stock Control Office by 0900, the following workday of actual expenditure. Fax number is 433-2490.

2-207. Negative responses are required for days that no ordnance is expended.

a. Make copies of the original document. Submit expenditure data on the copy only.

b. Enter the expended quantity.

c. Enter the unexpended balance.

SECTION 3

AMMUNITION RETURNS

Ref: (a) LANTORDCOM DET Oceana Requisition Guide  
(b) NMC DET Oceana MOA

2-301. Ammunition/Ordnance Returns. References (a) and (b) provide detailed guidelines for returning ammunition, ammunition containers and steel pallets. Abbreviated procedures are as follows:

a. All ammunition returned to NMC DET Oceana will be accompanied by a properly completed DD Form 1348-1A.

b. With the exception of pre-assembled ordnance, all ammunition, explosives and components will be packaged properly and returned in the prescribed shipping container, if available, with lot number, national stock number, NALC, MK/MOD, open date and condition code clearly marked. NMC DET Oceana Magazine Department will provide shipping containers when the original shipping container is not available.

c. All ammunition containers, including wooden boxes, are reusable and will be returned to NMC DET Oceana Magazine Department when empty. Each container must be certified empty by visually inspecting to ensure it is clear of any live ammunition.

d. When ammunition or ordnance is being taken off station for a detachment or deployment, it must have a completed DD Form 1348-1A from NMC DET Oceana Ammunition Stock Control Office. The DD Form 1348-1A will be submitted to the activity destination. This will ensure proper accounting/tracking of ammunition items.

e. Squadrons returning ammunition, explosives and components from detachments/deployments will furnish NMC DET Oceana with DD Form 1348-1A from the detachment/deployment Ammunition Accounting Department.

f. If the material condition of the ordnance item is unknown, the material will be returned in condition code "K" (serviceable/condition unknown) pending verification of the actual condition code

g. If ammunition is to be returned to NMC DET Oceana after 1530, Monday through Friday, on weekends or holidays, NMC DET Oceana duty section personnel will be notified at 433-2352.

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2-302. Return Step-by-Step Procedures. To return ammunition, operating units will complete DD Form 1348-1A as follows:

a. Prior to returning any ammunition, operating unit personnel will validate each item for accuracy against the original document. Check the item nomenclature, serial number(s), lot number(s), NALC/NIIN and return quantity indicated in block 16. Upon completion, operating unit personnel will enter a "returned by" signature in block 22.

b. Return all unexpended ammunition to NMC DET Oceana magazine department.

c. Prior to returning any ammunition, NMC DET Oceana magazine department personnel will validate each item for accuracy against the DD Form 1348-1A. Upon completion, Magazine Department personnel will enter a receipt signature in Block 22.

d. Completed documents will be forwarded to the NMC DET Oceana Ammunition Stock Control Office without delay.

2-303. Reclassification. To return ammunition that requires reclassification, the following procedures apply:

a. Present date time group or a copy of outgoing CODR(if required).

b. Complete DD Form 1348-1A for each unique NALC/NIIN with the correct condition code.

2-304. Temporary Stowage. Any ammunition that is to be temporarily stowed must be accompanied by DD Form 1348-1A. The temporary storage period will not exceed 30 days. Any item temporarily stowed for more than 30 days will be returned to stock. When verification of the documentation is completed, the documentation must be promptly submitted to the NMC DET Oceana Ammunition Stock Control Office.

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CHAPTER 3

WEAPONS VAULT OPERATING PROCEDURES

SECTION 1

RESPONSIBILITIES/OPERATIONS

Ref: (a) OPNAVINST 3591.1  
(b) OPNAVINST 5530.13  
(c) OPNAVINST 4790.4

3-101. NAS Oceana Weapons Vault. Responsible for ensuring the security, issuing and receipt of all small arms. The Gunners Mates are responsible for the coordination and execution of all small arms training.

3-102. General. Provide guidance relating to the management of NAS Oceana weapons vault located at NMC DET Oceana, Building 2005, and provide instructions for the physical security and safeguards concerning all small arms. Reference (a) provides guidance relating to the coordination and execution of small arms management and training.

NOTE: To enter any Arms, Ammunition and Explosives facility requires proper access authorization from the NAS Oceana Commanding Officer, per reference (b).

a. The weapons vault will be managed and operated by NAS Oceana Gunners Mates to provide maximum security of all small arms.

b. The weapons vault will be locked at all times except when authorized personnel are working, entering or exiting.

c. Personnel authorized to enter the armory will be listed on the approved access list as designated by the NAS Oceana Commanding Officer and posted just inside the weapons vault door, per reference (b).

d. Admission of personnel not on the approved access list will be made on a case by case basis and all visitors will be logged into the permanent visitors log book noting time of entry and exit from the weapons vault.

e. Commands having weapons stored in the armory will have on command letterhead, an approved access list, on file, signed by the Commanding Officer. "By direction" signatures are not authorized.

f. Base Gunners Mates will maintain appropriate records, per references (a) through (c).

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g. Tenant commands requesting access will provide at least a 24-hour notice to the base GM's at 433-3345 located at building 320 Room 18 to draw assigned weapons.

NOTE: Emergencies will be handled on a case by case basis at the discretion and approval of the NAS Oceana Gunnery Mates.

h. The interior of the armory will be lighted at all times.

i. Hours of operation for issue and receipt of weapons will be as follows:

(1) Monday through Friday, 0700-1530.

(2) Special operations as required and approved by the NAS Oceana Gunnery Mates.

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SECTION 2  
GOVERNMENT/PRIVATELY OWNED WEAPONS

Ref: (a) NAVSEAINST 8370.2 Series  
(b) OPNAVINST 5530.14  
(c) OPNAVINST 5530.13

3-201. General. References (a) and (b) contain guidelines for the issue, receipt and storage of privately owned weapons on board NAS Oceana. The following items are specifically directed:

a. NAS Oceana Gunners Mates are responsible for the secure storage of all privately owned weapons in the weapons vault. Inventory of privately owned weapons will be per reference (c) (semiannually in the presence of the owner).

b. Personnel will notify Security that they have a private weapon that they want to stow at base armory. Security, once notified, will escort personnel to NMC DET Oceana for proper storage.

3-202. Maintenance. Maintenance of privately owned weapons is prohibited.

3-203. Issues/Receipts. Issue/receipt of privately owned weapons will be during normal working hours. Twenty four-hour notice is required.

a. If an extenuating circumstance necessitates a weapon being returned after normal working hours, the owner must notify the main gate guard watch and await recall of a NAS Oceana Gunners Mate to properly secure their weapon.

b. NAS Oceana Gunners Mates will call Security for an escort prior to issuing any private weapon.

c. In the event a weapon is delivered and signed into the weapons vault by anyone other than the owner, the person who owns the weapon must be notified via their chain of command. The voluntary private weapon turn-in policy includes an E-7 or above signature on a NAVPERS 1070/613 Administrative Remarks indicating official turn-over of firearms.

d. Any privately owned weapon that is not inventoried within six months and the owner is unable to be contacted, the weapon will be disposed of per current Navy directives.

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SECTION 3

SMALL ARMS RANGE

Ref: (a) COMNAVAIRFOR C8011

3-301. NAS Oceana Gunners Mates. Responsible for the safe operation of all small arms ranges, qualifications and scheduling small arms range times at all local area facilities. Personnel will ensure that a qualified Range Safety Officer is present at all times when live firing is conducted. The Small Arms Marksmanship Instructor will normally act as Range Safety Officer and will designate another as Firing Line Safety Officer, as required for safe and efficient range utilization. Allowances of small arms training ammunition are contained in reference (a) and will not be exceeded. The OIC NMC DET Oceana is responsible for the accountability of all training ammunition and small arms provided for training within established annual allowances.

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## SECTION 4

## SMALL ARMS SCHEDULING

Ref: (a) OPNAVINST 4790.4  
(b) CNIC INST 3550.1 (Series)  
(c) OPNAVINST 3591.1

3-401. Hours of Operation. Range hours vary depending on which command is providing range time. The Base Range Master will coordinate with tenant activities and schedule all range times.

3-402. Scheduling

a. NAS Oceana Range Master is responsible for the scheduling of military ranges for training. Use of small arms ranges may be scheduled by phone at 433-3345 or 438-3289 and must be secured by formal written range request at least twenty-one working days in advance. There will be no range firing on weekends, holidays or at night unless authorized by the NAS Oceana Range Master. As always, official training will take precedence over all other range use.

NOTE: All non-Department of Defense (DoD) ranges need to be coordinated with the NAS Oceana Range Master prior to scheduling. Tenant commands will incur all expenses associated with non-DoD ranges.

b. All ammunition to support the range party requires a four-part requisition 8010/1, completed and signed by the authorized requisitioning activity. The requisitioning activity authorized sample signature must be on file with NMC DET Oceana.

c. All requisitioned ammunition will be delivered to the small arms range on the day scheduled. NAS Oceana Range Department will pick up requisitioned ammunition from the NMC Magazine Department and make delivery. Activities are not authorized to transport the ammunition. A minimum of six, and a maximum of 50 personnel constitute a range party. If the six person minimum is not met, the range period will be canceled. The range party will muster 30 minutes before scheduled range time with the Range Safety Officer at the range. Failure to muster on time will result in cancellation of the range period.

d. NAS Oceana Range Safety Officer will oversee all range activities and report any discrepancies immediately to the NAS Oceana Commanding Officer. All personnel firing on the range will be subordinate to the NAS Oceana Range Safety Officer while in the performance of their duties.

e. All personnel using the range are required to wear approved hearing and eye protection. It is mandatory that they be used throughout the firing evolution.

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3-404. Privately Owned Weapons. Privately owned weapons are not authorized for use on any of the area ranges except for approved government agencies such as Naval Criminal Investigative Service, Federal Bureau of Investigation and Customs.

3-405. Planned Maintenance of Small Arms. All activities will provide for a Planned Maintenance Program. This program will consist of existing maintenance documentation that is listed as the Maintenance Indexes Page in Appendix A of reference (a). Generally, each small arm or weapon will be given a pre-fire check prior to use to ensure it is safe to operate and a post fire cleaning and inspection after firing to ensure that all dirt and fouling is removed and it is ready for use. During periods of non-use, periodic inspections (i.e., quarterly, etc.) and cleaning will be performed by the owner activity to prevent rust and deterioration of the equipment.

3-406. Range Safety Regulations and Procedures

a. During all range operations, there will be an NAS Oceana Range Safety Officer present. NO EXCEPTIONS.

b. Prior to all firing exercises the range must be policed for any objects that may cause a ricochet.

c. Pyrotechnics, including tracer rounds, are prohibited at indoor ranges, per reference (b). Tracer rounds must be removed from belted ammunition prior to use on the range.

d. All firing range operations will be conducted per reference (c).

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CHAPTER 4

READY SERVICE MAGAZINES

SECTION 1

READY SERVICE MAGAZINES

Ref: (a) NAVSEA OP 5, Vol I  
(b) OPNAVINST 5530.13  
(c) NAVSUP P-807  
(d) NAVSUP P-724

4-101. Regulations/Operations. Rules and regulations of paragraphs 4-101 and 4-102 apply equally to all Ready Service Magazines.

4-102. Ready Service Magazine Storage. The following types of ordnance material may be stored in Ready Service Magazines; quantity not to exceed the sited net explosive weight (NEW). Compatibility requirements will adhere to reference (a).

- a. Distress signals
- b. CADS
- c. Military pyrotechnics
- d. Rocket seat motors

4-103. Checkout Procedures. All Ready Service Magazines will be signed for by the Air Wing/Squadron Ordnance Officer/Chief who is designated in writing. This person will be responsible for compliance with regulations outlined in this instruction and all other governing directives.

4-104. Turn-in Procedures. Prior to departure of a squadron or air wing from NAS Oceana for a period of more than 30 days, the assigned magazine will be cleared of all ammunition and completely cleaned. NMC DET Oceana, along with a representative of the air wing/squadron, will inspect magazines.

4-105. Magazine Keys. OIC NMC DET Oceana is the designated custodian for keys to all magazines on NAS Oceana. The OIC NMC DET Oceana may temporarily sub-custody the keys for Ready Service Magazines to a designated representative of a wing/squadron to permit access to assigned magazines. The representative will be designated in writing by the Wing/Squadron Commanding Officer and establish effective security control for the keys in their possession, per reference (b).

NOTE: Locks securing magazines or other ammunition storage facilities will not be cut without expressed permission of OIC NMC DET Oceana.

4-106. Inspections. Regular, frequent inspections will be conducted on all Ready Service/Portable magazines. OIC NMC DET Oceana is responsible for conducting these inspections at least every 30 days. Squadron Ordnance/Weapons Officers will conduct independent inspections on assigned ready service/portable magazines at least weekly.

4-107. Inspections Criteria. References (a) through (c) provide the minimum requirements for magazine inspections.

4-108. CAD/PAD. Should PADS become wet, they shall be disposed of in accordance with reference (d). PADS may be stored within the organizational maintenance space for a short term (up to eight hours) and for an intermediate term (up to 108 hours). All maintenance personnel will adhere to all safety regulations and approved SOPs for handling and storage of PADS. Proper hazard identification signs must be posted at appropriate locations, per reference (a).

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SECTION 2  
MAGAZINES AND MAGAZINE AREAS

Ref: (a) NAVSEA OP 5 Vol I  
(b) NAVSUP P-805

4-201. Magazine Regulations

a. All magazines, magazine areas and Ready Service Magazines are under the cognizance of OIC NMC DET Oceana and will be administered and maintained as outlined in this instruction and reference (a).

b. A Bravo flag will be displayed near the entrance to magazine areas, explosive operating buildings and designated assembly areas when crews are working.

c. Ready Service Magazines will be inspected per references (a) and (b). Items to be noted include security, safety, cleanliness, atmosphere and identification of contents and posting of magazine contents. Any abnormal condition or discrepancy will be reported to the OIC NMC DET Oceana immediately upon discovery.

d. Magazines will remain closed and locked except for authorized work, daily inspections, cleaning, repairs and ventilation. During times magazines are open, two responsible persons will be in attendance.

e. Explosives, ammunition and ammunition components will be stored in such a manner as to ensure against toppling or collapse. All stacks of ammunition will be segregated by type, filler, size and lot designation in such a manner as to permit inspection. The bottom layer will be raised off the floor by use of suitable metal dunnage in order to protect the material from water or dampness and to maintain a ventilation space between the bottom of the pile and the floor.

f. Unauthorized personnel are not permitted to enter or remain in any magazine or explosive area.

g. Magazines and other buildings containing ammunition or explosives must be kept scrupulously clean. Dangerously combustible material will not be permitted in or near magazines or other buildings containing ammunition.

h. Personnel are not allowed to take matches, lighters or other fire, flame or spark producing devices into any magazine or explosive area except by written authority of NAS Oceana Commanding Officer and then only in connection with authorized work.

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i. Empty containers, packing material, tools or similar items will not be stored in magazines.

j. Thunderstorms. Refer to Chapter 7.

4-202. Ready Service Magazine Inspection Criteria

a. Magazine/Magazine Area Inspection

(1) Regular, frequent inspections will be conducted on all magazines and ordnance handling facilities, per reference (a). These inspections will be conducted at an interval of not more than thirty days, and will include the following:

(a) Magazines overall condition including doors and security locking devices.

(b) Posting of proper safety precautions and explosive limits.

(c) Cleanliness and elimination of fire hazards.

(d) Operability of vents.

(e) Condition and proper storage of contents.

(f) Compatibility of stored material.

(g) Grass/vegetation less than 18 inches in height.

(h) Fire-Fighting equipment.

(i) Proper firebreaks.

(j) Access road conditions.

(k) Security and condition of fences and ingress/egress gates.

(l) Proper identification placards.

(m) Lightning systems.

(n) Alarm systems when applicable.

(2) OIC NMC DET Oceana or assigned personnel will conduct the magazine/magazine area inspection for all magazines and areas.

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(3) Magazine area inspection reports will be forwarded to OIC NMC DET Oceana for review. OIC NMC DET Oceana will take such actions as necessary to correct discrepancies.

