BY ORDER OF THE
SECRETARY OF THE AIR FORCE

FLIGHT OPERATING INSTRUCTION
32-3002

15 September 2020

EXPLOSIVE ORDNANCE DISPOSAL (EOD) DEMOLITION RANGE PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This Flight Operating Instruction (FOI) is available digitally on the shared drive.

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Supersedes EOD FOI 32-3001, 23 January 2019

Pages: 21
Distribution: X

This instruction implements AFPD 32-30, Explosive Ordnance Disposal, as well as a memorandum from PACAF/SEW rescinding compensatory measures from Andersen-06-S60CM05 and supplements procedures contained in 36 Wing Instruction 13-204, Airfield Operations. It establishes procedures for the safe operation of the EOD Demolition Range. This instruction applies to all military, civilian, and local law enforcement organizations and members; assigned, TDY, or deployed to Andersen AFB (including AFRC or ANG units or members). This publication may not be supplemented by lower organizational elements.

SUMMARY OF REVISIONS

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Changes to this edition are primarily grammatical and reflect the new updated references.
Added Para 3.6. to the Range Safety Brief addressing smoking on the range.
Added Flight Chief Risk Assessment requirement to Range Notifications.
Range Safety Brief was formatted to look more professional and better reflect its inclusion in the AF TTP.

1. References:

1.1. Explosive Site Plan Requests, Explosives Ordnance Disposal (EOD) Fragmenting Demolition Range, EOD Demolition Control Site, and Aboveground Magazine, Andersen AFB, Guam (PACAF-Andersen 06-S060, 07-S004 and 07-S005), 27 Sep 2007

1.2. Explosive Site Plan, (PACAF-Andersen 06-S060, 07-S04 and 07-S05) EOD Disposal Range, 27 Sep 2007

1.3. AFMAN 32.3001, Explosive Ordnance Disposal Program, 26 April 2019

1.4. Technical Order 60A-1-1-4, Protection of Personnel and Property, 2 May 2015

1.5. Technical Order 60A-1-1-31, General Info on EOD Disposal Procedures, 9 Dec 2014

1.6. AFMAN 91-201, Explosive Safety Standards, PACAF Supplement, 9 June 2017

1.7. 36 WGI 13-204, Airfield Operations, 27 April 2015

1.8. Air Force Policy Directive 32-30, Explosive Ordnance Disposal, 25 July 2018

1.9. PACAF/SEW Memorandum of 17 Jul 2008, Subject: Rescission of Compensatory Measure

1.10. AF TTP 3-32.5. Volume 7, EOD Range Operations, 24 February 2015

2. General Information:

2.1. The EOD Demolition Range is intended for use by the EOD Flight for the demolition of hazardous/unserviceable munitions (emergency and routine), explosives, and for maintaining proficiency in general demolition procedures and the operation of explosive actuated EOD tool sets. Other agencies requiring range use must coordinate their request through the 36th Civil Engineer Squadron EOD Flight prior to use. Furthermore, agencies requesting range use will provide all equipment and materials required for the operation and will be escorted by an NCO possessing a senior (or higher) EOD badge or a certified 7-level assigned to the 36 CES EOD Flight.

2.2. The EOD Demolition Range is located on the northern coastline 8,000 feet west of Pati Point and 4,600 feet north of runway 06L/24R. The MGRS coordinates for the range demolition site are 55P BR 75750 04400. The range is also within the Combat Arms Training and Maintenance small arms firing range "footprint". CATM and EOD operation can be conducted simultaneously with proper coordination. Communications must be maintained with CATM personnel to ensure that no small arms firing is taking place while personnel are transiting to and from the EOD range on the access road. Coordination with CATM personnel is imperative prior to planning any operation. For planning purposes, Fridays are used for pre-scheduled and routine detonations since the CATM range is generally active Monday through Thursday.

2.3. The Mk-84 (2,000 pound) bomb was selected as the worst case fragment producing item; consequently, all items detonated on the range must have a fragmentation range less than that of a Mk-84 bomb.

2.4. The destruction area will be policed after every use. The reef and jungle area will be policed quarterly from the reef line to 100 feet east of the detonation area (see attachment 5).

2.5. A stand-by team will maintain radio communications with Fire/Crash if assisting during destruction operations to facilitate timely responses. In the event of an EOD response, range operations will cease until the stand-by team completes and reconstitutes from the response.

3. Personnel Limits:

3.1. The maximum number of personnel on range will be commensurate with a safe and

efficient operation, but will not be less than two qualified EOD personnel.

