



UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
BOX 99100  
YUMA, ARIZONA 85369-9100

StaO 8023.2  
3ED1  
08 AUG 1990

STATION ORDER 8023.2

From: Commanding Officer  
To: Distribution List

Subj: PROCEDURES FOR THE DEVELOPMENT OF STANDARD OPERATING PROCEDURES  
(SOP) FOR THE PROCESSING OF EXPENDABLE ORDNANCE

Ref: (a) NAVSEAINST 8023.11  
(b) NAVSEA OP 5 VOL 1  
(c) MCO 8020.10

Encl: (1) SOP Format and Content  
(2) Checklist for SOP's

1. Purpose. To provide policy, guidance and direction for developing and using SOPs for the processing of expendable (non-nuclear) ordnance at Marine Corps Air Station Yuma, per the references.

2. Scope. Reference (a) requires all Naval and Marine Corps activities develop written procedures (SOPs). This order provides a standard for writing the subject SOPs. SOPs are not intended to substitute for Ordnance Pamphlets (OPs) or other technical documentation, but to encompass them and provide direction to the site where operations are performed. This order applies to all operations where explosives are handled, transported or stored. It applies whether the work is performed by Marine or contractor personnel at a government owned activity or by Marine personnel at other activities. The following processes are included:

a. Recurring processing of expendable (non-nuclear) ordnance and/or their components. This includes processing of parts and ingredients intended to be used in the all-up-round configuration.

b. Recurring or non-recurring processes involving the testing of explosives, components or ammunition.

c. Recurring processing involving the handling, transporting and storage of ordnance or explosives.

d. Non-emergency explosive ordnance disposal.

e. Training involving live ordnance.

08 AUG 1996

The following processes are exempt from specific provisions of this order but remain subject to the requirements of reference (b): Emergency explosive ordnance disposal performed by EOD personnel; expendable ordnance processing performed by operating forces aboard ship, deployed airfield or performed at squadron level aboard Marine Corps Air Stations for which a Naval Air Systems Command Conventional Weapons Checklist is published.

3. Definition of Terms. Enclosure (1) of reference (a) lists definitions of terms used in this order.

4. Policy. Approval authority for SOPs and changes to SOPs is delegated to the Department Head responsible for the operation. The Explosive Safety Officer will review each SOP or change prior to the Department Head approval.

a. SOPs expire four years from the date of approval. A complete review and approval process will be performed prior to the reissue of expired SOPs.

b. SOPs will be reviewed by the developer of the SOP whenever there is a change to the source documentation of a SOP.

c. SOPs will be reviewed annually by workers and the immediate supervisor of the process.

d. Enclosure (2) of reference (a) contains a list of basic publications, instructions and documents which may be used in preparing SOPs.

e. SOPs will follow the format of enclosure (1). Enclosure (3) of reference (a) provides additional guidance concerning the content of SOPs.

f. SOPs are to be maintained in the work areas for worker's use. To minimize the bulk of the SOP, management information shall not be part of or appended to SOPs.

g. Validation is a demonstration that the SOP is correct and will result in a safe, effective and efficient operation. All validations will be documented using enclosure (2).

5. Action. Commanding Officers of each activity under the scope of this order shall:

a. Ensure full compliance within the activity with the policy, guidance and direction of reference (a).

StaO 8023.2  
08 AUG 1996

b. Ensure all new SOPs and major changes to SOPs for ongoing ordnance processing are developed, approved and maintained per reference (a).

6. Concurrence. The Commanding Officers of MAG-13, 1ST LAAM BN, MACS-7, VMFT-401, MWSS-371, CSSD-16, and MAWTS-1 concur in and make this directive applicable to all units aboard MCAS Yuma.