(4) Magazine/magazine area inspection reports will be maintained on file for four years.

b. The magazine area primary electrical grounding system for lightning protection and secondary static electrical grounding system will be inspected and tested by the Public Works Storefront (PWS) every 24 months, and visually inspected by PWS every six months. Results of these tests will be forwarded to OIC NMC DET Oceana. See reference (a) for information on newly installed or modified systems testing requirements.

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CHAPTER 5

TRANSPORTATION OF EXPLOSIVES

SECTION 1

GENERAL

Ref: (a) OPNAVINST 8023.24  
(b) NAVSEA SWO20-AG-SAF-010  
(c) Code of Federal Regulations 49 CFR  
(d) NAVSEA SWO20-AF-HBK-010  
(e) NAVSEA SWO23-AH-WHM-010  
(f) NAVSEA SWO23-AG-WHM-010  
(g) NAVSEA SWO20-AC-SAF-010  
(h) OPNAVINST 4790.2  
(i) OPNAVINST 5102.1  
(j) OPNAVINST 8000.16  
(k) NASOCEANAINST 3170.1

5-101. General

a. A variety of vehicles and Materials Handling Equipment (MHE) are authorized for the handling and on-station movement of ammunition and explosives at NAS Oceana. These vehicles and MHE are as follows:

(1) Pick-up trucks specially configured by PWS with wooden beds, explosive placards, weapons trailer electrical connectors, spare fuses and an approved fire extinguisher.

(2) Weapons/Support Equipment (SE) Tow Tractor  
A/S 32A-45

(3) Electric (EE Model) forklift

(4) Diesel forklift

(5) Tractor/Trailer trucks with wooden flatbed trailer

NOTE: Aircraft tow tractors are not authorized for the movement of ordnance.

b. The term "ordnance vehicles" will be used collectively to refer to any of the above vehicles and MHE. Ordnance vehicles are the only authorized equipment for on station handling, movement and transportation of ammunition and explosives.

c. An ordnance vehicle is only authorized for use after satisfactory completion of pre-operational inspections.

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d. Vehicles with plastic insert bed liners will not be used to transport ammunition.

5-102. Ordnance Vehicle Use

a. Use of ordnance vehicles for handling and transportation on any public road requires an explosive license issued or validated by OIC NMC DET Oceana. Explosive drivers must also be qualified and certified, per references (a) through (c), and have in their possession a current Explosive Medical Examiners Certificate, U.S. Government Motor Vehicle Operators Identification Card (OF 346) and a valid state drivers license. Explosive drivers required to access the airfield will hold Airfield Certification Cards (Ramp Pass) as required by reference (k). The A/S 32A-45 Weapons/SE Tow Tractor also requires a SE license issued by Fleet Readiness Center SE Division.

b. Use of ordnance trucks for any purpose other than direct support of an ordnance-related function or evolution is prohibited. Only qualified/certified personnel with a valid and current explosive driver's license are authorized to operate an ordnance vehicle while transporting ordnance. Unauthorized use can be cause for loss of license and certification. Ordnance pickup trucks are designed for use on the flightline for transportation of ammunition and explosives. These trucks are also to be used for towing explosive laden Armament Weapons Support Equipment (AWSE) to and from the flightline. Unauthorized use of vehicles will be recalled by the type wing Ordnance Officer.

5-103. Ordnance Vehicle Weight Test and Certification. All MHE requiring periodic weight test including forklifts, pallet trucks and cranes will have a stencil or tag affixed certifying a valid and current weight test before that equipment is authorized for handling or transporting any ammunition or explosives.

5-104. Assignment and Sub-custody of Ordnance Vehicles. The Public Works Officer will act as custodian of all ordnance vehicles/handling equipment and may sub-custody these vehicles to transient/tenant activities on an as required basis.

5-105. Return of Ordnance Vehicles

a. Ordnance trucks on sub-custody to transient activities will be returned to Public Works Transportation prior to departure from NAS Oceana. When detachments are left behind, special arrangements can be made on a day-to-day basis for temporary use of a truck.

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b. When an ordnance truck is required to be returned for repair or preventative maintenance, a replacement truck will be provided on an "as available" basis. When a replacement is not available the squadron/visiting activity should contact the appropriate type wing Ordnance Officer or host squadron for truck reassignment within the wing.

c. If willful abuse, misuse or negligence is suspected, the activity in custody will request a replacement vehicle in writing with an explanation of corrective actions taken to prevent a recurrence.

#### 5-106. Ordnance Vehicle Inspection/Configuration

a. Ordnance vehicles will be kept foreign object damage (FOD) free. Vehicles are subject to weekly inspection by type wing Ordnance Officers.

b. An inspection on ordnance trucks will be performed daily by the first operator and again by each subsequent operator of the ordnance trucks, using the Operators Inspection Guide and Trouble Report (NAVFAC Form 9-11240/13 (12-69)). Discrepancies detected during this inspection or during use will be reported to PWS.

c. All vehicles used to transport ammunition and explosives must be in perfect electrical/mechanical condition and equipped with all safety equipment required by references (b), (d) and (e). Each trailer used for transporting ammunition and explosives must also be in perfect mechanical/electrical condition and equipped with all safety chains, tie-down straps, chocks and safety pins. Missing equipment will be cause for rejection of the equipment for transportation of explosives. The following minimum safety equipment is mandatory for ordnance vehicles:

(1) One approved fire extinguisher with a minimum ratio of 10 B:C or greater capacity with a fire department inspection tag indicating satisfactory inspection within the previous 30 days. The safety wire seal and safety pin will be in place.

(2) Four placards; one located on the front, rear and each side of the vehicle.

(3) One copy of the glove box edition, reference (d) (Trucks only).

(4) One Accident Report (Standard Form 91).

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5-107. MHE. A pre-operational inspection will be satisfactorily completed on all MHE prior to each use, per the applicable equipment checklist. Immediately upon discovery of deficiencies, defective equipment will be taken out of service until the equipment has been returned to operational status.

5-108. Safety Precautions and Speed Limits for Ordnance Vehicles.

a. Unless otherwise posted, the speed limits for trucks and towed trailers for on-station transportation of ammunition are as follows:

(1) Ordnance Trucks

(a) 15 mph in magazine areas and on the airfield.

(b) 5 mph in the vicinity of aircraft.

(c) 25 mph on public roads not posted at a lesser speed.

(2) Aero 51 Trailers

(a) 15 mph for empty or loaded single trailers.

(b) 10 mph for empty or loaded trailers in tandem (maximum of two loaded or unloaded trailers).

(3) MHU 126/MHU-202

(a) 15 mph for single empty trailers.

(b) 10 mph for single loaded trailers.

(c) 5 mph for empty or loaded trailers in tandem (maximum of two loaded or unloaded trailers).

(4) Forklift trucks with load engaged will not exceed 5 mph or as fast as the safety walker can walk.

b. All safety equipment will be installed and operable. The Aero 51, MHU 126, MHU-185 and MHU-202 weapons trailers will be equipped with an electrical inter-connector cable attached to the towing vehicle from the towed trailer and between trailers towed in tandem. Different types of trailers will not be towed in tandem.

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c. Per reference (f), during loading or unloading, the driver/operator will ensure the following:

(1) The vehicle and trailer are correctly positioned in the loading area.

(2) The engine is shut off.

(3) The transmission is in park for automatic transmissions or the lowest forward gear for manual transmissions with the emergency brake applied. For diesel powered vehicles equipped with standard transmissions, the gearshift lever will be left in the neutral position and the parking/emergency brake applied. Wheels on the truck and/or trailer will be chocked.

(4) Smoking or flame producing devices are not permitted within 25 feet of the truck/trailer.

(5) The interior of the cargo space is clean of FOD.

(6) The floor of the cargo bed is lined with wood or nonferrous metal.

(7) Compatibility of the load as authorized in references (d) and (g).

(8) Placards are proper and in place.

(9) The vehicle and trailers are not left unattended for any reason.

(10) MHE for explosives are used only in the locations authorized using the guidelines of reference (e).

(11) When stopped and the engine is turned off, keys are removed from the ignition and wheels are chocked.

(12) When using MHE or a crane, weight limitations will not be exceeded. All electric forklifts authorized for handling explosives will be of the EE/EX type, painted yellow, have their designation painted on each side and the rear in four inch high block letters. Diesel forklifts and electric pallet trucks will have the "EE" or "DS" designation painted in the same manner as the electric "EE" forklifts. The rate capacity, UL-type and basic weight must be stenciled on the MHE in full view of the driver.

(13) Overhead guards on forklifts are required.

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(14) An ANSI Z89.1 approved non-metallic safety helmet is worn while on or around forklift operations.

(15) Accidents/incidents occurring during the handling and/or transportation of explosives, or inert devices simulating explosive material or devices are reported per references (h) through (j). When vehicles are involved, the explosive incident/accident report negates the requirement for a motor vehicle accident report. In all cases, the OIC NMC DET Oceana and ESO will be notified.

(16) No refueling is conducted.

(17) Safety precautions contained in reference (e) are closely observed during battery charging operations and material handling operations.

(18) Ordnance vehicles with internal combustion engines are not operated inside magazines. Diesel or gasoline forklifts are prohibited inside closed bed trailers.

(19) The operator will complete the "Notice of Unsatisfactory Operation of Materials Handling Equipment" (NAVSUP Form 10490). Additionally, a NAVAIR 4790/52 (daily) card will be maintained on all equipment on sub-custody from the AWSE Branch.

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## SECTION 2

ORDNANCE VEHICLE LICENSE REQUIREMENTS AND EXPLOSIVE  
DRIVER QUALIFICATION AND LICENSING PROGRAM

Ref: (a) OPNAVINST 8023.24A  
(b) OPNAVINST 4790.2J  
(c) NAVSEA SWO20-AF-HBK-010

5-201. Ordnance Vehicle License Requirements

a. Per references (a) through (c), all personnel, military or civilian, authorized to transport explosives with a powered vehicle must have an explosive driver's license as described below. The requirement includes all commercial/industrial trucks, MHE, forklifts and self-powered pallet trucks.

b. Ordnance Pickup Trucks and Other Commercial Type Trucks and Tractors. A U.S. Government Motor Vehicle Operators Identification Card (OF 346) is required for transporting explosives, operating commercial type trucks (including ordnance pick up trucks) and tractors, in addition to, and as a prerequisite for an explosive driver's license. NMC DET Oceana provides training and makes recommendations for issue of the OF 346. OIC NMC DET Oceana is the issuing authority for the station. When issued as a requisite for an explosive driver's license, the OF 346 must have the following statement typed or stamped in the 'Other Records' section: "Explosives Driver" (must hold a current medical certificate signed by a medical doctor). Additionally, the OF 346 is valid only if the medical examiner's certificate is valid.

c. MHE. All self-propelled MHE requires the successful completion of a formal course of instruction conducted by NMC DET Oceana and a U.S. Government Motor Vehicle Operators Identification Card (SF 96) issued by the Public Works Officer. A SF 46 license issued by other activities will be reciprocally accepted at NAS Oceana on a case by case basis.

d. Explosive Driver's License. All personnel, military or civilian, who are required to transport ammunition and explosives on station, must have in their possession an OF 346 license and a current medical examiner's certificate. This license must contain all information as described in reference (c). The license is required in addition to the basic operator's license and is mandatory for all self-propelled ordnance handling equipment when transporting ordnance. Qualifications for explosive drivers are as follows:

(1) A physical examination by a certified medical doctor (Physicians Assistants not authorized).

(2) Be recommended by the Commanding Officer, OIC or Department Head.

(3) Be at least 18 years of age, for on-station driving, and 21 years of age, for off-station driving.

(4) Hold a valid state operator's license.

(5) Successfully complete an Explosive Drivers course.

5-202. Explosive Drivers Qualification

a. Upon issue of an explosive driver's license the individual must be ordnance certified prior to being authorized to operate explosive laden self-propelled vehicles. The Ordnance/Explosive Handling Qualification and Certification Program is administered by activities' Weapons Officers.

b. Any action that de-certifies an explosive driver requires cancellation of the explosive driver's license. Loss of state or on-base driving privileges can result in loss of explosive driver's privileges.

d. The ESO will closely monitor all explosive handling operations on board NAS Oceana. Failure of any explosive driver to fully comply with the rules and regulations contained herein will be cause for revocation of explosive driving privileges. NAS Oceana Safety representatives are authorized to confiscate explosive drivers license's for turn over and report to the Commanding Officer, NAS Oceana ESO and or OIC NMC Det Oceana as appropriate.

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## SECTION 3

## ON STATION HANDLING AND TRANSPORTATION OF EXPLOSIVES

Ref: (a) NAVSEA SWO23-AH-WHM-010  
 (b) NAVSEA SWO20-AF-HBK-010  
 (c) NAVSEA SWO20-AG-SAF-010

5-301. On-Station Requirements. Trucks engaged in on-station transportation of explosives will meet the inspection criteria of reference (a). Drivers will be qualified and licensed per provisions of section 2 and vehicles will be equipped and configured per paragraph 5-106. Qualified explosive drivers in possession of a valid license issued by other activities will be reciprocally accepted at NAS Oceana on a case by case basis. Trucks and allowed trailers will have warning lights flashing and headlights on (low beam) during explosive moves. Placards will be configured as follows:

<u>DoT Class</u>	<u>Type Placard</u>	<u>Type Truck</u>
1.1	Explosives 1	Ordnance
1.2	Explosives 2	Ordnance
1.3	Explosives 3	Ordnance
1.4	None Required (see note)	Ordnance
Inert	None Required	Material Vehicles

NOTE: For Class "1.4" exceeding 1,000 lbs. NEW. "Explosives 4, Dangerous Material or Class "C" placard is required.

5-302. Passengers in Explosive Laden Vehicles. The driver and at least one other certified individual, preferably an explosive driver, will occupy the cab of a three-passenger ordnance vehicle. A maximum of two riders in addition to the driver is authorized on station only. No one will be permitted to ride in the cargo compartment of a vehicle transporting ammunition and explosives.

5-303. Ordnance Safety Devices. Ammunition and explosives transported on station will have all safety devices installed per references (a) and (b).

5-304. On-Station Driving Regulations

- a. Observe and obey all road signs.
- b. Maintain safe clearances.
- c. Do not overtake or pass other vehicles.
- d. Use a director when backing or during tight maneuvering.

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e. Maintain a safe following distance of not less than 100 feet.

f. Yield right of way to ambulances, firefighting equipment, security vehicles with warning lights flashing and military formations. When an emergency vehicle approaches, pull off to the side of the road if possible and come to a complete stop.

g. Except as noted above, ordnance vehicles transporting explosives will have the right of way over other vehicles. Vehicles following ordnance vehicles transporting explosives will not pass and will maintain a 300-foot minimum separation distance.

h. Flame producing devices are prohibited in ordnance vehicles transporting explosives. Smoking is prohibited within 50 feet of vehicles transporting explosives.

i. In case of an accident or breakdown, an explosive driver will remain with the ordnance vehicle. At no time will the ammunition and explosives be left unattended or attended by a person not qualified to move the vehicle.

j. Know the fire extinguisher, its application and procedures for use.

k. All explosives transported on board NAS Oceana must meet the compatibility requirements of OP 5 Volume I and references (a) and (c). All vehicles transporting explosives will use an authorized explosive route as listed in Figure 5-1.

l. Whenever possible, all forward firing ordnance loaded on Aero 51, MHU-126 and MHU-202 trailers will be positioned facing aft.

m. Alternate/reduced dunnage methods are authorized for flight line transportation of ordnance per reference (c). Explosive materials will be secured to vehicle cargo areas by straps, darling boards or other acceptable means as authorized by the movement evolution command's Ordnance Officer/Chief. This authorization does not relieve the driver from the responsibility of ensuring ordnance loads are safely secured. When in doubt always defer to the safest procedure.

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The explosive route is depicted by a dark red line; dark blue line depicts alternates. Explosive laden trailers will not be towed on Hornet Drive in conjunction with POV traffic. Contact Security to arrange for an escort.