3.2. No visitors will be allowed on range during explosive operations. If visitors arrive, explosive operations will stop and an escort will be assigned and will not exceed a visitor to escort ratio of 1:5. The Range Safety Officer (RSO) may be the Escort, but only if there is a separate TL leading the operation (one person may not be all three, TL, RSO and Escort). All visitors will be off range before operations restart.

3.3. Only one supervisor and one worker will be present during priming operations.

4. Explosive Limits:

4.1. The range explosive limit is **600 pounds** NEW Hazard Class/Division 1.1 for any single detonation. This includes all demolition materials.

4.2. The range explosive limit for open burn is **100 pounds** NEW for any single operation. This includes all demolition materials.

5. Safety:

5.1. When conducting live explosive training, (e.g., tool use, inert ordnance destruction, or other demolition) emergency medical support must be available within 30 minutes while the operations are being performed.

5.2. Medical support during planned high-explosives operations (destruction of live munitions) is a mandatory safety requirement. Medical support personnel will remain in a designated safe area unless required for injury/incident response.

5.3. The range will not be used without permission of the 36 CES EOD Flight CC/Chief.

5.4. The EOD Range Book will be on-site during all operations and will contain at a minimum:

5.4.1. A copy of this instruction.

5.4.2. Technical Order 11A-1-42, General Instructions for Disposal of Conventional Munitions.

5.4.3. Technical Order 11A-1-66, General Instructions, Demolitions.

5.4.4. Flight Operating Instruction 32-3003, Transportation of Explosives.

5.5. The CATM and EOD range flags will be raised before conducting any explosive operations.

5.6. The RSO, the highest-ranking EOD personnel with minimum 7-skill level, will maintain positive control over all firing devices.

5.7. Demolition explosives and initiators will be separated and secured in bunkers, if feasible, when not in use.

5.8. For operations involving munitions greater than five inches in diameter, a minimum of 4 feet of dirt shall be placed on the munitions. All personnel working in facilities within 2,000 feet will be evacuated, if ordnance is buried.

5.9. A personnel protective bunker is located 1,250 feet west of the detonation point and must be utilized during all fragmentation producing operations.

5.10. The minimum withdrawal distance for non-essential personnel is 1,250 feet. This distance was selected since all detonations are conducted at the base of a 520-foot cliff and that cliff line channels fragments out to sea.

5.11. During all instances of lost communications, demolition operations will cease until communications are restored.

6. Misfire Procedures:

6.1. A **1-hour** wait time will be observed for all non-electric misfires. One EOD technician, with minimum senior EOD badge, will clear the misfire with another EOD technician serving as a safety observer.

6.2. A **30-minute** wait time will be observed for all electric misfires. One EOD technician, with minimum senior EOD badge will clear the misfire with another EOD technician serving as a safety observer.

6.3. Immediately notify the Andersen Tower and Airfield Management Operations (AMOPS) of any misfire that involves the restriction of airspace and the associated wait time.

7. Non-Fragmentation Producing Operations
***Applies to all planned detonations in excess of 300 pounds NEW.**

7.1. The EOD Flight Commander/Chief will designate a Team Leader for each operation. The senior EOD member present (minimum senior EOD badge) will serve as the RSO. The Team Leader and RSO may be the same individual if necessary due to manning constraints.

*7.2. **2-weeks** prior to the planned operation, the operation dates/times will be forwarded to Public Affairs for base newspaper and TV bulletin release. A template for the TV bulletin is located at shared drive: \\ajjy-fs-022v\36 CES\CED\2. Operations & Training\2a. Operations\04. Range\03. Range Ops\TV and Newspaper Template.

*7.3. **2-weeks** prior to the planned operation, an e-mail will be sent to the following distribution lists via the 36 CES/CC:

7.3.1. 36 WG/CC

7.3.2. 36 WG/GROUP CC's

7.3.3. 36 WG/Squadron CCs

7.3.4. Andersen Chief's Group

Sample Statement is below:

"The 36 CES Explosive Ordnance Disposal Flight will be destroying munitions at the EOD range from (time window) on (Day), (Date). As a safety precaution, Pati Beach, the CATM range, Tarague overlook, and some facilities on the North Ramp will be closed during this time. Please contact the 36 CES Explosive Ordnance Disposal Flight at 366-5198 for more information."

7.4. The Team Leader will ensure proper Above Ground Level (AGL) safe distance is calculated utilizing technical order 60A-1-1-4, AFMAN 91-201 and the Tactical Decision Aid. The AGL will be included on the range notification worksheet and can be found on shared drive: \\ajjy-fs-022v\36 CES\CED\2. Operations & Training\2a. Operations\04. Range\02. Range Notifications.