W. J. GUDDECK

By direction

Distribution: B

SOP FORMAT AND CONTENT

Each SOP shall contain the following:

1. Record of Approval. This record contains spaces for signature and dating by personnel internal to the processing activity who developed, reviewed and approved the SOP. Example:

Submitted: _____	Date: _____
Developer/Verifier	
Reviewed: _____	Date: _____
Explosive Safety Officer	
Approved: _____	Date: _____
Department Head	

2. Supervisor's Statement. Every process covered by an SOP must have a designated supervisor who is responsible to manage the operation. This statement indicates that the supervisor clearly understands the duties with regard to the SOP. The supervisor must review the SOP and sign the statement when they are first assigned responsibility for a process. This requirement also applies to an acting supervisor when the regular supervisor is absent. During recurring processing, the supervisor must sign the statement upon their annual review of the SOP. A suggested supervisor's statement follows:

Process Supervisor's Statement

I have read and understand this SOP. To the best of my knowledge, the process described within the SOP can be done in a safe, healthful and environmentally sound manner. I have made sure all persons assigned to this process are qualified and have read and understand the requirements of this SOP and have signed the worker's statement for this process. I will conduct an annual review of this SOP during recurring processing. If deviations from this SOP are necessary I will ensure that this process is stopped until the SOP is revised and approved. If unexpected safety, health or environmental hazards are found, I will make sure this process is stopped until the hazards have been eliminated.

Supervisor's Name	Date	Supervisor's Name	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Worker's Statement. This statement indicates that the worker clearly understands their duties regarding the operations in the SOP. The worker must review the SOP and sign the statement to be authorized to train or work under the SOP. A suggested worker's statement follows:

Worker's Statement

I have read this SOP and I have received and understand the hazard control briefing. I will follow this SOP unless I identify a hazard not addressed or encounter an operation I do not understand. If that occurs, I will stop this process and notify my immediate supervisor of the problem.

Worker's Name	Date	Worker's Name	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

4. Step-By-Step Procedures. Provide the worker with clear and concise step-by-step instructions for performing the process. The SOP shall be kept in the work area with the procedures readily available for the use of the worker performing the process. Ordnance Pamphlets, technical manuals and drawings, or other documents defining operations may be attached to this section of the SOP. The relevant sections must not contain extraneous instructions for processes not relevant to the SOP. The worker must not be required to leave the work station to locate other references nor jump haphazardly from section to section in order to perform the process safely and correctly. Documents which form part of the SOP must be reviewed during SOP development. Changes to these documents must be considered to be changes to the SOP. SOPs may contain technical instructions for which changes are expected to be routine. The SOP must document both the allowable variation limits and the process of approval for variations within the limits authorized by the SOP.

5. Diagrams

a. Building or Site Diagrams. This is a diagram of the processing building or site showing the location of various safety-related items with respect to the work station. Safety-related items include fire extinguishers, fire suppression systems, eye wash station, emergency showers, first aid kits, spill cleanup kits, ventilation systems or stations, clearly illustrated explosive and personnel limits, evacuation routes and emergency exits. This information may be provided as posted fire bills or spill contingency plans. Posted information will be reviewed concurrently with the SOP.

ENCLOSURE (1)

b. Processing Diagram. This diagram includes information needed to clarify or amplify the information provided in the step-by-step procedures. Often this will take the form of a diagram using locally standardized symbols to indicate steps in the flow of materials through the various processing stages.

6. Equipment List

a. Processing Equipment List. Provides a list of all the approved tools, equipment, items and supplies (hand tools, power tools, gauges and meters, handling equipment, consumables, etc.) which are or may be used in the processing.

b. Safety Equipment List. Provides a list of all the safety equipment (including personal protective equipment) and systems which must be in place and working properly in order to protect the safety of personnel, equipment, facilities and the environment during the process.

7. Hazards, Hazards Control and Hazards Control Briefings

a. The SOP shall document all hazards and hazard control methods applicable to the process. This information shall form the basis for two types of hazard control briefings. The briefings shall be part of the SOP and records maintained of each briefing conducted.

(1) Type I: All inclusive. Addresses the process and describes the hazards and control methods that the worker may encounter. Can involve video recordings, computer based instructions, and testing and is normally given off-line. Must be given prior to employee assignment as worker or trainee and is a prerequisite to personnel certification.

(2) Type II: Addresses the operation and work area. Describes the hazards and control methods that the worker will encounter. This "stand up" or refresher briefing may be on-line and is given monthly or when the SOP is changed.

b. The SOP shall:

(1) List and explain the nature of each hazard and hazardous material which may be used, produced or encountered during the processing and which may have adverse impact on the worker, equipment or environment. For hazardous materials used or consumed in the processing, life cycle information (raw materials, composition changes, end products, by-products and waste) may be included.