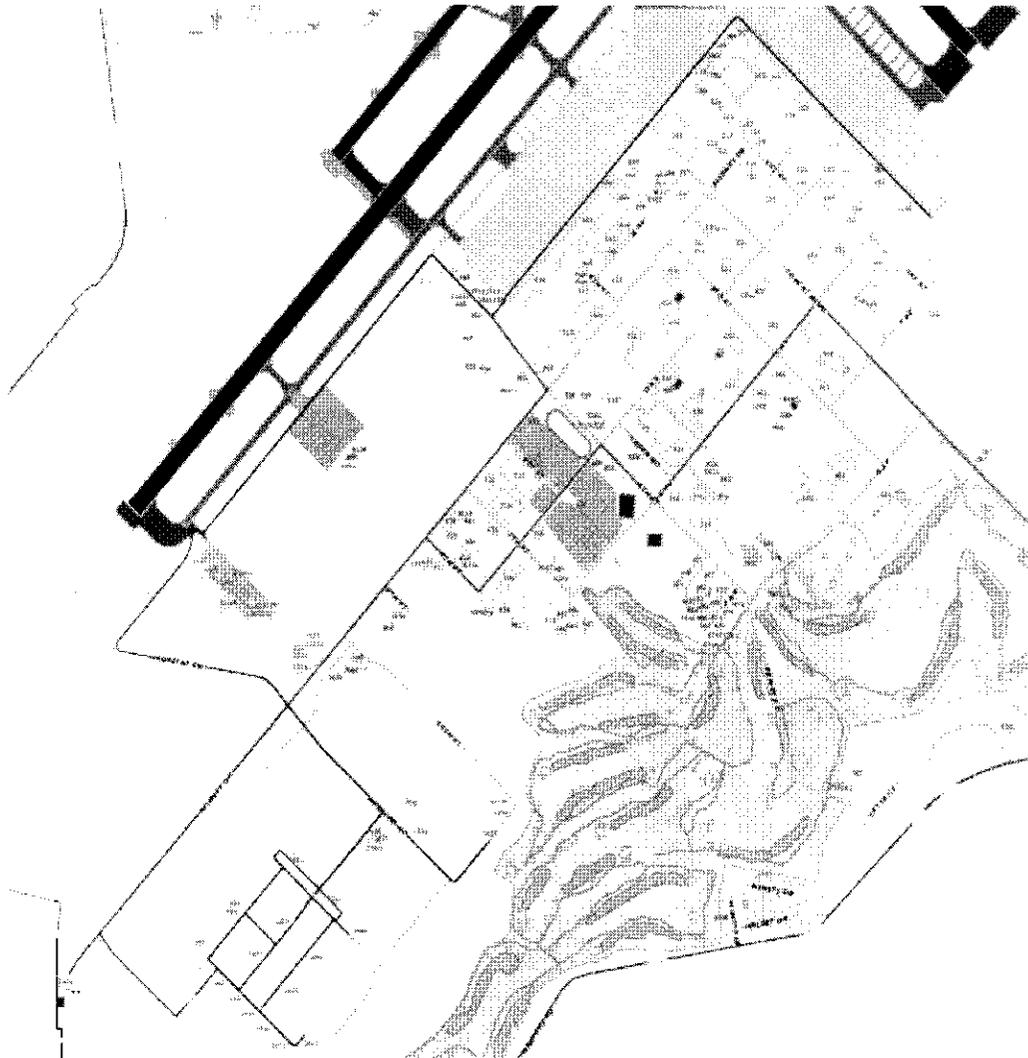


Figure 5-10A

SECTION 4

EXPLOSIVE LADEN/SUSPECT VEHICLE

Ref: (a) NAVSEA SWO20-AG-SAF-010  
(b) OPNAVINST 5530.13C

5-401. Suspect Vehicle Procedures. Once a vehicle is determined to be a suspect vehicle, procedures outline in references (a) and (b) will be followed:

WARNING: ALL EXPLOSIVE OPERATIONS WILL CEASE IN THE SUSPECT CARGO AREA PRIOR TO ESCORTING A SUSPECT VEHICLE INTO THE SUSPECT CARGO AREA.

a. Notify Appropriate Personnel

- (1) NMC DET Oceana Duty Officer.....433-2352
- (2) Base Command Duty Officer.....433-2366/2367 (For Commanding Officer notification)
- (3) Base Fire Department.....433-9111 (Oceana) and 492-6911 (Dam Neck)
- (4) Explosive Ordnance Disposal.....438-4140
- (5) Security Officer.....433-2438 (Perform security requirements per Table 5-1)

b. Cease all evolutions within the assembly area.

c. Escort the suspect vehicle to Suspect Cargo Area between Buildings 2026 and 2027 (assembly area) or Building 2029 (holding yard).

Table 5-1: SECURITY OF ARMS, AMMUNITION AND EXPLOSIVES IN SAFE HAVEN

In accordance with references (a) and (b).

<u>CATEGORY</u>	<u>ITEM</u>	<u>SECURITY REQUIREMENTS</u>
I	Missiles and rockets in ready-to-fire configuration such as redefye, stinger, laws etc.	Constant armed guard
II	High explosive and white phosphorous grenades, antitank and antipersonnel mines weighing 100 pounds or less, demolition explosives (C-4, TNT Dynamite), automatic weapons up to and including .50 caliber	Constant armed guard
III	Grenade launchers, 20MM ammunition, rocket warheads incendiary grenades, blasting caps and detonating cord	Check locks and/or seals every four hours
IV	Handguns, small arms ammunition and/or FUSES, smoke and tear gas grenades	Check locks and/or seals every eight hours
Others	All other ordnance items, including bombs, missiles, rocket motors and inert	Check locks and/or seals every eight hours items.

Figure 5-11A

CHAPTER 6

HAZARDS OF ELECTROMAGNETIC RADIATION TO ORDNANCE (HERO)

SECTION 1

CONTROL OF HERO

Ref: (a) NAVSEA OP-3565/NAVAIR 16-1-529/NAVELEX 0967-LP624-6010 Volume II PART 1 and 2  
(b) NASOCEANAINST 8020.1D

6-101. General

a. This instruction applies to all facets of ammunition handling on board NAS Oceana.

b. References (a) and (b) should be referred to when any doubt exists regarding HERO safety.

c. HERO varies greatly with the type of ordnance involved, distance to the radiation source, power output and frequency of the transmitter. Reference (a) divides all ordnance into the following three categories:

(1) HERO Safe Ordnance. Items that are not susceptible and require no general RF restrictions during any phase of normal employment.

(2) HERO Susceptible Ordnance. Items that are susceptible and require radio frequency (RF) restrictions for at least some phases of employment.

(3) HERO Unsafe Ordnance. Items that are susceptible and require RF restrictions for some or all phases of employment.

d. To ensure safety when handling HERO susceptible or HERO unsafe ordnance, precautions must be taken to limit the radiation of RF energy in the surrounding area. Reference (b) contains NAS Oceana's HERO assessment, including safe separation distance between ordnance and radiating antennas.

6-102. Responsibilities

a. Air Operations Officer

(1) Ensure that all equipment under the cognizance of this command capable of emitting RF radiation is placarded with the safe operating distance prior to issue. Reference (b) applies.

(2) Be responsible for the setting and securing of HERO conditions.

(3) Ensure that taxing/landing aircraft are informed when HERO conditions are set in the arm/de-arm areas or along the airfield.

(4) Maintain liaison with tenant activities to resolve any conflict in requirements.

(5) Include HERO/Electromagnetic Emission Control (EMCON) Radio Operator training as a requirement to qualify to operate vehicles on the airfield and on station.

(6) Review the command's HERO posture once every five years or in the event there are major changes in the electronics suite, ordnance complement or handling procedures. Hero surveys and questions should be addressed to Naval Surface Warfare Center, Dahlgren, Virginia (Code H-22).

b. Commanding Officers, OICs and Department Heads

(1) Ensure that all operators of communications equipment and aircrews comply with the requirements of this instruction and references (a) through (b).

(2) Ensure transmitters, other than UHF aircraft and aircraft control transmitters, are placarded per reference (b).

(3) Inform the station HERO/EMCON Officer (Ground Electronics Officer at 433-2104) whenever plans are made to employ new electronics equipment that radiates more than five watts of power.

(4) During HERO Condition One, establish a HERO/EMCON maintenance area 61 meters (200 feet) from the nose wheel strut of aircraft whose radars must be turned on. This area should be suitably marked with portable stanchions and the introduction of ordnance into the maintenance area must be prohibited.

c. OIC NMC DET Oceana

(1) Ensure that all NMC DET Oceana personnel are familiar with the HERO restrictions applicable to ordnance operations.

(2) Ensure that no HERO unsafe ordnance leaves the magazine area without adequate protection and proper HERO condition set.

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(3) When issuing any weapons or components to a user activity, inform the user if the weapon becomes HERO susceptible or HERO unsafe during assembly, handling or loading operations of what precautions must be taken. It is the responsibility of the receiving unit to set and secure from HERO condition requirements through the Air Operations Duty Officer (AODO).

(4) Inform the HERO/EMCON Officer upon receipt of any new ordnance or component that would become a hazard or be affected in reliability of operation due to RF radiation.

(5) Include HERO/EMCON training as a requirement for explosive driver's license qualifications.

d. Station HERO/EMCON Officer

(1) Be responsible for a continuing program to ensure HERO safety at the station

(2) Conduct a HERO/EMCON drill at least quarterly.

(3) Ensure all hand held and mobile radios have HERO warning labels affixed and specify distance requirements for HERO susceptible and unsafe ordnance.

6-103. Hero Conditions, Zones and Restrictions

a. The Air Operations Officer, upon notification, sets a HERO/EMCON condition to ensure radiation is maintained at acceptable levels. Specific HERO conditions are delineated in reference (b).

b. HERO Zones

(1) There are four HERO Zones on NAS Oceana as follows:

(a) Zone 1. Weapons Storage and Assembly Area (WSAA) and the transporting route from the WSAA to the Combat Aircraft Loading Area (CALA).

(b) Zone 2. Airfield; Special Operations Area 10; Arm/De-arm Areas 1, 2, 2A, 3, 4, and 5; flight line ordnance loading areas 7 and 8 and aircraft parking aprons.

(c) Zone 3. CALA.

(c) Zone 4. Administrative areas off of flight line.

(2) There are four HERO Zones on Dam Neck Annex as follows:

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(a) Zone 1. Southern most zone encompassing all eastern (seaside) areas south of Polaris Street to the Sandbridge gate.

(b) Zone 2. DEVGRU compound to Polaris Street, including all southern areas on west side of base.

(c) Zone 3. DEVGRU compound, including magazines and Marine Corps ranges.

(d) Zone 4. Birdneck Road area up to the northern DEVGRU gate.

c. HERO Restrictions

(1) Radio/radar transmissions by aircraft being loaded/downloaded/armed/de-armed are prohibited. When other aircraft are in these areas, and either HERO susceptible or HERO unsafe ordnance is involved, HERO separation distances of reference (a) must be maintained for all listed emitters, radars and radios.

(2) Avoid touching any exposed firing contacts, wiring, contact buttons/bands or umbilical connectors with hands or any metal objects. Do not handle umbilicals and motor fire connectors unnecessarily.

(3) Make no electrical connections to ordnance/weapons before the item is locked in the rack or launcher unless specifically authorized in the NAVAIR loading checklist.

(4) HERO unsafe ordnance will not be transported on the station unless enclosed completely in metal shipping containers or in approved launchers with safety pins installed. Metal pallets are not considered a container.

(5) Ordnance will not be handled unless all electrical connector covers and shorting devices are installed.

(6) Ordnance with EED will be stowed only in approved metal shipping containers.

(7) Portable or installed transceivers will not be used in a vehicle transporting HERO susceptible ordnance.

(8) Portable transceivers operating at a frequency above 100 MHz with an output of two watts or less may be operated within 10 feet of HERO safe or HERO susceptible ordnance subject to other restrictions provided in reference (a).

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e. Securing from HERO. The on-scene Ordnance Supervisor will notify the AODO when HERO may be secured. Upon receipt of the above notification, the AODO will notify all stations involved to secure from HERO. All stations controlling radio circuits will broadcast one time: NAS Oceana has secured from HERO Condition ONE or TWO, as appropriate.

CHAPTER 7

WEATHER CONDITIONS

Ref: (a) NAVAIR 00-80T-103  
(b) NAVSEA OP 5, Volume I  
(c) NASOCEANAINST 3440.1  
(d) HRINST 3141.1  
(e) DoDINST 6055.09-STD

7-101. General. When severe weather phenomena is forecasted, security of ordnance will take priority over all other storm preparations as delineated in references (a) and (b).

7-102. Storm Threats. The Naval Aviation Forecast Center, Oceana Component makes notification of impending adverse weather conditions by audio/visual means via the base Weathervision, telephone and facsimile to key personnel, and by posting the latest developing severe weather warnings on their webpage, at <https://pki.weather.navy.mil/AvWeb/frames.jsp?icao=KNTU>. Reference (a) breaks down adverse weather conditions into precipitation, winds, lightning, thunderstorms and severe weather. Reference (b) provides more specific technical information on lightning protection for ordnance facilities. Historically, the greatest danger from destructive weather has come from hurricanes and local heavy thunderstorms. References (c) through (e) applies.

a. Thunderstorms. Small scale storms are always accompanied by lightning, thunder and occasionally hail. Thunderstorms may produce extremely strong winds with gusts of more than 50 knots, and the wind direction may be drastically different from the prevailing wind before the storm. Lightning strikes are common and torrential rainfall with visibility near zero are often encountered.

b. Tornado/Waterspouts. A violent rotating column of air that extends from a cumulonimbus cloud which touches the ground/water. The winds blow spirally upward around the axis of the tornado, reaching average speeds of 120 to 180 knots.

c. Other Local Windstorms. Severe windstorm/rainstorms such as those accompanying frontal passages are common in the Tidewater Area. Wind speeds increase very suddenly and generally last from 12 to 24 hours.

d. Major Cyclonic Storms. Examples are hurricanes, typhoons and gales. These storms generally affect a wide area and last for days rather than hours. They are characterized by severe winds and torrential rains, surging tides and sometimes tornadoes. They are classified based on wind velocity as follows:

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(1) High Wind Warning. Sustained surface winds of 20 knots or greater and/or gusts of 25 knots or greater.

(2) Gale Winds. Sustained surface winds in the range of 34 to 49 knots inclusive.

(3) Tropical Depression. Sustained surface winds of 33 knots or less.

(4) Tropical Storms. Sustained surface winds in the range of 34 to 63 knots.

7-103. Destructive Weather Conditions

a. Tropical Cyclone Condition V. Destructive winds associated with a tropical system are possible in the area within 96 hours.

b. Tropical Cyclone Condition IV. Destructive winds associated with a tropical system are possible in the area within 72 hours.

c. Tropical Storm Condition III. Destructive winds between 34 and 63 knots associated with a tropical system are possible in the area within 48 hours.

d. Hurricane Condition III. Destructive winds of 64 knots or greater associated with a tropical system are possible in the area within 48 hours.

e. Tropical Storm Condition II. Destructive winds between 34 and 63 knots associated with a tropical system are anticipated in the area within 24 hours.

f. Hurricane Condition II. Destructive winds of 64 knots or greater associated with a tropical system are anticipated in the area within 24 hours.

g. Tropical Storm Condition I. Destructive winds between 34 and 63 knots associated with a tropical system are anticipated in the area within 12 hours.

h. Hurricane Condition I. Destructive winds of 64 knots or greater associated with a tropical system are anticipated in the area within 12 hours.

i. Thunderstorm/Tornado Condition II. Thunderstorms or tornadoes are expected within 25 nautical miles of the station within six hours.

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j. Thunderstorm/Tornado Condition I. Thunderstorms or tornadoes are occurring or are forecast to occur within ten nautical miles of the station within one hour.

7-104. Destructive Weather Preparations

a. Thunderstorm/Tornado Condition II. Supervisors will limit work in and around magazines to that quantity of ammunition and explosives that can be safely re-stowed in 15 minutes.

b. Thunderstorm/Tornado Condition I. When notified that Thunderstorm Condition I is set, all exposed ammunition and explosives will be immediately re-stowed. Personnel will be removed from the magazine and the magazine locked. Once an electrical storm commences, magazines will not be reopened. If any ammunition or explosive is left outside a magazine after an electrical storm commences, it will be covered and grounded to the maximum extent possible. Transportation and/or handling of exposed ammunition and explosives during an electrical storm is prohibited.

NOTE

During the course of instruction/proficiency loads in an aircraft hangar, certified inert training shapes may continue to be loaded during thunderstorm conditions.