7.4.1. **72-hours** prior to a scheduled operation, a completed range notification worksheet will be emailed to the Andersen Tower, Air Field Management Operations, Guam Combined Control Facility (CCF), and the U.S. Coast Guard. U.S. Coast Guard & Environmental will in turn issue a "General Warning" to watercraft in the Tarague Basin.

7.5. If manning permits, standby team will remain in EOD Operations to facilitate coordination as needed. If manning is not available, the operation Team Leader will perform these duties from the range.

7.6. The operation Team Leader will:

7.6.1. Ensure all required notifications are recorded using attachment 1.

7.6.2. Conduct a safety briefing for all personnel prior to handling any explosives using attachment 4.

7.6.3. Ensure all required tools/equipment, vehicles and technical data are on-hand and functional prior to conducting explosive operations.

7.6.4. Maintain radio contact with either EOD Operations or Crash Control throughout the operation.

7.6.5. Perform a 360-degree visual scan of the area prior to any detonation. If water traffic is spotted within the required clear zone, contact EOD Operations. EOD Operations will contact the Coast Guard to report the incident and remove the vessel. If contact cannot be made, suspend operations until the water traffic departs to a safe distance.

7.6.6. Contact Andersen Tower and AMOPS 30 minutes prior to expected detonation.

7.6.7. Contact Andersen Tower and AMOPS 5 minutes prior to detonation.

7.6.8. Notify Andersen Tower and AMOPS after each detonation is complete and again when all detonations are complete for the day.

8. Fragmentation and Non-Fragmentation Producing Operations Involving Ordnance Less Than 300 Pounds

8.1. The EOD Flight Commander/Chief will designate a Team Leader for each operation. The senior EOD member present (minimum senior EOD badge) will serve as the RSO. The Team Leader and RSO may be the same individual if necessary due to manning constraints.

8.2. The Team Leader will ensure proper Above Ground Level (AGL) safe distance is calculated utilizing technical order 60A-1-1-4, AFMAN 91-201 and the Tactical Decision Aid. The AGL will be included on the range notification worksheet and can be found on shared drive: \\ajjy-fs-022v\36 CES\CED\2. Operations & Training\2a. Operations\04. Range\02. Range Notifications.

8.2.1. **72-hours** prior to a scheduled operation, a completed range notification worksheet will be emailed to the Andersen Tower, Air Field Management Operations, Guam Combined Control Facility (CCF), and the U.S. Coast Guard. U.S. Coast Guard will in turn issue a "General Warning" to watercraft in the Tarague Basin.

8.3. For operations with calculated fragmentation distances over 1,850 feet, EOD Team Leader will ensure the Tarague Overlook is clear of personnel. One EOD team member will be posted where 32nd street makes a sharp bend to the south by the MSA 2 fence (MGRS: 55P BR 05749 92917).

8.4. For emergency destruction operations, the 36 CES/CC will be notified by the most expeditious manner possible (e.g. phone, Land Mobile Radio (LMR), email) before initiation of the detonation, if possible.

8.5. The standby team will remain in EOD Operations to facilitate coordination.

8.6. The operation Team Leader will:

8.6.1. Ensure all required notifications are recorded using attachment 1.

8.6.2. Conduct a safety briefing for all personnel prior to handling any explosives using attachment 4.

8.6.3. Ensure all required tools/equipment, vehicles, and technical data are on-hand and in good working condition prior to conducting explosive operations.

8.6.4. Maintain radio contact with either EOD Operations or Crash Control throughout the operation.

8.6.5. Perform a 360-degree visual scan of the area prior to any detonation. If water traffic is spotted within the required clear zone, contact EOD Operations. EOD Operations will contact the Coast Guard to report the incident and remove the vessel. If contact cannot be made, suspend operations until the water traffic departs to a safe distance.

8.6.6. Contact Andersen Tower and AMOPS 30 minutes prior to expected detonation.

8.6.7. Contact Andersen Tower and AMOPS five minutes prior to detonation.

8.6.8. Notify Andersen Tower and AMOPS after each detonation is complete and again when all detonations are complete for the day.

9. Fragmentation Producing Operations Involving Ordnance Greater Than 300 Pounds

9.1. The EOD Flight Commander/Chief will designate a Team Leader for each operation. The senior EOD member present, minimum senior EOD badge, will serve as the RSO. The Team Leader and RSO can be the same individual if necessary due to manning constraints.

9.2. **2-weeks** prior to the planned operation, the operation dates/times will be forwarded to Public Affairs for base newspaper and TV bulletin release. A template for the TV bulletin is located on shared drive \\ajjy-fs-022v\36 CES\CED\2. Operations & Training\2a. Operations\04. Range\03. Range Ops\TV and Newspaper Template.