ENCLOSURE (1)

08 AUG 1996

(2) List the measures required to avoid or minimize exposure to such hazard or hazardous material.

(3) List the symptoms which indicate unacceptable exposure of the worker, equipment, facility or environment to each hazard or hazardous material.

(4) List the remedial actions required to relieve the immediate symptoms and restore the worker's health should exposure to an unacceptable hazard or hazardous material occur.

(5) List the actions required to decontaminate and restore the equipment and facility to a safe working condition should exposure to an unacceptable hazard or hazardous material occur.

Where applicable, Material Safety Data Sheet (MSDS) information must be included in the SOP.

8. Emergency Response and Contingency Plans. This provides the workers with the following information:

a. Lists each of the accident or incidents (fire, spill, explosion, runaway action, release of hazardous vapors, mechanical failure, injury, etc.) which could occur during processing and which would require immediate action to control.

b. Lists a single point of contact that the worker should notify in case of each accident or incident.

c. Lists initial and follow-up actions that the worker should take in case of each accident or incident.

9. Security. This provides the worker with all of the requirements necessary to maintain physical security, accountability and disposition control of expendable ordnance end items and inherent components, hazardous materials, tools and equipment items. It also instructs the worker on measures to prevent unauthorized disclosure of classified material.

ENCLOSURE (1)

CHECKLIST FOR SOP'S

The following checklist should be used to determine if a SOP is in compliance with NAVAIRINST 8023.11.

	YES	NO
1. Did the Commanding Officer of the Activity approve the SOP?	_____	_____
2. Is delegation authority in writing?	_____	_____
3. Did the immediate Supervisor review the SOP annually/restart of a process ?	_____	_____
4. Did the developer of the SOP review it after a change to source documentation?	_____	_____
5. Is there a record of approval?	_____	_____
6. Does it have the Developer's, Supervisor's, Commanding Officer's signature?	_____	_____
7. Is there a Supervisor's statement?	_____	_____
8. Are there acting supervisor's statement signatures?	_____	_____
9. Did the Supervisor resign the statement at the time of annual review?	_____	_____
10. Have <u>all</u> workers signed the worker's statement?	_____	_____
11. Does the SOP have step by step procedures to perform the operation?	_____	_____
12. Does the SOP have site diagrams showing locations of safety related items (i.e. fire ext, firstaid kit, eyewash station)?	_____	_____
13. Does the diagram show personnel limits, evacuation routes, emergency exits?	_____	_____
14. Does the SOP have a processing diagram?	_____	_____
15. Does the SOP have a list of <u>approved</u> tools to be used during the process?	_____	_____

ENCLOSURE (2)

08 AUG 1996

- 16. Does the SOP have a list of all safety equipment to be used during the process? \_\_\_\_\_
- 17. Has an all-inclusive hazard control brief been given to all workers and documented? \_\_\_\_\_
- 18. Has the hazard brief been given monthly for the operation and documented? \_\_\_\_\_
- 19. Does the SOP list and explain all hazards which may be encountered during the process? \_\_\_\_\_
- 20. Does the SOP list measures to avoid and/or minimize exposure to the hazard? \_\_\_\_\_
- 21. Does the SOP list symptoms which indicate unacceptable exposure to hazards? \_\_\_\_\_
- 22. Does the SOP list the remedial procedures to restore the worker's health? \_\_\_\_\_
- 23. Does the SOP list the remedial procedures to restore the work area to a safe working condition? \_\_\_\_\_
- 24. Does the SOP have emergency response procedures? \_\_\_\_\_
- 25. Does the SOP contain a list of incidents that could occur? \_\_\_\_\_
- 26. Does the SOP list a point of contact in case of a incident/accident? \_\_\_\_\_
- 27. Does the SOP list follow up action the worker should take? \_\_\_\_\_
- 28. Does the SOP address physical security aspects of the operation (i.e. tool control, control of expendable ordnance, etc.)? \_\_\_\_\_

ENCLOSURE (2)