NOTE

When Thunderstorm Condition I is set, all ordnance operations will cease. Aircraft already loaded not requiring arming procedures may taxi and launch at the discretion of the unit Commanding Officer and pilot in command as modified by other applicable instructions. Aircraft already loaded with ordnance requiring arming will not be armed during periods of Thunderstorm Condition I. Aircraft landing during the above conditions requiring de-arming will remain in the de-arming area until the downgrade of Thunderstorm Condition I.

CHAPTER 8

COMBAT AIRCRAFT LOADING AREA (CALA)

Ref: (a) NAVSEA OP-5, Volume 1  
(b) NASOCEANAINST 8020.1  
(c) OPNAVINST 4790.2

8-101. Explosive Limits

a. The maximum permissible NEW permitted at the CALA at any one time is 30,000 pounds.

b. Reference (a) requires inter-magazine distances to be maintained between explosive loaded combat aircraft. These separation distances are mandatory at NAS Oceana unless specifically waived by the Commanding Officer and then only in cases of absolute operational necessity.

8-102. Mandatory Use of the CALA

a. It is mandatory that the CALA be used for the loading, downloading and/or rearming of combat aircraft carrying hazard class 1.1, 1.2.1, 1.2.2, some training guided missiles, ammunition and explosives.

b. All other hazard class ammunition and explosives (1.3, 1.4) may be loaded on the flight line.

c. CALA will be used for all emergency safing and downloading of HERO unsafe or susceptible ordnance, including:

(1) Jammed M61A1 gun systems.

(2) Partially fired rocket pods loaded with any rockets and radiation hazard barrier integrity broken or damage.

(3) Any rocket motor out of, or partially out of its launcher.

d. Any guided missile with a live rocket motor.

e. Any Aircraft returning from flight with intent to launch criteria.

8-103. CALA Operating Procedures. Ensure Bravo flag is raised on top of CALA building prior to conducting ordnance operations. Additionally the current HERO condition will be displayed.

a. Control. All aspects of CALA scheduling, aircraft parking assignments, support facility space assignments and

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safety are under the direct control of OIC NMC DET Oceana. The NAS Oceana Airfield Manager is overall responsible for CALA operations.

b. Scheduling. Use of the CALA may be scheduled by bringing an approved Weapons Requisition Form 8010 to the Quality Assurance Division Leading Chief Petty Officer (LCPO) or Leading Petty Officer (LPO) at Building 2005. CALA aircraft spots will be assigned by the Quality Assurance Division Representative.

c. Keys to the CALA building may be checked out at NMC DET Oceana Quality Assurance Division, Building 900, at 433-3618, or contacting NMC duty, at 433-2351.

d. HERO. Reference (b) and Chapter 6 of this instruction discuss HERO and HERO EMCON procedures on board NAS Oceana in detail. The following provides additional guidance:

(1) Reference (b) provides specific frequency and field intensity restrictions on HERO susceptible ordnance handled at NAS Oceana.

(2) The CALA is designated a HERO susceptible area and the following procedures will be strictly adhered to:

(a) All flight crews and aircraft maintenance personnel are responsible for complying with the appropriate HERO EMCON restrictions.

(b) Under no circumstances will portable maintenance/ordnance transceivers be keyed within 25 feet (7 meters) of any type ordnance or aircraft loaded, or in the process of being loaded with ordnance except normally installed CADS/AEPS.

(c) Operation of aircraft radar transmitters is prohibited at the CALA.

e. Explosive Limits. OIC NMC DET Oceana is responsible for enforcing explosive limits and combat aircraft separation distances at the CALA. Combat aircraft separation will be measured from the nearest loaded weapon from one aircraft to the nearest loaded weapon on adjacent aircraft.

f. CALA Cleanliness

(1) The provisions of reference (c) regarding the FOD Program apply equally at the CALA. The entire CALA must be kept FOD free.

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(2) The Air Operations Officer will ensure frequent sweeping of the CALA and adjacent taxiways.

(3) Squadrons scheduling the CALA will conduct a FOD walk-down of the entire pad and immediate area daily and prior to starting any aircraft engines.

g. Vehicular Parking. Military vehicles and support equipment will be parked only in the parking areas adjacent to Building 900, except during servicing of aircraft.

8-104. Fire/Crash/Emergency Procedures

a. Squadron Weapons Officer/Gunner or Chief Petty Officer will act as ordnance handling Safety Supervisor to supervise explosive handling safety and procedures.

b. The Safety Supervisor will closely observe all elements of aircraft, explosive and personal safety. Immediately stop any evolution where any element of safety is violated until proper corrective action has been taken.

c. In the event of an aircraft fire, the Fire Department will be immediately notified by anyone having knowledge of the fire. Portable extinguishers are available.

8-105. Security Control of Ammunition and Explosives

a. NMC DET Oceana will maintain the required security watch on ammunition and explosives in the staging area until turnover to the squadron/unit. At that time, the squadron/unit will provide all required security.

b. Loaded aircraft will not be left unattended. As a minimum, qualified ordnancemen will be assigned to provide the required security surveillance. A watchstander may be assigned to one or more aircraft, providing the aircraft and ordnance are continuously in view.

8-106. Personnel Safety. All personnel working in the area will have and wear proper flightline PPE. **Smoking is prohibited at the CALA at all times.**

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CHAPTER 9

LOADING, DOWNLOADING, REARMING, REFUELING  
AND AIRCRAFT MAINTENANCE

Ref: (a) NAVAIR 00-80T-103  
(b) OPNAVINST 8000.16C  
(c) OPNAVINST 8023.24 (Series)  
(d) MIL-HDBK-274  
(e) NAVSEA OP 5 VOL I  
(f) NASOCENAINST 3710.1U

9-101. General

a. All explosives and ammunition loading or downloading from aircraft will be conducted at either the CALA or designated areas of the flight line.

b. All explosives and ammunition loading or downloading from aircraft will be conducted using the aircraft weapons store loading manual supplemented by applicable Naval Air conventional weapons loading checklist.

c. All explosives and ammunition loading and downloading from aircraft at the CALA must meet quantity/distance requirements. The OIC NMC DET Oceana will resolve all issues concerning questions of quantity/distance requirements.

d. Cockpit weapons loaded signs are required for all loaded aircraft.

e. Aircraft will not be fueled, loaded or downloaded simultaneously.

f. Loading, downloading and oxygen servicing, other than converter replacement in the aircraft, will be conducted as separate evolutions.

g. Ammunition and explosives, including captive carry missiles (CATM) and practice bombs with signals staged for loading or actually loaded on aircraft, will not be left unattended. The evolution supervisor will assign a watchstander to keep the ammunition, explosives and loaded aircraft under constant security and safety surveillance. The watchstander's sole duties will be that of maintaining safety, security and accountability of the material.

h. CATM (20MM Target Practice) may remain loaded overnight, providing all electrical connections are disconnected and rendered electrically/mechanically safe.

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i. No more than 20 CATM-9M may be stowed in each aircraft hangar at any time. CATM 9X/65/88 and other inert shapes may be stowed in hangars during adverse weather and during extended periods of non-use. GBU's with functional CCGs installed contain live explosives and are not authorized for hangar stowage at any time.

9-102. Ammunition and Explosive Assembly/Disassembly. All non all-up-rounds requiring assembly or disassembly of components will be conducted at NMC DET Oceana, with the following exceptions: Practice bombs (MK-76/BDU-48/LGTRs), Chaff/Decoy Flares (See Chapter 11).

9-103. Hangared Aircraft

a. No explosive devices will be allowed to remain on board aircraft that are hangared or in sheltered facilities ashore except as follows:

- (1) Emergency egress systems.
- (2) Helicopter rescue hoist cable cutter CADs.
- (3) Fire extinguishing cartridges installed in aircraft engines are exempt from the safing requirements.
- (4) All other cartridges will be removed prior to hangaring aircraft.
- (5) Aircraft with internal M61 series guns loaded with TP/Target Practice Tracer (TPT) ammunition may be hangared for up to 24 hours. In such cases, all ammunition will be cycled into the drum and the gun electrically disconnected. The number of rounds loaded, the words "Electrically Disconnected" and time/date of Fire Department notification will be annotated on the Gun-Bay door, along with the certifying QA/SO's name. Notify the Fire department, at 433-2224/2043, with the hangar number, squadron and aircraft side number immediately prior to entry, and after removal of M61 Drum loaded aircraft into the hangar bay.

b. In all cases, safety precautions for installed items will be strictly adhered to, safety pins installed, and cartridges electrically disconnected or mechanically locked to prevent the possibility of inadvertent firing. At no time, when maintenance is to be performed on an aircraft where the possibility of firing exists, should ordnance (including CADs) be left in or on the aircraft.

c. Under conditions of war or extreme emergency, these requirements may be modified as necessary with the concurrence of the station Commanding Officer. This may include ready alert

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aircraft during times of adverse weather. In such cases, all applicable safety precautions must be observed at all times.

9-104. Maintenance on Loaded Aircraft

a. For the purpose of this paragraph, loaded aircraft will be construed to mean any aircraft with any explosive, propellant or pyrotechnic device on board regardless of purpose or intended use, and is restricted to only that maintenance authorized by reference (a).

b. Per reference (b), any equipment normally containing explosive or explosive devices will have the explosives or explosive device removed prior to commencing maintenance on that system and such action certified in writing. This certification for an aircraft may be accomplished by the use of a maintenance action form or established local procedures.

c. High power turns will not be conducted with ordnance loaded on the aircraft.

d. Ejector rack CADs will be removed.

e. Low power turns are permitted, per reference (a), to prepare aircraft for the next launch. Ordnance will be safed to the maximum extent possible.

f. As previously discussed, maintenance will not be conducted on loaded aircraft, however, routine servicing and minor maintenance that would ready the aircraft for the next launch may be conducted per reference (a).

g. Fresh water wash-down will not be conducted with ordnance loaded on aircraft.

9-105. Aircraft Fueling/Defueling

a. Fueling of explosive loaded aircraft with fuel trucks is authorized at the CALA/flightline provided the stores are properly safed per the Aircraft Weapons/Stores Loading Manual.

b. Hot refueling of aircraft with the following unexpended ordnance/aircraft stores is authorized, providing they have been safed and de-armed per the Aircraft Weapons/Stores Loading Manual or checklist. Aircraft decoy flares are strictly prohibited in the fuel pit area.

(1) Electrically de-armed M61A1 gun systems loaded with TP/TPT ammunition if the gun system is not jammed.

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(2) Unexpended inert MK-80 series bombs, MK-76 and BDU-48, MK-106 practice bombs or any other practice bomb with flash or impact signals.

(3) Captive carry missiles.

(4) Unexpended dummy ordnance.

(5) Internally carried unexpended pyrotechnics, signals and sound underwater signals. Aircraft decoy flares, pyrotechnics and para-flares are strictly prohibited in the fuel pit area.

(6) Unexpended chaff and impulse cartridges ALE series dispensers.

9-106. Aircraft Loading and Downloading

a. Qualified/certified personnel, per reference (c), will conduct all aircraft loading and downloading.

b. The loading/downloading crew supervisor will ensure that a FOD walk-down is conducted in the immediate area after completion of the evolution.

c. Grounding of loaded aircraft is mandatory. Only authorized/certified grounding points and cables will be utilized, per reference (d). NAVFAC Mid-Atlantic, Public Works Oceana is responsible for testing resistance of grounding points. Squadrons or flight line area owners, such as Air Operations or NMC DET Oceana, are responsible for marking their grounding points with test data provided by NAVFAC, per reference (d).

d. Weapons safety devices will be retained by the loading crew leader and reinstalled prior to or after downloading. These devices will not be destroyed. All safing devices from expended ordnance will be turned into the NMC DET Oceana Magazine Division.

e. Hazard Class 1.3 and 1.4. ordnance items are authorized for loading/downloading at flight line loading areas.

f. Only armament and weapons support equipment authorized in the loading checklist or stores loading manual is authorized for aircraft loading/downloading. All handling equipment configurations will be per applicable directives. If required, handling equipment will be inspected for current weight test prior to the day's use. Specified safe working loads will not be exceeded.

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g. Loading/downloading crew leaders will ensure that satisfactory pre-operational inspections are completed on all Weapons Support Equipment/Aviation Support Equipment per applicable Naval Air Systems Command/Naval Sea Systems Command maintenance requirement cards.

9-107. Aircraft Arming/De-arming

a. All aircraft, ordnance and weapons will be armed and/or de-armed in strict compliance with NAVAIR weapons loading checklist and reference (f). All items to be performed in the checklist "RE-ARM" area may be accomplished in the loading areas designated in Figure 9-1. All items to be performed in the "ARMING" area, including stray voltage check for forward firing ordnance, will only be conducted in the designated ARMING AREAS Figure 9-1. For De-arming, all items to be completed in the checklist "DE-ARM" area will be accomplished only in the "DE-ARMING" area designated in Figure 9-1.

b. CATM with inert motors and warheads may be armed/de-armed at the end of the squadron flight line. The area ahead and immediately behind aircraft will be cleared and maintained clear until completion of arming/de-arming. Tactical missiles or CATM missiles with live motors will be armed/de-armed per applicable checklist.

9-108. Hung Ordnance

a. Aircraft returning to NAS Oceana with hung ordnance will be de-armed per reference (a) and applicable checklist. Hung ordnance will not be downloaded while aircraft engines are turning.

b. Hung ordnance will be downloaded in designated areas.

c. Aircraft returning with forward firing hung ordnance that cannot be de-armed/safed per the NAVAIR loading checklist will be shut down adjacent to an authorized grounding point in the de-arming area. OIC NMC DET Oceana, Strike Fighter Wing Atlantic (STRKFITWINGLANT) Ordnance Officer and NAS Oceana ESO will be notified and the aircraft downloaded in place. If squadron Quality Assurance personnel deem ordnance beyond their scope of safing, EOD will be contacted.

d. Harpoon/SLAM/SLAM-ER/JSOW weapons utilize an automatic launch sequence. In the event an automatic launch sequence has been initiated and subsequently been aborted prior to weapons separation, an ITL situation exist. An ITL weapon will be considered a hung weapon whenever a launched signal has been sent to the weapon and it has then either

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failed to release or its release has been aborted prior to separation of the weapon from the aircraft. Aircraft will be taxied to CALA, and ITL downloading procedures in accordance with reference (a) will be adhered to.

9-109. Jammed Gun Procedures

a. Aircraft will be taken to the CALA Gun Jam Spot (southwest corner). HERO restrictions apply.

b. Squadron ordnancemen with jammed 20MM guns will notify the Air Operations Duty Officer (AODO) to divert aircraft to the CALA jammed gun spot and set HERO (If applicable).

c. (If applicable) AODO set HERO in Zones 2 and 3.

d. (If applicable) Work is to be performed safely and expeditiously to minimize the base operations impact under HERO conditions. Once HERO items are secured, the AODO must be notified to stand down HERO conditions.

e. Squadron notifies NMC DET Oceana WDO, Fleet Readiness Center (FRC) duty desk, STRKFITWINGLANT Ordnance and EOD (If applicable). See chapter 12 for EOD notification.

f. NMC DET Oceana provides 20mm ammunition cans for loose brass.

g. (If applicable) HERO must be set in Zone 1 prior to transporting a jammed gun to NMC DET Oceana. Jammed guns with loose visible rounds are not to be transported.

h. In the event FRC personnel cannot move or remove rounds to make the gun HERO Safe, or requires extensive disassembly, the gun is to be removed from the aircraft and placed in an NMC DET Oceana designated location for further disassembly. Rounds are to be removed from the gun and the gun removed from the NMC DET Oceana location as soon as possible.

9-110. Field Carrier Landing Practice (FCLP)  
Landing/Touch-And-Go With Ordnance

a. Aircraft with hung ordnance will not conduct touch-and-go landings. All landings will be full stop only.

b. Aircraft with externally carried ordnance should not perform touch-and-go or FCLP training, per reference (a). To minimize potential damage to training weapons, dedicated FCLP missions should not be loaded with ordnance.