9.3. **2-weeks** prior to the planned operation, an e-mail will be sent to the following distribution lists via the 36 CES/CC:

9.3.1. 36 WG/CC

9.3.2. 36 WG/GROUP CC's

9.3.3. 36 WG/Squadron CCs

9.3.4. Andersen Chief's Group

Sample statement is below:

"The 36 CES Explosive Ordnance Disposal Flight will be destroying munitions at the EOD range from (time window) on (Day), (Date). As a safety precaution, Pati Beach, the CATM range, Tarague overlook, and some facilities on the North Ramp will be closed during this time. Please contact the 36 CES Explosive Ordnance Disposal flight at 366-5198 for more information."

9.4. Due to mission requirements, if any Commander cannot support on the requested day/time, notify the 36 CES/CC as soon as possible.

9.5. The Team Leader will ensure the proper Above Ground Level (AGL) safe distance is calculated utilizing technical order 60A-1-1-4, AFMAN 91-201 and the Tactical Decision Aid. The AGL will be included on the range notification worksheet and can be found on shared drive: \\ajjy-fs-022v\36 CES\CED\2. Operations & Training\2a. Operations\04. Range\02. Range Notifications.

9.5.1. **72-hours** prior to a scheduled operation, a completed range notification worksheet will be emailed to the Andersen Tower, Air Field Management Operations, Guam Combined Control Facility (CCF), and the U.S. Coast Guard. The Coast Guard will in turn issue a "General Warning" to watercraft in the Tarague Basin.

9.6. **Emergency destruction** operations will be coordinated through the 36 CES/CC in the most expeditious manner possible (e.g. phone, LMR, e-mail) before initiation of the detonation, if possible.

10. Day of Planned Operation Involving Buried Ordnance Greater than 300 Pounds

10.1. 36 SFS will:

10.1.1. Ensure all personnel on the CATM firing range complex are afforded frontal and overhead protection during detonation.

10.2. 36 CES will:

10.2.2. Direct the construction management office to account for and evacuate all contractors working inside the 2,000-foot arc.

11.8.3. Ensure that a 10K, AT front-end loader is available for range support.

10.3. The EOD Team Leader will:

10.3.1. Ensure all required notifications are recorded using attachment 1.

10.3.2. Verify evacuation is complete.

10.3.3. Conduct a safety briefing for all personnel prior to handling any explosives using attachment 4.

10.3.4. Ensure all required tools/equipment, vehicles, and technical data are on-hand and functional prior to conducting explosive operations.

10.3.5. Maintain radio contact with EOD Operations, Crash Control, and SFS throughout the operation.

10.3.6. Perform a 360-degree visual scan of the area prior to any detonation. If water traffic is spotted within the required clear zone, contact EOD Operations. EOD Operations will contact the Coast Guard to report the incident and remove the vessel. If contact cannot be made, suspend operations until the water traffic departs to a safe distance.

10.3.7. Position bombs/projectiles as close to the cliff line as possible. Refer to attachment 5.

10.3.8. Ensure general purpose bombs (i.e. M117, Mk 80-series, BLU-109, etc.) are placed perpendicular to and within three feet of the cliff line. Position base plate directly towards the Philippine Sea and nose directly into the cliff line. Remove lugs when possible, and angle strong backs towards the ground. Munitions items must be buried a minimum of 4 feet.

10.3.9. Contact Andersen Tower and AMOPS 30 minutes prior to expected detonation.

10.3.10. Contact Andersen Tower and AMOPS five minutes prior to detonation.

10.3.11. Notify Andersen Tower and AMOPS after each detonation is complete and again when all detonations are complete for the day.

10.3.12. After each detonation, EOD personnel will police the detonation area of explosive residue and inspect the integrity of the cliff face. When the area is cleared, the next bomb will be placed. If the cliff face is deemed unsafe, remaining operations will be delayed until the problem is resolved or cancelled.

11. Emergency Procedures:

11.1. Cease operations and secure area/items involved in an accident/incident.

11.2. Render first aid, as required.

11.3. Request emergency assistance via EOD Operations or Andersen Crash Control, if required.

11.4. Notify the operation Team Leader/RSO, Flight Chief or Commander immediately. Notify the 36 CES/CC and Wing Safety as soon as possible.

11.5. Take all actions necessary to secure the area for emergency responders.

11.5.1. This includes making contact with CATM to call a cease fire for vehicles transiting to and from the EOD Range.

12. Supplemental Range Information:

12.1. The EOD Demolition Range is a culturally and ecologically sensitive area. Limit vehicle operations to the road and destruction area, as much as practical.