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9-111. Divert/Transient Aircraft

a. The AODO upon notification of an aircraft diverting from another base, or ship due to weather or aircraft emergency, will notify the radar controller or tower operator. When the tower first makes radio contact, the aircrew will identify the specific type of ordnance on board. Once the type aircraft and type ordnance have been determined, NMC DET Oceana and appropriate the Type Wing Duty Officer will be notified to take appropriate action.

b. When the divert/transient aircraft squadron does not support NAS Oceana with de-arm/download teams, the AODO will direct the aircraft to shut down in one of the de-arm areas specified in Figure 9-1. The aircraft will remain in the de-arm area until de-arming is completed. The pilot in command of divert/transient aircrew may act as a qualified individual for de-arming as approved by their parent command.

c. After dearming divert/transient aircraft may be parked in the loading area designated in Figure 9-1 depending on the type of ordnance/weapons involved.

d. If downloading of divert/transient aircraft is required and can be conducted by the host squadron/Air Wing, the downloading will only be accomplished in the loading/downloading area specified in Figure 9-1. If downloading can not be accomplished, the AODO and NMC DET Oceana Duty Officer will be notified and a security watch posted by the host squadron/Air Wing to protect the ordnance until the aircraft departs.

e. Servicing of divert/transient aircraft will not be attempted until the aircraft is dearmed. Maintenance on the aircraft will not be performed until the ordnance involved has been downloaded except as authorized in section 9-104.

9-112. Dummy Ordnance Displays

a. Reference (e) prohibits the use of any live ordnance for static displays, military or private.

b. Prior to use of an item for static display the item must be inspected by a qualified and certified Explosive Ordnance Disposal (EOD) representative and certified as inert by completion of an inspection tag per reference (e). ESO will maintain a file of all inert ordnance onboard.

c. All ordnance used for static display, including display boards, must have a decal affixed per reference (e).

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d. Only EOD or a person certified per reference (e) will determine that items are fully inert. Inert ordnance items received from a manufacturer must be entered in the inert ordnance certification program and appropriate paperwork must be on file with the ESO.

Forward Firing Ordnance Arm/Dearm Areas

- Area 1 Abeam approach end runway 5R, heading 230 DEG.
- Area 2 Abeam 8000 ft marker runway 5R, heading 230 DEG.
- Area 2A Abeam approach end of runway 5L, heading 230 DEG.
- Area 3 Abeam approach end runway 32L, heading 140 DEG.
- Area 3A Abeam approach end of runway 32R between r/w 32L & 32R, heading 140 DEG.
- Area 4 Abeam approach end runway 23L, heading 230 DEG.
- Area 4A Abeam approach end of runway 23R between r/w 23L & 23R, heading 230 DEG.
- Area 5 Abeam approach end runway 14R, heading 140 DEG.
- Area 5A Abeam approach end of runway 14L between r/w 14R & 14L, heading 140 DEG.

Freefall Ordnance Arm/Dearm Areas

- Area 2 Abeam 8000 feet marker runway 5R.
- Area 2A Abeam approach end of runway 5L.
- Area 6 Ordnance handling pad.
- Area 7 Flight line loading area.
- Area 8 Flight line loading area.

Emergency Safing/Downloading Areas

- Area 9 Southwest corner of CALA ordnance handling pad, (Jammed Gun Spot).
- Area 10 North Pad, (Special Operations Area).

CHAPTER 10

ORDNANCE REGULATIONS AND PRECAUTIONS

Ref: (a) OPNAVINST 8023.24  
(b) OPNAVINST 8000.16  
(c) OPNAVINST 5102.1D  
(d) NAVSEA OP 5, VOL I

10-101. Ordnance Regulations

a. The regulations and safety precautions contained in this instruction have been issued to prevent accidents and casualties. Accordingly, all personnel having association with ordnance material or explosives are responsible for complying with the instructions contained herein. Any deviation will result in disciplinary action.

b. NAS Oceana ESO will chair an Ordnance Safety meeting on the third Wednesday of each month. This meeting will review compliance with this and other applicable ordnance safety instructions. Ordnance, Aircraft Survival Equipmentman and Aviation Structural Mechanic (Safety Equipment) supervisors should attend.

c. NAS Oceana ESO and OIC NMC DET Oceana will be informed of any circumstances that conflict with ordnance safety precautions. When in doubt as to the exact meaning of a safety precaution an interpretation will be requested from OIC NMC DET Oceana in conjunction with the station's ESO. Changes, as they may occur, will be issued officially by the NAS Oceana Commanding Officer.

d. Any repeated work, no matter how dangerous, is likely to become perfunctory and lead to carelessness. Therefore, constant vigilance and intelligent, close supervision must be maintained to prevent accidents in operations involving ammunition and explosives.

e. The paramount considerations in handling ammunition and explosives are safety and responsibility; the output of personnel will never be evaluated in a competitive basis.

f. It is difficult to cover every possible emergency that may arise, which, if not properly handled, may have serious consequences. A thorough understanding of all aspects of any safety precaution is essential if personnel are to take the correct action in an unforeseen circumstance. Incorrect or no action in an emergency may be disastrous.

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g. During operations involving the handling of ammunition, no one person will be permitted to work alone in a location where assistance from another cannot be given immediately in case of an accident.

h. Any unsafe condition or act in or around magazines or explosive areas will be immediately corrected, if possible, and promptly reported to NMC DET Oceana and ESO.

i. Smoking is prohibited in any magazine, building, vehicle, other conveyance or any area containing explosives or ammunition where operations involving such material are underway and within 200 feet of the vicinity of such operations.

j. Hunting is prohibited in the NMC DET Oceana magazine area or within 1,200 feet of the magazine area or within Explosive Safety Quantity Distance arcs, per reference (d). Restricted area signs are located at arc boundaries.

k. All inerted ammunition and components used for training, classroom mockups, static displays or aircraft static displays will be inspected by EOD or a person certified per reference (a) to determine that the item is fully inert.

10-102. Precautions

a. Ordnance will be handled as little as practicable to minimize the risk of fire, explosion or damage.

b. Every precaution will be taken to prevent ammunition or explosives from falling into unauthorized hands.

c. Ordnance material will never be left unattended.

d. The quantity of ammunition located outside of the magazines will be limited to immediate requirements.

e. All weapons will be assembled and tested as set forth in appropriate NAVAIR or NAVSEA directives.

f. All weapons and other ordnance items will be loaded or installed in embarked aircraft in strict accordance with procedures set forth in current NAVAIR Conventional Weapons Loading Manuals/Checklist. All loading crews will use conventional weapons checklists for loading, arming, de-arming and downloading of conventional weapons.

g. Anyone who recognizes a hazardous situation will immediately order "STOP THE LOAD/SILENCE." This term will be understood to mean that a dangerous situation exists and that:

(1) All operations will cease immediately.

(2) No further operations will be permitted until the condition prompting the order has been resolved.

h. Per references (b) and (c), defective ordnance items will be reported. Whenever ammunition or explosives are being received, transferred, stored or prepared, the work will be directly supervised by a qualified/certified individual per reference (a). The supervisor will ensure that each individual in his detail is certified for the task to be performed.

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CHAPTER 11

GENERAL WEAPONS SAFETY

SECTION 1

BOMBS

Ref: (a) NAVAIR 11-140-5

11-101. General. Aircraft bombs are dangerous because of their explosive property and sheer weight. Their explosive property is the greater source of danger. When handling aircraft bombs, safety precautions and procedures of reference (a) will be strictly adhered to.

a. Building 2027 is the only authorized assembly area for live bombs, destructors and guided bombs.

b. The quantity of bombs will be kept to a minimum during an operation and the number of personnel present will be kept to the minimum necessary to perform the operation safely.

c. While handling bombs, care will be exercised to prevent damage to the bomb or handling equipment being used. Care will also be taken to minimize shock, blows, friction and accidental dropping or rolling.

d. All bomb handling and assembly will be performed under the direct supervision of a certified team leader, safety observer and quality assurance representative.

e. The supervisor will be thoroughly familiar with safety regulations, handling procedures and assembly methods, and will at all times observe ordnance safety precautions. They will allow only personnel certified to handle bombs and fuzes to prepare them for loading and fuzing.

f. Stockpiling/staging of bombs is prohibited except at Building 2027, and then only in such quantity as required to meet immediate scheduled operations. Physical security will be maintained at all times at Building 2027 to ensure that unauthorized personnel do not have access to the area.

g. Per reference (a), cluster bombs (CBU) must be handled with extreme care since the CBU and internal bomblets contain fuses.

h. Prior to assembly, bombs must be thoroughly inspected for rejectable criteria. Fuse cavities must be free of dirt, grease or exudate.

i. Steel tools or instruments that may cause sparks will not be used to clean fuse or booster cavities. Exudate will be cleaned per applicable directives.

j. Bombs will be securely strapped to handling equipment or trucks prior to movement. Loaded bomb skids/trucks will always be parked with the brakes set and/or wheels chocked.

11-102. Practice/Inert Bombs. More accidents occur with practice bombs than any other type of ordnance. Supervisors must ensure that practice bombs are handled with extreme care.

a. MK76/BDU-48 practice bombs may be assembled in a safe location on the flight line at designated locations at least 100 feet from any other hazardous area or hazardous evolution. All unexpended bombs will be unloaded (signals removed) at the end of the daily flight schedule.

(1) Extreme care must be exercised when preparing practice bombs for loading. Under no circumstance will a signal be forced into the bomb cavity/cartridge chambers, or detonation may occur. Practice bomb assembly personnel will wear face shields or flight deck goggles during assembly and disassembly.

(2) During loading of practice bombs, bombs will be oriented such that the nose and tail end is not pointed at any person or hazardous area.

(3) After assembly, practice bombs may be loaded on aircraft. Installation of signal cartridges after aircraft loading is prohibited.

(4) Practice bombs with signal cartridges installed will be stowed in a manner that will prevent any chance of tumbling or dropping. Only certified personnel will be permitted to handle and load practice bombs.

b. BDU-45 and Inert MK-80 series practice bombs will be delivered to the CALA by NMC DET Oceana personnel as an all up round when configured with electric tail fuse or spotting charge.

11-103. Mines and Destructors

a. Aircraft laid mines and destructors will be handled per safety precautions applicable to bomb type ammunition and loaded per NAVAIR checklists.

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b. Mine preparation and tests will be performed by Mobile Mine Assembly Group personnel certified to handle each particular model.

c. Various mine components are susceptible to electromagnetic radiation which limits assembly and test to the RADHAZ free environments of the magazine area.

SECTION 2

BOMB FUSES

Ref: (a) NAVAIR 11-1F-2  
(b) NAVAIR 11-140-5  
(c) NAVAIR 11-5A-17

11-201. General Safety Precautions

a. Fuses, firing mechanisms, boosters and other ammunition components will not, except as covered by current directives from competent authority, be disassembled, repaired or altered in any way in accordance with reference (a).

b. Steel tools that may cause sparks will not be used to clean fuse threads.

c. In the event a fuse is dropped, it will be considered unserviceable. Immediately notify the chain of command, NMC DET Oceana and EOD.

d. If in doubt as to the safe condition of any fuse, report the circumstances immediately to your chain of command.

e. Under no circumstances will a damaged FUSE be disassembled to determine its condition. All damaged FUSES will be disposed of as directed by EOD.

f. M904 fuse delay elements must be handled with the greatest care at all times, as they are especially sensitive to heat and shock.

g. In the unlikely event a fuse becomes armed or partially armed, no attempt will be made to restore it to the safe position. Clear the area and notify the chain of command, NMC DET Oceana and EOD immediately.

h. Only the quantity of fuses required to meet the immediate flight schedule will be removed from the shipping containers at any one time.

i. Fuses will not be transported with high explosive bombs or rocket warheads unless the fuses have been preassembled into the bomb or rocket warheads.

11-202. FMU-139-A/B & B/B Electrical Tail Fuse

a. The FMU-139 fuse is compatible with all MK-80/BLU series bombs and MK-43 target detection device.

b. Emergency Procedures. If the arming wire and other safety devices have been removed from the fuse, other than during assembly/disassembly procedures, the fuse should be considered armed. If the arming wire and safety pin have both been removed from the FMU-139 A/B, the fuse should be considered unsafe. Notify the chain of command, NMC DET Oceana and EOD immediately.

11-203. Adapter Boosters. The booster charge will be handled as high explosives. The booster will be inspected for visible damage before installation. Installation or removal will be strictly per references (b) and (c).

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SECTION 3

PYROTECHNICS/PARACHUTE FLARES/MARINE LOCATION MARKERS AND  
AIRCREW SURVIVAL EQUIPMENT/ECM FLARES AND CHAFF

Ref: (a) NAVAIR 11-15-7/SW050-AB-MMA-010  
(b) NAVSEA OP-5 Volume 1  
(c) NAVAIR 11-140-7

Encl: (1) MDAS Sample Authorization Letter

11-301. Pyrotechnics

a. Pyrotechnic devices contain highly combustible chemicals which, when ignited, generate flame, flash, infrared radiation and smoke, or display a combination of these effects for a variety of purposes.

b. Dye-marking devices are included in this section although their display is not a product of combustion. Though the dye composition is spread by explosive means, its end purpose is quite similar to the purpose of true pyrotechnics.

c. Pyrotechnic devices are designed to withstand normal handling. Their handling should be minimized to reduce the chance of damage that might cause accidental ignition or leakage per reference (a). Dents, deformations or cracks in the outer body may interfere with the proper function of safety features and may cause ignition during handling or storage. It is imperative that extreme care be taken to prevent damage to containers or pyrotechnics.

d. Pyrotechnics devices are equipped with a safety device that is designed to prevent inadvertent activation of the initiation mechanism. Such devices must not be tampered with or removed until immediately before it's use. Any device that shows signs of damage to it's safety features will be considered unserviceable and segregated for prompt disposition.

e. Accidental ignition of pyrotechnic devices will result in a fire hazard. In confined spaces, gases generated could present a serious toxic hazard. Devices containing propellant charges that are designed to propel the pyrotechnic candle create an extremely dangerous missile hazard.

f. Many chemicals used in pyrotechnics and dye-marking devices are toxic to personnel if taken internally. This also applies to residues for burned pyrotechnics. Although many of the smokes and fumes given off are considered

non-toxic and only mildly irritating of the eyes and nasal passages when encountered, heavy concentrations are dangerous and may be lethal if they reduce the amount of oxygen in the air.

g. Pyrotechnic devices characteristically contain their own oxidants, therefore do not depend on atmospheric oxygen for combustion. The exclusion of air is usually ineffective as a means of controlling a pyrotechnic fire. Pyrotechnic mixtures, particularly illuminating flare compositions, burn with intense heat up to 4,500 degrees F. Carbon dioxide extinguishers are ineffective and in addition are a potential source of danger in that they tend to produce oxygen that supports combustion. Foam type extinguishers are equally ineffective as they work on the exclusion of air principle. Firefighting tests have established that properly controlled and directed water is the best fire-extinguishing agent for aircraft flares.

h. Pyrotechnic pistols and projectors require the same care and precautions during loading, firing and unloading as small arms except they may not be carried in a loaded condition. A pyrotechnic pistol is cocked as long as the breach is closed. If a pyrotechnic pistol or projector is loaded and not fired, it will be unloaded immediately since both are not equipped with positive safety features.

i. Pyrotechnics will be stored in designated pyrotechnic magazines. They will be stored in the original box or watertight container in which received.

11-302.

a. Aircraft Parachute Flares (LUU-2)

(1) Flares are illuminating devices that contain powdered magnesium mixed with an oxidizer. Flares will be stored fully packaged.

(2) The number of flares removed from magazine storage will not exceed the amount required for the mission.

(3) The only authorized location for opening flare-shipping containers is in Building 2020. After an inspection of the LUU-2, squadron personnel are authorized to build and disassemble LUU-2 at the CALA or line. LUU-2s are not authorized to be stored in the flight line RSL due to compatibility requirements. CALA RSL may be temporarily signed out for stowage of LUU-2.

(4) Flares that are prepared for use and not launched will not be returned to the magazine until they are made safe and packaged per reference (a).

(5) If the condition of a flare cannot be positively verified, notify the chain of command, NMC DET Oceana and EOD immediately. These flares will not be returned to storage until their correct condition is determined.

(6) If at any time during LUU-2 preparation, the timer is accidentally activated, place hand over timer to prevent the timer from falling off when it releases. After release, hold the timer and cut the cord connecting the timer assembly to the parachute package and remove spring and timer. Tape the end of the flare to retain parachute pack. Discard spring and timer. Notify the chain of command, NMC DET Oceana and EOD personnel to dispose of the flare.

b. MK 58 Marine Location Marker

(1) This marker is designed for day or night use. It produces a yellow flame with smoke for a period of 40 to 60 minutes. The marker contains two phosphorous pyrotechnic candles that are ignited electrically by a salt-water activated battery upon water entry. The MK 58 marker can be launched by hand which requires the tear strip and tape covering the battery cavity surface be removed prior to launching, or it can be launched from aircraft per the applicable aircraft loading manual.

(2) Prior to use, inspect each round for damage. Any detectable external damage is cause for rejection.

(3) Use care when removing the tear strip to avoid cutting hands.

(4) Ensure that only authorized break away suspension bands are used for aircraft loading.

(5) Ensure the tear strip is undisturbed and covered with tape and the case is not damaged before returning to storage.

(6) After removal of the tape covering the battery cavity well, the marker must be segregated and kept completely dry until disposal.

(7) MK 58 Marine Markers will be prepared for launch in strict compliance with reference (a) and applicable NAVAIR loading checklists.

c. MK 25 Marine Location Markers

WARNING: THIS DEVICE WILL NOT BE USED IF THE WARNING LABEL IS NOT ATTACHED.

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(1) Marine Location Marker MK 25 all mods will be handled and stored IAW the general provisions set forth in Section 1-6 of Chapter 1 of this instruction. This device is a hermetically sealed unit if both plugs remain intact. When a marker is prepared for launching (base plug(s) pushed in), and the launch is rescinded, special handling and storage procedures are necessary.

(2) Dented, corroded, cracked, ruptured or otherwise damaged MK 25 Marine Location Markers will not be used and will be carefully segregated from all other pyrotechnics and munitions pending disposition IAW reference (a).

d. Aircrew Survival Equipment (MK 79 and MK 124 Signal Flare Kits)

WARNING: DO NOT POINT THE PROJECTOR TOWARD THE FACE OR BODY OF THE USER OR OTHER PERSONNEL.

(1) If there is smoke and flames, briefly immerse it in water or hold it against a solid object.

(2) These devices should be stored in a dry, well ventilated location and shielded from direct sunlight. This device will be handled and stored per references (a) and (b).

11-303.

a. Aircraft ECM Chaff and Flares

(1) ECM decoy flares generate heat and infrared energy which is used to distract an infrared heat seeking missile away from the aircraft. Currently, there are two different forms of IR decoys. One is composed of a pyrotechnic composition that is ignited and burns while falling away from the aircraft. The other is composed of a pyrophoric metal, shaped like thin wafers, that reacts with oxygen in the air once it is dispensed. Basically, the material rusts so quickly it gives off a heat signature which is in the sensing spectrum of the missile's heat seeking sensor.

(2) Chaff is aluminum-coated glass fibers which are dispensed by aircraft to mask or screen other aircraft or to cause a tracking radar to break lock. The materials are generally cut into small pieces for which the size is dependent upon the radar interrogation frequency (approximately 1/2 wave length of the victim radar frequency). Being 1/2 wave length long, chaff acts as a resonant dipole and reflects much of the energy back to the radar.

(3) The number of chaff and flares removed from magazine storage will not exceed the amount required for the mission.

(4) After initial inspection of chaffs, flares and impulse cartridges, squadron personnel are authorized to build and disassemble dispensers in accordance with reference (c) at approved flight line designated locations, and at NMC DET Oceana, Building 2020.

(5) Decoy flares that return unfired shall be inspected for impulse cartridge function. If an impulse cartridge functioned and the decoy was not ejected, consider the decoy armed and contact EOD for disposal. If the condition of a flare cannot be positively verified, notify the chain of command, NMC DET Oceana and EOD immediately. Flares will not be returned to storage until their correct condition is determined by proper competent authority.

(6) Disposal of spent impulse cartridges and chaff/flare tubes will be conducted by personnel designated per Figure C-1 and in accordance with Appendix C and applicable environmental directives.

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## SECTION 4

## ROCKET CATAPULTS/MOTORS, CARTRIDGES AND CARTRIDGE ACTUATED DEVICES

Ref: (a) NAVAIR 11-100-1  
(b) NAVSEA OP-3565 Volume 2  
(c) NASOCEANAINST 8020.1  
(d) MIL HDBK-274

11-401. Description. Rocket catapults/motors, cartridges and cartridge-actuated devices are items used in ordnance delivery systems and aircraft escape systems. Shape, size and explosive charges vary, ranging from large rocket catapults to tiny impulse cartridges. Specific information and handling procedures are contained in reference (a); for Rocket Catapult/Motors for Escape Systems Manual and cartridges and cartridge activated devices, refer to reference (b) and (c) for HERO restrictions.

11-402. General Safety Precautions

a. All personnel must ensure rockets, catapults/motors, cartridges and cartridge actuated devices are properly handled and installed by qualified/certified personnel to prevent any chance of malfunction. Malfunction or failure to fire in an emergency can result in severe injury or death to the aircrew.

b. Do not disassemble, make any adjustment to, or attempt to repair or rework the rocket motor or catapult.

c. If the rocket motor/catapult or loaded rocket motor / catapult container is dropped or shows evidence of rough handling, dispose of the unit per current directives.

d. Any visible defect is a critical defect. Do not use the unit if any damage or defect is noted.

e. It is mandatory that a armed/loaded explosive label is present on the rocket catapult/motor during handling and storage.

f. Air or gas pressure must not be applied to inlet ports of certain rocket catapults due to activation by gas pressure. Such catapults will have inlet ports closed with shipping caps when not installed in an aircraft.

g. Ejection seats and their associated explosive components, including rocket catapults removed from aircraft, may be stored in the squadron AME shop if they remain under the constant surveillance of a qualified and certified AME.

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h. Ejection seats in AME work centers containing explosives must be grounded at all times to a properly tested grounding point that is identified per reference (d) with its current test date and resistance readings.

i. All flame and spark producing devices, to include heaters and microwave ovens, will be removed from the shop and fire extinguishers will be immediately available. Smoking is always prohibited. Explosive components will be stowed in a container and labeled as appropriate.

j. Ejection seats/aircraft escape system explosive components, not exceeding 25 lbs N.E.W., to be reinstalled in the aircraft are authorized to be stored in the appropriate Site Approved maintenance space up to 108 hours per reference (a). Explosive placards must be in place to identify the specific hazard being stored.

k. Electrically initiated cartridges will be kept away from stray voltages.

l. When a cartridge is removed for inspection or safety reasons, it will be marked for identification to be reinstalled in the same device from which it was removed.

m. The inlet or outlet ports, if present, on cartridge activated devices will be closed with a shipping cap or plug when the device is not installed. No cartridge or cartridge-actuated device will be installed in equipment for which it is not designed. Many cartridges and cartridge-actuated devices have the same dimensions and are physically interchangeable. Utmost care will be taken to identify each cartridge-actuated device to ensure that the proper item is installed in the device for which it was designed.

n. When hermetically sealed containers of cartridges are opened, the cartridge expiration date will be marked with indelible ink on the casing of each cartridge in the can as follows: Open Date: (year/month); Service Life Expiration Date: (year/month), per reference a.

o. Personnel handling cartridges, cartridge actuated devices, rocket catapults and motors will be certified and thoroughly familiar with specific safety precautions, warnings, cautions and notes applicable to the device being handled.

p. Squadrons will not requisition cartridge-actuated devices, catapults and motors in quantities exceeding actual requirements.

q. When rocket catapults and aircraft installed CADs are requisitioned, the removed item rocket catapults will be

returned to NMC DET Oceana with appropriate fields annotated on DD 1348-1A turn-in document. Returned items will be delivered directly to Building 2520. Aircraft installed CADs shall be returned via FEDEX per Indian Head Naval Surface Warhead Center direction.

11-403. AME/PR Fire Department Explosives Status

a. When AME/PR work centers change the status of explosives present (EMPTY/1.4/1.3) within their spaces, such as deployments or detachments (DEPART OR RETURN), base Fire Department and base Safety must be notified to update their respective emergency response fire maps. Contact base Safety, at 433-2360 or 433-2692, and the Fire Department, at 433-2043.

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CHAPTER 12

EXPLOSIVE ORDNANCE DISPOSAL (EOD) RESPONSIBILITIES AND  
PROCEDURES FOR OBTAINING EOD SERVICES

SECTION 1

RESPONSIBILITIES

Ref: (a) OPNAVINST 8027.6 (Series)

(b) OPNAVINST 3440.17

12-101. General. References (a) and (b) state EOD is responsible for the disposition of explosive ordnance at Navy and Marine Corps installations or in the physical possession of the Navy and Marine Corps at the time of any accident.

12-102. Action Required. In the event there is a question as to the safety of that device, the following action will be taken:

a. The senior person at the scene will take such action as necessary to clear the immediate area of unnecessary personnel and equipment.

b. If time permits, the area should be cordoned off and warning signs posted. A sufficient number of guards should be posted to establish control of the area. Guards should be located at a safe distance from the object.

12-103. The person or activity identifying the incident will notify Emergency Operations Dispatch, at 433-9111 (Oceana) and 492-6911 (Dam Neck).

12-104. During and After Normal Working Hours. The unit or squadron reporting the incident will notify the EOD team and NMC DET Oceana. EOD may be contacted, at 444-3333 (EMERGENCY), 444-3214 (ROUTINE) or 438-4140 (CELL).

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CHAPTER 13

HAZARD CONTROL BRIEF

INCOMING BRIEF OUTLINE

Ref: (a) OPNAVINST 8000.16

Encl: (1) NMC Det Oceana Hazard Control Brief (CALA)  
(2) NMC Det Oceana Visitor Hazard Control Brief

13-101. Background. History has proven that the constant shifting from sea to shore stations becomes a burden on transient commands to keep abreast of the changes to ordnance handling requirements. To ease this transition between operational environments, NMC DET Oceana has developed Hazard Control Briefs, enclosures (1) and (2), for all squadrons and incoming transient personnel who may be subjected to a weapons evolutions.

13-102. Requirements

a. All transient commands assigned temporary additional duties, and tenant commands returning from extended deployment, are required to attend a Hazard Control Brief, enclosures (1) and (2) as applicable, prior to commencing any explosive operation on board NAS Oceana.

b. No ammunition transactions from NMC DET Oceana will be conducted until the safety brief has been completed.

c. Hazard Control Briefs will be conducted at NMC DET Oceana, Building 2005, Conference Room.

d. Call NMC DET Oceana, at 433-3381 or 433-4175, between 0700-1530, to schedule briefs.

e. Personnel Required to Attend Safety Brief

(1) Ordnance Branch/Department Officer.

(2) All Aviation Ordnancemen used during detachment.

(3) All ordnance augmentation members used during detachment.

13-103. Other Areas of Interest to be Covered

a. NAS Oceana Standard Operating Procedures.

b. NAS Oceana Ordnance Operations Manual 8000.16.

c. Requisitioning Procedures. Requires an authorization

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letter signed by their Commanding Officer for RSLs and requisitions.

- (1) Turn-in
  - (2) Geographical hosting procedures
  - (3) CADS/PADS
  - (4) Small Arms
  - (5) Assembled ordnance items
- d. Ready Service Locker Inspection. Check in/out procedures.
- e. Portable Ready Service Locker. Check in/out procedures.
- f. Fuel Pit Requirements.
- g. Explosive Driver Requirements.
- h. Transportation of Explosives.
- i. Authorized Handling Areas.
- (1) Loading/Downloading
  - (2) Arming/De-arming
- j. 20MM/Chaff buildup areas.
- k. Bomb-build up area procedures.
- l. HERO requirements.
- m. Aviation weapons support equipment. Check in/out procedures.
- n. Weather conditions.
- o. Qualifications/Certification Verification.

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NMC DET OCEANA HAZARD CONTROL BRIEF

Hazard Area: NAS Oceana CALA  
 Identified Hazards:

Explosives Class/ Division	Hazard
1.1	Mass Explosion
1.2	Fragment Producing
1.3	Mass Fire
1.4	Moderate Fire

- Storage/Handling of explosives (1.1, 1.2, 1.3, 1.4)
- Material Handling Equipment (MHE) and Vehicles

Controls:

- Explosives Hazards: Only authorized personnel shall handle ordnance.
- All flame-producing devices are prohibited at the CALA.
- All personnel shall remove flame-producing devices prior to departing for the CALA.
- Smoking is not permitted at any time in at the CALA.
- Flashlights must be UL approved or other recognized testing agency for use in the specified hazard area.

Radio type (ELMR)	Separation Distance for HERO UNSAFE Ordnance
Mobile (Vehicle)	66 feet
Portable (Handheld)	19 feet
Gov't Cell Phone	10 feet

- Only company vehicles/government contract rentals are allowed at the CALA.
- Commercial and military vehicles displaying hazard class/division placards encountered on NAS Oceana shall be considered laden with ammunition/explosives.
- Approach with caution; pass only when directed by the driver of the laden vehicle.
- All work crews encountered while at the CALA shall be considered involved in live ammunition/explosives operations. Do not approach work crews unless requested.

**DO NOT TOUCH ANY CONTAINERS OF AMMUNITION/EXPLOSIVES.**

Repairs:

- Welding, grinding, spark producing (Hot Work) activities, will require a hot work permit issued by the NAS Oceana Fire Prevention Office and Explosives Safety Officer (ESO).

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- Hot work permits must be renewed daily by the Maintenance Supervisor.

- Prior to beginning any Hot Work, the Maintenance Supervisor will establish a fire watch with fire extinguisher until the job is complete.

- Report all fires by phone to 433-9111.

MHE Operations:

- MHE will only be operated by qualified/licensed personnel
- Safety shoes (ANSI Z41 approved) shall be worn while on the CALA area during operations involving MHE.

Electrical Storms:

- At the approach of, and during an electrical storm, all CALA operations will cease until cleared by the operations tower.

Heat Injuries:

- Heat Index: Temperatures at NAS Oceana often exceed 100 degrees Fahrenheit.

- Drink plenty of water prior to, during and after exposure to these conditions.

- Heat Exhaustion: Skin cool/moist, profuse sweating, nausea. Hydrate, cool, slightly elevate feet, seek medical.

- Heat Stroke: Skin hot, red, dry or profuse sweating, confusion. Medical Emergency 433-9111. Pour cool water.

Wildlife/Insects:

- Contact with venomous snakes, spiders and insects are possible.

- Insect or snake bites should receive immediate medical treatment

In Case of Emergency:

- Dial 433-9111

- Tell the operator you are at Naval Air Station Oceana, Building 900, and nature of the emergency.

- The emergency muster location is at Building 900 (unless evacuation is required, otherwise Building 2005 - NMC CED Duty Room 433-2352.

- ESO: Debbie Vanbuskirk, at 433-2211.

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HAZARD CONTROL BRIEF GIVEN (Date):

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Figure 13-1B

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Navy Munitions Command Conus East Division  
Detachment Oceana

Hazard Control Briefing

**Safety is of paramount concern at NMC CED DET Oceana. The objective of this briefing is to offer to those receiving it, the opportunity to identify and address any potential safety concerns. NMC CED DET Oceana uses Operational Risk Management (ORM) in daily practices to discuss and implement opportunities for continued improvement in "Safety Preparedness."**

1. Cell phone use, either inside or outside vehicles, is unauthorized. The only exception is if the cell phone has an approved HERO safe sticker applied to it.
2. The main gate is an extremely busy entry and exit location. Due to various traffic concerns, especially while exiting at lunch and after work, use ORM and take extra time to exit.
3. Smoking on board NMC DET Oceana is strictly controlled and prohibited outside of the designated area. The ONLY designated smoking area is behind Building 2005 in the smoke shack.
4. Spark producing items are NOT authorized in the magazine area and must be turned into the production supervisor/Leading Chief Petty Officer in Building 1140. These items will be returned to you upon your departure from the compound.
5. Personal Protection Equipment (PPE - Steel toed shoes, hard hats, face shields, gloves and safety glasses) must be worn at all times.
6. In the event of building evacuation, report to Building 2005. A muster will be conducted.
7. While driving at NMC DET Oceana you must obey all posted speed limits.
8. You may encounter oncoming traffic (trucks) with their headlights on and hazard lights flashing. This will usually indicate an explosive laden vehicle. Explosive laden vehicles have the right of way and extreme caution must be given to ensure their safe transit. At the approach of any ordnance laden vehicle, you may need to pull to the side of the road and stop your vehicle until the ordnance laden vehicles passes.