12.2. The beach is a protected habitat. Green Sea Turtle nesting on Guam may occur at any time of the year. Because of this vehicle traffic in the destruction area should be minimized. Close coordination with University of Guam Marine Laboratory Sea Turtle Monitoring Section (671-734-4054) should occur to identify nesting sites. Furthermore, reduced N.E.W. should be utilized to minimize ground shock in accordance with A-1-1-4 when nests are in the vicinity of the destruction site.

12.3. The range is also home to two protected species of bats and crows. The 36 CES Environmental flight must be notified before and after operations to ensure these species were not affected.

WILLIAM J. KNIGHT, SMSgt, USAF
Superintendent, EOD Flight

Attachments:

1. Range Notification Lists
2. Range Operation Checklist
3. Post Range Operations Checklist
4. Safety Briefing
5. Proper Detonation Point/Cliff Orientation and Quarterly Clean-up Area
6. Rescission of Compensatory Measure Andersen-06-S60-CM05

Attachment 1
Range Notification List

AGENCY	INITIALS/DATE		TIME	
*EOD Leadership (Risk Assessment)				
*Law Enforcement Desk: 366-2910/2911/2912				
*Fire Department: 366-5284/5264/5261				
*Medical: 366-4706/3231				
*Command Post: 366-2981/2982				
36 WG Safety: 366-4222/7233				
Coast Guard: 355-4821/4866 Email: rccguam@uscg.mil				
36 WG Tower: 366-4737/4281	Initial	30 Min	5 Min	Cold
Airfield Management Operations: 366-4188/1010 Email: 36 OSS-OSAM	Initial	30 Min	5 Min	Cold
Guam CCF: 99-473-1210				
Munitions Control: 366-6393/6300/6394/6395				
CATM: 366-2254/3220				
CES Environmental: 366-2101/2556/2557				
Seismology: 727-3544 (If over 300 lbs. NEW)				
Public Affairs: 366-4202/2228 (If over 300 lbs. NEW refer to para. 7.2 & 9.2)				
Weather: 366-5230				
*Minimum Calls for Off-Range Use of Tools				

Date: _____

N.E.W.: _____

AGL Required: _____

# of Shots: _____

CHECKLIST COMPLETED BY:
PRINT/SIGN/DATE:_____

Attachment 2

Range Operation Checklist

_____ Provide a safety briefing prior to the operation

_____ Ensure emergency permit is received for non-permitted items (see EPA permit), if required

_____ Ensure ADR items are inventoried and only authorized munitions are being treated

_____ Notify all agencies before beginning explosive operations

_____ Secure all entrances to the range prior to detonations

_____ Post range warning signs

_____ Ensure the red range flag is flown at the CATM gate and on EOD range until completion of the operation

_____ Comply with all requirements for safe transportation of explosives

_____ Ensure first aid equipment is immediately available on the range

_____ Function check/make available satellite phone and Motorola radios for use on the range

_____ Confirm there are no electrical storms within 5 nautical miles prior to beginning operations

_____ Ensure blasting caps, bulk explosives, and munitions are properly segregated

_____ Inspect tools/equipment, vehicles, and the range prior to and immediately following any operation

_____ Ensure fire extinguishers are available

_____ Ensure range is clear of unauthorized personnel to include beach, cliff line, and water

_____ Check beach to determine if hazardous materials have washed ashore in the immediately area

_____ Ensure all personnel, except for the initiation team, are withdrawn from the detonation site prior to connecting initiators to explosives

_____ Obtain clearance from tower immediately prior to initiating any explosives

_____ Ensure all personnel take appropriate cover prior to initiating fragment producing detonations

Attachment 3
Post Range Operations Checklist

_____ Perform a detailed inspection of the range after all detonations are complete for the day and ensure no residue remains

_____ Ensure all munitions are visually inspected for explosive residue

_____ Perform clean up shot if necessary. Under no circumstances will kick outs be removed from the range and restored.

_____ Collect scrap metal and other trash and dispose of accordingly.

_____ Collect spent cartridges and turn into the Munitions Inspections section

Attachment 4 Safety Briefing
AFTTP 3-32.5, Volume 7, EOD Range Operations, Attachment 3, STANDARD PRE-OPERATION SAFETY BRIEFING

This pre-operation sheet will be filled out and briefed before conducting any explosive operation on Andersen AFB and/or Guam. The purpose of the checklist is to maximize safety during operations by ensuring personnel are aware of all explosive hazards involved and the appropriate actions to take in the event of an emergency.

1. Explosive and Personnel Limits.

1.1. Operation to be performed: _____

1.1.1. Munitions involved: _____

1.1.2. Number and NEWQD (w/TNT-equivalent) of Detonations: _____

1.1.3. Maximum Fragmentation Distance (per T.O. 60A-1-1-4, Protection of Property and Personnel, TDA, and applicable 60 series publications) for each Detonation: _____

1.1.3.1. Hazardous Fragmentation Range (HFR): _____

1.1.3.2. Maximum Fragmentation Range – Horizontal (MFR-H):_____

1.1.3.3. Maximum Fragmentation Range – Vertical (MFR-V):_____

1.1.4. Explosive Hazards (per applicable 60 series publications):

_____

_____

1.2. Location where operation is to be performed (detonation site): _____

1.3. Operating Location for Essential Personnel (For operating locations with aerospace vehicle traffic seek the appropriate Air Ground Level (AGL) clearance (based on calculated MFR-V) from local Air Traffic Controllers.):_____

1.3.1. Distance from detonation site: _____

1.3.1.1. If distance from detonation is less than Maximum Fragmentation Distance:

1.3.1.1.1. Apply protective measures (AFMAN 91-201 para 12.74.4 and 12.74.8):

_____

1.3.1.1.2. Note all standing or approved ORM considerations IAW AFPAM 90-902 and overall assessments (i.e. Range OI, etc.): _____

1.3.2. Commander approving ORM assessment based on being inside the maximum fragmentation distance (if applicable): _____

1.4. Evacuation Assembly Point / Non-Essential Personnel:_____

1.5. Explosive Limits: _____

1.6. Personnel Limit for the range is _____

1.6.1. A minimum of three EOD personnel, one who is a PAFSC 3E871 or higher, will be present

during explosive operations.

1.6.2. The parameter in 1.6.1 may be adjusted to a minimum of two EOD-qualified personnel, one of which is an E-5 that has been awarded a 5-skill level, when the mission is defined by EOD-coordinated instructions (local stand-by duties, exercise support, testing support, etc), or when approved through Commander ORM determination during periods of critical manning or other unique circumstances to meet mission requirements. Document commander ORM data and maintain for inclusion in EODIMS report.

1.7. Personnel/Duty assignments (name/rank):

Range Safety Officer (RSO): _____

EOD Team Leader (TL): _____

EOD Team Members (TM): _____

Support Team / Medical (Casuals): _____

Non-Essentials (Stop all operations when visitors are present):_____

Non-Essential Escort: _____

1.8. Conduct briefing to ensure personnel are familiar with all the hazards involved prior to commencing.

2. Equipment Requirements.

2.1. General Safety Equipment Requirements:

_____Water _____Portable radios

_____Gloves _____First Aid Kit

_____Sun-screen (as needed) _____Fire Extinguishers

_____Safety glasses (explosive ops)

2.2. Special personnel protective equipment (e.g., laser goggles, helmet, body armor):

_____ _____

_____ _____

2.3. Special operational equipment (e.g., Mk-series tools, robotics, etc.):

_____ _____

_____ _____

3. Pre-operational Safety Assessment.

3.1. EOD operations will be conducted under the supervision and control of the EOD Team Leader (TL).

3.2. Prior to the start of disposal or training operations, the TL designates a Range Safety Officer (RSO). The RSO is responsible for ensuring all safety aspects of the operation are properly applied in support of the TL. The RSO will not participate as a worker during the explosive operation.

3.2.1. The RSO will conduct a briefing to cover tasks to be performed, safety precautions and emergency procedures. The duties of the RSO and TL may be performed by the same person.

WARNING

Ground yourself prior to handling initiating explosives; work on grounded surfaces if possible.

Personnel handling electrically initiated explosive devices will avoid wearing clothes made of material, which have high static generating characteristics.

Use available frontal/overhead protection during detonation – do not stand in view of the munitions to be detonated.

CAUTION

Remember Cardinal Principal of Explosive Safety: "Expose the minimum amount of people to the minimum amount of explosives for the minimum amount of time."

3.2.2. The RSO will brief visitors and casuals on type of ordnance and associated hazards. Provide specific instructions on where to drive, park, and walk; and not to touch items they may encounter ("if you didn't drop it, don't pick it up"). Show visiting and casual personnel the specific frontal/overhead protected area in which to take cover.

3.3. Non-Essential Personnel Escort: If visitors are on range, stop all operations and assign an escort to ensure safety rules are followed. Escort to visitor ratio will not exceed 1:5. The RSO may be the Escort, but only if there is a separate TL leading the operation (one person may not be all three, TL, RSO and Escort).

NOTE

All personnel wanting to proceed down range after commencement of the operation will do so only after obtaining approval from the Range Safety Officer (RSO). Personnel will then be briefed on all hazards present.

Any unsafe actions observed by EOD personnel will be immediately brought to the attention of the RSO. The RSO will cease operations until unsafe condition is corrected. If unable to resume safe operations, withdraw to a safe distance and inform EOD Operations [and appropriate Range Control Office] that the EOD operation is terminated.