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9. When proceeding to an operating building, check in with the building/office supervisor so you may be supported in the best possible manner.

10. If you are conducting business in the magazine area or around a storage facility, be extremely cautious. Wasps, wasp nests, spiders and snakes are a common occurrence in these areas.

11. At the approach of lightning, NMC DET Oceana uses a radio/phone verbal warning system. If you see lightning or hear thunder, secure your operation and report to Building 2005 or 1140.

12. Black flag postings are advisories of when high temperature and humidity are detected. Be advised that you should drink plenty of fluids and break often during these times.

13. NMC DET Oceana employs the work proximity rule where at no time is someone working alone. There should always be someone within close proximity to you while working.

14. In the event you come upon, or are involved in an accident, contact the NMC DET Oceana Duty Room, at 433-2352 or AOIC at 433-2239 (621-7303).

15. We, at Navy Munitions Command, Conus East Division, Detachment Oceana, hope you have a safe, productive and enjoyable time while here.

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## APPENDIX A

## TERMS, DEFINITIONS, ABBREVIATIONS AND ACRONYMS

1. Airborne Stores. Items intended for carriage, internally or externally by aircraft, including racks, launchers, adapters and detachable pylons which are not normally separated from the aircraft in flight, such as tanks, pods, guns, non-expendable training weapons, targets and Electronic Counter Measure pods.
2. Airborne Weapons. Items intended for carriage, internally or externally by aircraft which are normally separated from the aircraft in flight, such as other stores authorized for release in the NATOPS Manual.
3. Air Operations. A section of the Air Operations Department that is responsible for coordinating all matters pertaining to flight operations, including the proper function of Air Traffic Control and Radar Air Traffic Control Center.
4. AEPS. This term collectively represents rocket catapults and rocket motors utilized in aircrew/escape propulsion systems.
5. Aircraft Parking Area/Ramp. Any area set aside for parking aircraft that does not normally contain explosives.
6. Ammunition. A contrivance charge with explosives, propellants, pyrotechnics, initiation composition or chemical material for use in connection with defense or offense, including demolition, training, ceremonial or non-operational purposes.
7. Ammunition and Explosives. Includes, but is not necessarily limited to, all items of ammunition, propellants (liquid and solid), high and low explosives; guided missiles, warheads, devices, pyrotechnics, chemical agents, components thereof, and substances associated therewith presenting real or potential hazards to life and property.
8. Ammunition and Explosive Aircraft Cargo Area. An area specifically designated for:
  - a. Aircraft loading or unloading of transportation configured ammunition and explosives.
  - b. Parking aircraft loaded with transportation configured ammunition and explosives.
9. Ammunition and Explosives Area. An area specifically designated and set aside from other portions of an installation for the development, manufacture, testing, maintenance, storage or handling of ammunition and explosives.

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10. Ammunition Components. Integral units which are part of a complete round of ammunition. Ammunition components may consist of either inert or explosive loaded parts or both.
11. Ammunition Lot. A quantity of ammunition which has been assembled from uniform components under similar conditions and is expected to function in a uniform manner. Each ammunition lot is assigned a number.
12. Ammunition Lot Number. The code number that identifies a particular ammunition lot.
13. Arming. An operation in which a weapon is changed from a safe condition to a state of readiness for initiation.
14. Arming Area. A designated area in which a weapon is armed or changed from a safe condition to a state of readiness for firing or initiation.
15. Aviation Ordnance Evolution. An ordnance evolution requiring the breakout, buildup and staging of explosive ordnance and the loading, arming, launching, recovery and de-arming of ordnance carrying aircraft.
16. Bingo. A carrier-based aircraft on an emergency divert to a shore station.
17. Bomb Type Ammunition. Ammunition that is characterized by a large, high explosive, charge-to-weight ratio, such as aircraft bombs, warheads, guided missiles, depth charges and mines that are designed for dropping, launching or planting. This type of ammunition depends on the destructive blast effect of the explosive at or near the target greater than the penetration effect of the explosive container.
18. CADs. This term collectively represents and is synonymous with cartridges, cartridge actuated devices (old meaning), aircraft detonation cords and cartridge associated hardware. (Refer to definition of cartridge actuated devices).
19. Cartridge. A complete round of ammunition in which the primer, propelling charge and projectile or bullet are completely assembled to the cartridge case as fixed ammunition; or the primer and propelling charge are assembled in the cartridge case and closed by a firable plug.
20. Cartridge Actuate Devices. Explosive loaded devices designed to act as a gas generator, or to provide a stroking action or a special purpose action. Actuated devices may be reusable, employing an expendable cartridge for each design

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Action, or may be a sealed unit with a one-time function capability. The amount of explosive contained in these devices is normally small.

21. Combat Aircraft Loading/Parking Area. Any area specifically designated for:

a. Aircraft loading or unloading of combat configured ammunitions.

b. Parking aircraft loaded with combat configured ammunitions.

22. Compatibility. A relationship between different items of ammunition, explosives or other hazardous materials with characteristics such that a quantity of two or more of the items stored or transported together is not significantly more hazardous than a compatible quantity of any one of the items stored or transported alone.

23. Container. A general term that encompasses boxed, cartridges, powders, tanks, cartons, drums, barrels, cylinders or cans; containers for long ordnance items; and cargo containers (dromedaries, etc.) for shipment of sizable quantities of hazardous materials. A pallet is not considered to be a container.

24. Cook-Off. The deflagration or detonation of ammunition caused by the absorption of heat from its environment. In loaded guns, it consists of the accidental and spontaneous discharge of, or explosion in the gun caused by an overheated chamber or barrel igniting a fuse, propellant charge or bursting charge. Cook-off may also occur in explosive loaded component when they are exposed to excessive heat or flame wash from any source, such as live steam, fire, rocket or gas turbine exhaust.

25. De-arming (Safing). An operation in which a weapon is change from a state of readiness for initiation to a safe condition.

26. De-arming Area. That designated area in which a weapon is de-armed and/or safed.

27. Display Ammunition. Inert ammunition items and components that are used in displayed boards, exhibits, demonstrations, public functions, or that are kept as engineering models, souvenirs, mementos or for decorative purposes.

28. Department of Transportation Class. A category of materials classified by DoT based on the character and predominance of the associated hazards and the potential for causing personnel casualties or property damage. The hazard

classes are Explosives A, B and C; blasting agent; flammable liquid; flammable solid; corrosive material; poisons A and B; irritating material; radioactive material; etiologic agent; Orm-A, Orm-B, Orm-C and Orm-D.

29. Downloading. An operation that removes airborne weapons/stores from an aircraft.

30. Drill Ordnance. Actual life size ammunition items with working mechanisms used for training exercises, but having no explosive materials.

31. Explosion Hazard. A hazard resulting from the tendency of certain materials to detonate en masse or burn with violence, causing destruction and damage or propagating explosions from one explosive site to another by blast wave or flying fragments.

32. Explosive Hazard Class. For universal identification of hazardous material, the United Nations Organization has established nine classes, of which Class 1 is designated for ammunition and explosives, DoT Classes A, B and C. Within Class 1, the material is further subdivided into four separate and distinct divisions:

Class 1	
Division 1	Mass detonating
Division 2	Non-mass detonating-fragment producing
Division 3	Mass fire
Division 4	Moderate fire, no blast

33. Explosive Incident. See Explosive Mishap.

34. Explosive Limit. The maximum quantity of explosives or ammunition permitted in a magazine, production building or other specified site. Explosive limits are based on quantity-distance damage considerations and are expressed in net pounds of explosive, number of rounds or units, or other measuring units. Also called Explosive Quantity.

35. Explosive Mishap. Includes all of the following occurrences, near-occurrences and/or circumstances:

a. Chemical Agent Accident. Any occurrence involving a chemical agent which, in the opinion of a medically trained authority, did result in a disabling injury or, did or will result in 10,000 dollars or more damage to property from contamination.

b. Dangerous Defect. A defect on visual examination or local test in an explosive material/system which is capable of resulting in an explosive mishap (e.g., ruptures of explosive

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containers exposing filler, protruding primers, partially armed fuses, safety devices missing or defective, etc.

c. Explosive Accident. An unplanned explosion or fire involving an explosive material/system. This includes inadvertent actuation, jettisoning, release or launching thereof, resulting in a fatality or injury to personnel, fire explosion or damage to property.

d. Explosive Incident. An occurrence which creates a potentially hazardous situation. Incidents include, but are not necessarily limited to:

(1) Human errors in processing, assembly, testing, loading, storing, transporting, handling, using or disposal of an explosive material or system.

(2) Unusual or unexpected occurrences, unnatural phenomena, unfavorable environments or instances of equipment failure which may damage or affect safety or reliability of an explosive material/system.

(3) Loss or abandonment of an explosive material/system, resulting in a potential hazard to untrained personnel who may find the item.

(4) Misuse or unauthorized alterations of an explosive material/system.

(5) Any failure or malfunction of, or damage to, a launch device or associated hardware which occurs when an explosive material/system is being handled or otherwise manipulated.

e. Malfunction. The term applied to an explosive material/system when it fails to function in the manner for which designed. Malfunctions are considered major or minor as follows:

(1) Major Malfunction. Failure to function in the manner for which designed, resulting in, or potentially capable of resulting in, personal injury and/or material damage.

(2) Minor Malfunction. Failure to function in the manner for which designed and does not result in injury or material damage is remote (duds, downrange premature activation, etc.).

f. Explosive Near-Mishap. Any event which, except for chance, would have been an explosive mishap.

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36. Explosive Area. Any area of a shore establishment in which explosives or ammunition are manufactured, stored, processed or otherwise handled.

37. Explosive Ordnance. Bombs and warheads, guided missiles, artillery, mortar, rocket and small arms ammunition, mines, torpedoes, depth charges, demolition charges, pyrotechnics, clusters and dispensers, cartridge and propellant actuated devices, and all similar or related items or components, explosive in nature which may cause injury or death to personnel or damage to material. This definition includes all munitions containing explosives, propellants, nuclear fission, fusion or radiological materials and chemical or biological agents.

38. Exposed Explosives. Explosives that are actually visible (such as unpackaged bulk explosives, disassembled or open components) and that also are susceptible to initiation directly by static or mechanical spark, or those that create (or accidentally create) explosive dust or give off vapors, fumes or gases in explosive concentrations.

39. EOD Incident. The suspected or detected presence of explosive ordnance which constitutes a hazard to operations, installation, personnel or material.

40. EOD Procedure. Any particular course or mode of action taken by qualified EOD personnel to render safe, disassemble, neutralize or dispose of explosive ordnance items to preclude a detonation or munitions function.

41. Improvised Explosive Devices. Those devices placed or fabricated in an improvised manner incorporating explosives or destructive, lethal, noxious, pyrotechnic or incendiary chemicals, designed to destroy, disfigure, distract or harass.

42. Flammable Liquid. Any liquid having a flash point below 100 degrees Fahrenheit and a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 degrees Fahrenheit, and any liquid of lesser hazard when artificially heated or atomized so as to increase the ignition hazard.

43. Guided Missile. An unmanned vehicle designed as a weapon that travels above the surface of the earth along a course or trajectory that can be altered by an automatic or remotely controlled mechanism within the vehicle itself. The missile normally is destroyed in carrying out its mission.

44. Hangfire. A brief, undesirable delay in the functioning of an ammunition item after initiating action is taken. Usually refers to delay in ignition of a propelling charge in a gun, missile motor or rocket launcher.

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45. Hazard. Any condition which may cause an accident or contribute to the severity of an accident. For purposes of classification, four general types of hazards are recognized in connection with ammunition and explosives. These are mass explosion hazard, mass fire hazard, non-mass-detonating (fragmenting) hazard and moderate fire, no blast hazard.

46. HERO EMCON. Control of all electromagnetic radiation and emitters, including electronic communications and radar to protect ordnance containing EED. During HERO conditions, no electronic emitting device within the designated bands will be operated without the permission of the Commanding Officer.

47. HERO SAFE Ordnance. Any ordnance item that is sufficiently shielded or otherwise protected that all EED/CAD contained by the item are immune to adverse effects (safety or reliability) when the item is employed in its expected RF environments, provided general HERO requirements are observed.

48. HERO SUSCEPTIBLE Ordnance System. Any ordnance system proved by test to contain EED/CAD that can be adversely affected by RF energy to the point that the safety and/or reliability of the system is in jeopardy when the system is employed in expected RF environments.

49. HERO UNSAFE Ordnance. Any ordnance item is defined as being HERO UNSAFE when its internal wiring is physically exposed; when tests are being conducted on the item that result in additional electrical connections to the item; when EEDs/CADs having exposed wire leads are present and when the item is in a disassembled condition. Ordnance items that fall into the above classification may be exempt from being classified as HERO UNSAFE ordnance as the result of a HERO test conducted to determine specific susceptibility.

50. Hung Weapons. Airborne weapons which cannot be fired or dropped because of weapon, rack or circuit malfunction and one or more attempts have been made to fire or drop the weapons.

51. Hypergolic. Term applied to the self-ignition of a fuel and an oxidized upon mixing with each other without a spark or other external aid.

52. Inert/Dummy Ammunition. An ammunition item or component whose explosive material has been replaced by inert material, but may contain a small amount of tracer material.

53. Inert/AEPS/CADS. A certified condition of an AEPS or CAD thereof, which contains no explosive, pyrotechnic or chemical agent as determined by an EOD inspector.

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54. Inert Components. The parts of ammunition which do not contain explosives, active chemicals or pyrotechnics.
55. Inert Material. Material that contains no explosives, active chemicals or pyrotechnics.
56. Inhabited Building. A building or structure, other than an explosive operating building, used in whole or in part as a habitation or place of assembly by human beings.
57. Inhabited Building Distance. The minimum distance permitted between an inhabited building and an ammunition or explosives location for protection of administration, quarter, industrial and other similar areas within a naval shore establishment. Inhabited building distance will be provided between ammunition or explosives locations, and the boundary of ashore establishment or the nearest point beyond the boundary where such inhabited buildings could be erected.
58. Loading (re-arming). An operation that installs airborne weapons and stores on or in an aircraft and may include fuzing of bombs and stray voltage checks.
59. Loading/Downloading Area. A designated area in which replenishment of airborne weapons or stores and other armament items on or in an aircraft is conducted.
60. Loading Area (cargo). A designated area for loading or offloading explosives from cargo aircraft.
61. Magazine. A structure designed and specifically designated for the storage of explosives, ammunition or explosive loaded components.
62. Magazine Area. The area on shore bases surrounding a magazine or group of magazines. The term is used to denote the areas adjoining or surrounding explosive storage where freedom of action is restricted in the interests of safety.
63. Misfire. Failure of an item of ammunition to fire after initiating action has been taken.
64. Ordnance. Military material such as combat weapons of all kinds with ammunition and equipment required for their use. Ordnance includes all the things that make up a ship's or aircraft's armament (i.e., guns, ammunition and all equipment needed to control, operate and support the weapons).
65. Practice/Training Ammunition. An ammunition item conforming to the configuration of the service item. There may be a modification of a service (tactical) item or be designed specifically for practice. It is used in training associated with firing, launching, flying, repositioning or dropping

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operations. It may contain an explosive and/or propellant. Practice ammunition may either be expendable or recoverable, depending upon the device involved.

66. Propellant. That which provides the energy required for propelling a projectile. Specifically, an explosive charge for propelling a bullet, shell, or the like; also a fuel, either solid or liquid, for propelling a rocket or missile.

67. Pyrotechnics. Ammunition containing compositions designed to produce illumination, or colored lights and smokes for marking or signaling, or incendiary effects or smoke screens, or military fire-works. Pyrotechnic compositions are mixtures of oxidizing materials and other ingredients such as binders and coloring agents.

68. Quantity-Distance. The quantity of explosives material and distance separation relationships which provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate quantity-distance tables. Distances greater than those shown in the tables should be used wherever practicable.

69. Ready Service Magazine. A standard magazine located in the magazine area, or near the weapons or area to be served on board the station, and used for the temporary storage of restricted amounts of ammunition for emergency use; or in an operating line for limited amounts of explosives or components used in the production of ammunition.

70. Rocket. A missile which derives its thrust from ejection of hot gases generated from propellants carried in the missile motor.

71. Rocket Engine. Self-contained rocket propulsion unit containing an oxidized and a fuel, each separated by an aluminum or stainless steel wall, and utilizing liquid rather than solid propellant material.

72. Rocket Motor. Portion of a rocket loaded with propellant.

73. Rocket Warhead. That portion of the rocket loaded with high explosives, chemicals, pyrotechnics or inert material.

74. Safe Working Load. The maximum weight in pounds which should be lifted by handling equipment such as cranes, slings, forklift trucks, beams and similar handling equipment. The safe working load will be marked on the lifting equipment.

75. Service Magazine. A building of an operating line used for the intermediate storage of explosive materials.

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76. Small Arms Ammunition. Ammunition for small arms (i.e., all ammunition up to, and including .50 caliber, and all gauges of shotgun shells). It also includes 14.5MM and 20MM ammunition which does not have high explosive or incendiary loaded projectiles.

77. Supervisor. Any employee, officer or petty officer designated by the Commanding Officer, Ordnance Officer or other Department Head to oversee and inspect personnel and employees and their operations.

78. Support Facilities. Ammunition and explosives storage or operations which solely support the function or tactical using units as distinguished for storage depots or manufacturing facilities.

79. Training Evolution. An event conducted at the command or unit level to attain technical or administrative proficiency of personnel in the maintenance, handling, preparation or use of explosives ordnance items, components and associated test, handling and production equipment.

80. Unexpended Weapons. Airborne weapons/stores that have not been subjected to attempts to fire or drop. They are presumed to be in normal operation condition and can be fired or jettisoned if necessary.

81. Unserviceable Ammunition. Ammunition reclassified as unserviceable because of a change in expected service or shelf life, or due to deterioration or damage. Unserviceable ammunition is identified by:

a. NAVSEA through issue of NAR and TW025-AA-ORD-010 (Formerly OD 17190), "Ammunition Unserviceable, Suspended and Limited Use."

b. Inspection which may reveal defective ammunition such as:

(1) Improper seating of fuse in rocket warheads.

(2) Warheads that are cracked, dented, bent and with recesses which are corroded.

(3) Ruptured missile seeker heads.

(4) Dented or deformed pyrotechnics.

(5) Leaking chemical ammunition.

(6) Exudate or other leakage from ammunition items.

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c. Reports of ammunition or components dropped five feet or more (two feet for rockets/rocket motors or missiles/missile motors).

82. Warhead. That part of a missile, projectile, torpedo, rocket or other munitions which contains either the nuclear or thermonuclear system, high-explosive system, chemical agents or inert materials intended to inflict damage. Rocket-assisted projectiles and rocket warheads without motors are designated as warheads.

## APPENDIX B

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## TECHNICAL PUBLICATIONS AND DIRECTIVES

NAVAIR DIRECTIVES

NAVAIR 00-80R-19	USN Fire Fighting and Rescue Manual
NAVAIR 00-80T-103	NATOPS Conventional Weapons Handling Procedures Manual (ASHORE)
NAVAIR 01-700	Airborne Weapons Stores Publication Index (Issued Quarterly)
NAVAIR 01-AIM9-2.1	MIM AIM-9 Series Sidewinder
NAVAIR 11-140-6.1-1	MIM AIM-7 Series Sparrow
NAVAIR 11-140.6.2.5	MIM AGM-84 Harpoon
NAVAIR 11-140-10-1	Guided Bomb Unit
NAVAIR 11-140-10-6	Guided Bomb Unit
NAVAIR 11-1F-2	Airborne Bomb and Rocket FUSE Manual
NAVAIR 11-5A-17	Bombs and Associated Components
NAVAIR 11-15-7.1	Pyrotechnic Screening and Marking Devices
NAVAIR 11-75A-92	LAU-68 Rocket Dispenser
NAVAIR 11-100-1.1	Cartridge and Cartridge Actuated Devices
NAVAIR 11-120A-1.1	Weapons Packaging, Handling, Stowage
NAVAIR 11-120A-1.2	Weapons Packaging, Handling, Stowage
NAVAIR 11-140-5	Bomb Assembly Manual (MK-80 Series)
NAVAIR 16-1-529	RADHAZ HERO Manual (also issued as OP 3565)
NAVAIR 19-15BC-12	Aero 12C Weapons Skid
NAVAIR 19-25E-66	Aero 191 Weapons Skid
NAVAIR 19-25E-51	Aero 51 Weapons Trailer
NAVAIR 19-25E-61	MHU-126 Weapons Trailer
NAVAIR 19-25E-63	MHU-151/M Munitions Trailer
NAVAIR 19-100-2	Approved Ordnance Handling Equipment
NAVAIR 19-600-63-6-1	PMS/Preop Aero 51 Weapons Trailer
NAVAIR 19-600-226-6-1/2	PMS/Preop Aero 191 Skid w/Adapters
NAVAIR 19-600-96-6-1/-4	PMS/Preop Aero 12C Skid w/Adapters
NAVAIR 19-600-97-6-1/-4	PMS/Preop Aero 16B Skid w/Adapters
NAVAIR 19-600-101-6-1/-4	PMS/Preop MK-7 Bomb Trailer
NAVAIR 19-600-145-6-1/-2	PMS/Preop Munitions Set A/M32K-5
NAVAIR 19-600-148-6-1/-2	PMS/Preop LALS
NAVAIR 19-600-162-6-1/-2	PMS/Preop MHU-126 Bomb Trailer
NAVAIR 19-600-169-6-1/-2	PMS/Preop Aero 61 Sling
NAVAIR 19-600-185-6-1/-2	PMS/Preop MHU-151/M Bomb Trailer
NAVAIR 19-600-186-6-1	PMS/Preop A/532A-30 Tow Tractor
NAVAIR 19-600-189-6-1	PMS/Preop MHU-171/E Trailer
NAVAIRINST 9460.1	Series Policy and Procedures for Air Launched Missile Repairable Material Movement
NAVSEA OP-5 Vol 1 and 2	Ammunition and Explosives Ashore Regulations for Handling, Storing, Production, Renovation and Shipping

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NAVSEA DIRECTIVES

NAVSEA OP-1014	Ordnance Safety Precautions Their Origin and Necessity
NAVSEA OP-2173 Vol 1 and 2	Catalog of Ordnance Handling Equipment
NAVSEA OP-2165 Vol 1 and 2	Navy Transportation Safety Handbook
NAVSEA OP-2217	Miscellaneous Chemical Munitions (NAVSEA SW073-AC MMA-010)
NAVSEA OP-2238	Identification of Ammunition
NAVSEA OP-2239	Explosive Driver's Handbook
NAVSEA OP-2793	Toxic Hazards of Pyrotechnics
NAVSEA OP-3199 Vol 1 and 2	Safety Precautions for Liquid Propellants
NAVSEA OP-3347	USN Ordnance Safety Precautions
NAVAIR 16-1-529	HERO Manual
NAVSEA OP-4098	Handling Ammunition with MHE
NAVSEA OP-4461	On-Station Transportation of Ammunition
NAVSEA QAP 100	Quality Assurance Procedures for Fleet Activities
NAVSEA SG420-AP-MMA-010	Testing of Ordnance Handling
TWO10-AA-ORD-030	Navy Ammunition Logistics Code
TWO10-AA-ORD-010	Ammunition Unserviceable, Suspended, and Limited use
NAVSEAINST 4570.1	Demolition and Disposal of Ammunition
NAVSEAINST 8370.2	Small Arms and Weapons Management Policy and Guidance Manual

OPNAV DIRECTIVES

OPNAVINST 3100.6	Special Incident Reporting (OPREF 3) Procedures
OPNAVINST 3591.1	Small Arms Training and Qualifications
OPNAVINST 4790.2	Naval Aviation Maintenance
OPNAVINST 5100.23	Naval Occupational Safety and Health Program Manual
OPNAVINST 5102.1	Accident, Investigation and Reporting
OPNAVINST 5530.13	DoN Physical Security for Sensitive Arms, Ammunition, Explosives
OPNAVINST 5530.14	Physical Security Manual
OPNAVINST 8020.14	USN Explosive Safety Policies, Requirements and Procedures
OPNAVINST 8000.16	Naval Aviation Weapons Maintenance Program

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OPNAVINST 8023.24

Navy Personnel Ammunition and  
Explosives Handling Qualification  
and Certification Program  
(QUAL/CERT)

FLTCOM DIRECTIVES

COMLANTFLTINST 8010.4

Series Fleet Ammunition  
Requisitioning Guide

COMLANTFLTINST 8027.3

Series Explosive Ordnance Disposal

COMNAVAIRLANT

COMNAVAIRLANTINST 8023.5

Series Conventional Aviation  
Ordnance Qualification and  
Certification Program

CSFWP/CSFWL

CSFWP/CSFWLINST 8023.1

F/A-18 Joint Wing Ammunition And  
Explosive Handling Qualification  
Training Plan

NAVSUP DIRECTIVES

NAVSUPINST 4440.115

Physical Inventory

NAVSUPINST 4600.70

Military Traffic Management  
Regulations

NAVSUPINST 4610.33

Reporting of Transportation  
Discrepancies in Shipment

NAVSUP PUB 437

MILSTRIP/MILSTRAP Operating  
Procedures Manual

NAVSUP PUB 505

Package and Handling of  
Dangerous Materials for  
Transportation by Military  
Aircraft-Preparation for  
Hazardous Material for  
Military Shipment

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APPENDIX C

MATERIALS POTENTIALLY PRESENTING A POTENTIAL EXPLOSIVE HAZARD  
(MPPEH) PROCEDURES

- Ref: (a) DoD 4160.21-M Series  
(b) DoD 4160.21-M-1 Series  
(c) DoD Policy to Implement the EPA's Military Munitions Rule of Jul 98  
(d) NAVSEA OP-5  
(e) NAVSUP P-724  
(f) OPNAVINST 5090.1

1. This SOP provides policy, guidance and direction to station and tenant commands relating to the issue, receipt, handling, stowage, segregation, packaging and shipping of Materials Presenting a Potential Explosive Hazard (MPPEH) for turn in to either the Defense Reutilization and Marketing Office (DRMO) or the local Qualified Recycling Program (QRP) as appropriate for disposal through sales.

2. This SOP is applicable to NAS Oceana and NAS Oceana, Dam Neck Annex departments, tenant commands and contractor personnel who generate MPPEH residues.

3. Generating activities must exercise extreme care in the disposal of property that is potentially dangerous to public health, safety and environment. Reference (a) establishes requirements for the inspection, certification and turn in of MPPEH residue to a DRMO/QRP. Reference (b) establishes requirements for the demilitarization of MPPEH residue. This instruction provides a standard for any operation involving MPPEH residue that is to be turned in to a DRMO/QRP.

4. Requirements

a. All MPPEH residue shall be managed strictly in accordance with this SOP.

b. This SOP applies to military and civilian departments and tenants that turn in MPPEH residue on board NAS Oceana that originated from DoD issued ammunition and explosives (A&E).

c. If a munition or munitions component becomes a Waste Military Munition (WMM), references (c) through (f) apply.

5. Responsibilities

a. NAS Oceana departments, tenants and contractors responsible for managing MPPEH shall:

(1) Ensure that MPPEH residue is properly inspected to determine the presence or absence of explosive hazards prior to

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referral to the DRMO/QRP. This certification process can only be used on those items that can be 100 percent visually inspected (all surfaces; no blind crevices).

(2) Ensure that personnel certifying the MPPEH residue inert are appropriately qualified to do so. As an example, Security personnel should be at least an E-5 with small arms qualifications and/or hold a Gunner's Mate rate. Commercial contractors responsible for certifying MPPEH residue must possess qualifications equal to those of technically qualified DoD personnel.

(3) Ensure that all personnel certified/authorized to turn in MPPEH residue have been designated in writing by their respective Commanding Officer or Officer-In-Charge, and have provided a sample of their signature to DRMO/QRP and the activity's Explosives Safety Office. Figure C-1 provides an example of a turn in authorization letter.

(4) Individuals that are designated will clearly print or type the following statement on DD Form 1348-1A and affix it in a weatherproof, transparent sleeve to the outside of the container:

**"The material listed on this form has been inspected or processed by DDESB-approved means, as required by DoD policy, and to the best of my knowledge and belief does not pose an explosive hazard."**

Certifications require dual signatures. The first signer (certifier) may be either a qualified DoD person or qualified contractor. The second signer (verifier), in addition to being technically qualified, must be a DoD person and a U.S. citizen. Certification and verification signatures must be directly above the typed or clearly stamped or legibly printed full name, rank/rate, complete organization name and address, and phone number (commercial and DSN) of the personnel that certified and verified the inspection.

(5) Ensure all MPPEH residue is demilitarized in accordance with reference (b).

(6) All MPPEH residue will be secured in sealable containers (ammunition cans or steel barrels) and stored indoors. In no case will water or moisture be allowed into the containers. Partially filled containers of inert certified MPPEH will be labeled and secured between filling events.

(7) All MPPEH residue (i.e., inert small arms spent brass casings .50 caliber or smaller; lead; mixed metals; shrapnel which is in a form that is unrecognizable from its original configuration, etc.) will be turned in to the local QRP via the NAVFAC Integrated Solid Waste Site Manager, 433-2454.

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All other MPPEH (i.e., expended casings larger than .50 caliber/13 mm, shotgun shells, CADs and PADs (must be segregated by caliber or type)) will be turned into DRMO. Turn in will be accomplished using the Electronic Turn In Document (ETID) process. The 1348-1A form must indicate both the container tare weight and gross weight (including contents). In addition, the 1348-1A shall be annotated as follows:

(a) In the Nomenclature block (Block 17) - specific caliber (i.e., 9mm expended)

(b) In the NSN block (Block 25) - SCRAP FIRED BRASS

DRMO St. Jullians Creek, Portsmouth, Virginia Disposition Services point of contact can be reached at 396-0447, ext. 115 or additional information can be located at <http://www.dispositionservices.dla.mil/>.

(8) All MPPEH residue items (spent brass) will be segregated by metal type and caliber (i.e., 9mm, shotgun, .45, etc.) and placed in different containers. Commingling of weapons calibers and different metals in the same container is prohibited by DRMO/QRP regulation.

(9) Tenants utilizing non-DoD Ammunition, Arms and Explosives (AA&E) are responsible for the prompt and appropriate disposal of AA&E residue off-station.

(10) Designated personnel, only when directed, can turn in to DRMO/QRP expended brass, lead bullets from small arms training, empty munitions containers and other non-explosive components. Contact Explosives Ordnance Disposal (EOD) for all other ordnance or items to determine if they are free of hazardous material prior to turn in. EOD Mobile Unit 2 DET Norfolk can be reached at 462-1471 (for emergency only, call 433-9111).

(11) Organizations shall ensure that the DRMO/QRP is aware that all material generated from Ammunition, Explosive and Dangerous Articles, even though properly inspected and rendered free of energetic material/residue, cannot be mingled with other types of material, including scrap when transferred to DRMO/QRP.

(12) All ammunition container markings shall be painted over, so that no markings are seen prior to disposal of container. All empty containers will be certified empty prior to turn in. Empty boxes of ammunition shall be identified by stenciling the word EMPTY in approximately one-inch letters on both ends, and at least one side of the container. See paragraph 13 to 15 of reference (d) for additional guidance on this issue.

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b. Officer in Charge, EOD Mobile Unit 2 DET Norfolk shall provide response and guidance in the event of any questions regarding accurate screening and certification of MPPEH.

c. NAVFAC Integrated Solid Waste Site Manager, 433-2454, shall provide direction and guidance for compliance with MPPEH recycling requirements and regulations.

d. DRMO Norfolk Receiving Branch shall accept material defined above and verify that the 1348-1A is properly documented and correctly signed.

e. Public Works Center, Facility Support shall ensure contractors comply with the provisions of this instruction.

(13) For additional information on proper disposal procedures, contact Naval Facilities Engineering Command Mid-Atlantic Environmental Office, at 341-0406.

(14) The Installation Commanding Officer, ESO, EOD and Activity Commanding Officer must be notified of any improper disposal.