3.4. The TL will ensure two-way radio (or phone) communication is operational and available (for both TL and RSO) during all explosive operations. Both a primary and a secondary means communication are preferred.

WARNING

Do not conduct hand-held radio transmissions within 25 feet (100 feet when using vehicle radios) of electro-explosive devices (EEDs).

Modern Mobile Emitters (MME) such as key fobs and cellular phones will not be operated within 10 feet of EEDs.

3.5. Remove rings and watches prior to starting any explosive operation.

3.6. No smoking will be conducted on the range during live explosive operations. RSO can designate a

proper smoking location that will be downwind and no closer than 50 feet from any explosives or flammables.

3.7. Do not handle munitions roughly (e.g., rolled, tumbled, dropped, dragged or thrown).

3.8. If an abnormal condition occurs, stop the operation until the condition is corrected.

3.9. Observe wait times of 30 minutes for electrically primed misfires and 1 hour for non-electrically primed misfires.

3.10. Cease all explosive operations when there is lightning within 5 nautical miles (AFMAN 91-201, paragraph 7.34).

3.11. Only one EOD technician will check the detonation point after a planned detonation with a second person acting as a safety backup. This rule also applies when checking items kicked out by a detonation. Deviation for the sake of training is not authorized.

3.12. Do not proceed directly down range if the detonation results in a range fire. If it can be ascertained that the fire can be contained, immediately respond and try to control the fire while the FD is responding (AFMAN 91-201, para 10.9.4). If the decision is made not to fight the fire, the area should be evacuated and remain so until it has cooled for at least 24 hours. Inform [the range controller or other local authorities] as to the extent of the fire so appropriate notifications can be made. Follow the safety measures outlined in AFTO 60A-1- 1-31 and below prior to returning to the detonation site.

3.12.1. Wait at least 24 hours after the fire has been extinguished to check the detonation point.

3.12.2. Do not approach a pyrotechnic or incendiary ordnance burn area for 24 hours after the cessation of burning.

3.13. Make positive identification before taking any action on a munition item.

3.14. Destroy in place or clearly mark for later destruction any dud munitions that cannot be safely moved.

4. Emergency Procedures.

4.1. In the event of an accident or fire,_____(normally the RSO) will notify the appropriate agency (e.g. fire department, ambulance, range controller or EOD Operations).

4.1.1. Evacuate all nonessential personnel_____feet as required.

4.1.2. The Evacuation Assembly Point is _____

4.2. Fire extinguishers/equipment are located: _____

4.3. First Aid Kit is located: _____

4.4. _____and_____will fight the fire and note the time if any munitions become engulfed in flames.

WARNING

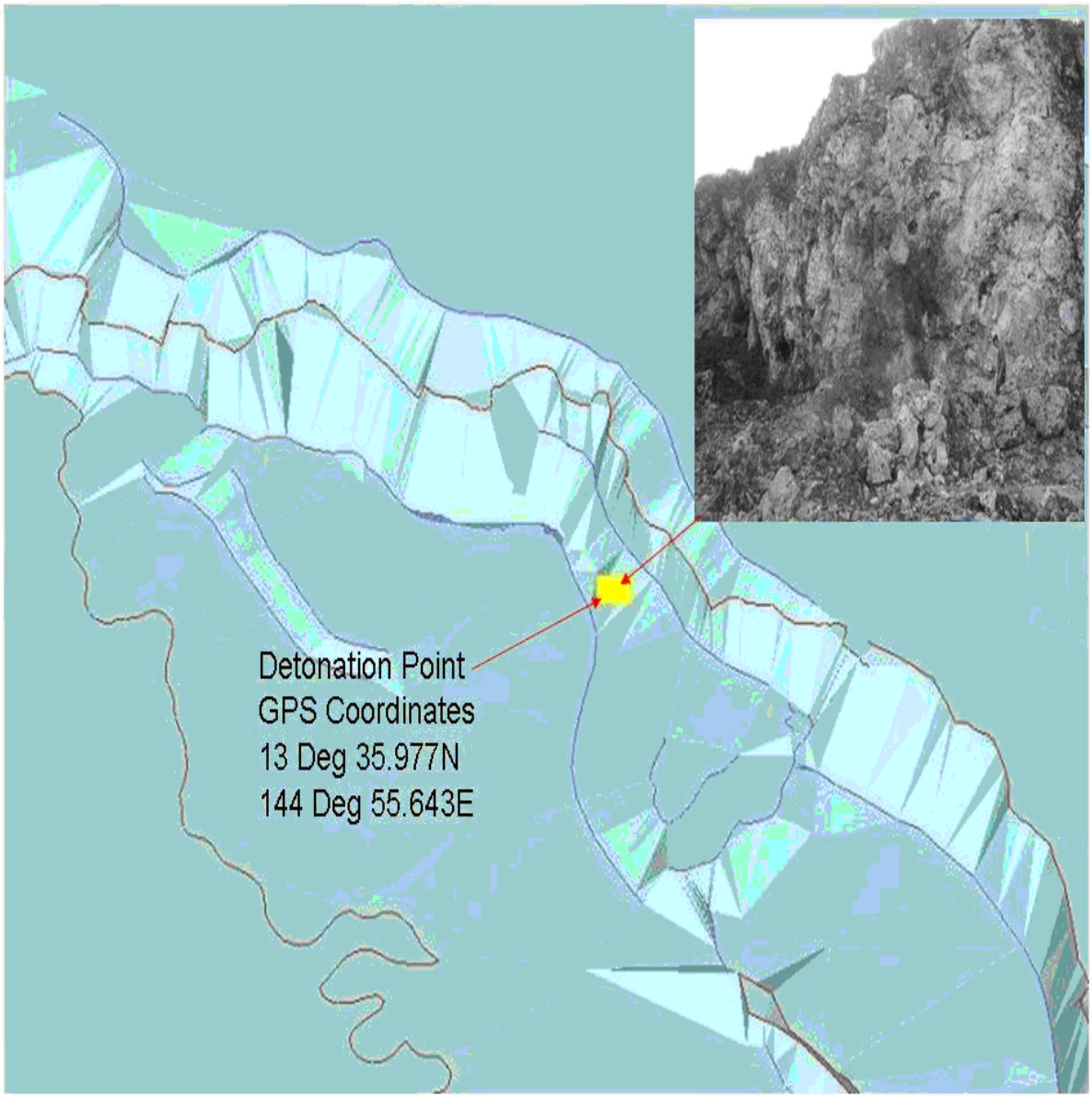
Do not fight fires involving 1.1 munitions engulfed in flames unless attempting a rescue.

4.5. _____will sound the alarm and go to the Evacuation Assembly Point and direct emergency responding personnel to the scene.

4.6. _____ and _____ will secure the site of unused explosives for storage or later disposition.

4.7. When evacuation is accomplished, RSO will account for everyone involved in the operation.

Attachment 5
Proper Detonation Point/Cliff Orientation and Quarterly Clean-up Area



Attachment 6

Rescission of Compensatory Measure
Andersen-06-S60-CM05

DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

17 Jul 08

MEMORANDUM FOR HQ AFSC/SEWV

FROM: PACAF/SEW

SUBJECT: Rescission of Compensatory Measure Andersen-06-S60-CM05

1. PACAF/SEW has reviewed and concurs with rescission of compensatory measure Andersen-06-S60-CM05.

2. Direct questions to HQ PACAF/SEW, 448-2990/1/89 or e-mail PACAF.SEW@hickam.af.mil.

BRUCE R. MARTINEAU, MSgt, USAF
Command Weapons Safety Manager

Attachment:
1. 36 WG/SEW Compensatory Measure Rescission Memo

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, 36TH AIR BASE WING (PACAF)
UNIT 14003, APO AP 96543-4003

17 July 08

MEMORANDUM FOR PACAF/SE

FROM: 36 WO/SEW
Unit 14003, Box 27
APO AP 96543-4003

SUBJECT: Rescission of Compensatory Measure CMOS from Site Plan Andersen-06-S60

1. Per DDESB recommendation during Guam Military Munitions Working Group. Compensatory measure CMOS contained in site plan Andersen 06-S60 should be rescinded. CMOS calls for a 4,000-foot clear zone for destruction of munitions greater than five inches on Andersen's EOD range.

2. Fragmentation modeling using TRAJ and CONWEP has produced recommended distances of 2,000 feet for all operations on the Andersen range. The range is at the base of a S20 foot cliff and actual detonation point is contained under a cliffline overhang that removes potential for fragmentation above the cliffline. Current range operating procedures require exact placement of munitions for detonation based on OPS coordinates to remove any margin of error. All items are buried to a depth of 4 feet with lugs down and baseplate facing out towards the open water. The 4,000-foot requirement was used as an additional precaution that is no longer needed due to use of OPS coordinates for munitions placement. Removal of 4,000-foot requirement will also allow for OSD planned Marine buildup at Andersen to take place.

3. Any questions pertaining to this subject can be forwarded to the 36 WO/SEW office at 366-2904 or 366-4222.

DAVID C. SAWYER, MSgt, USAF
Superintendent, Weapons Safety