

**BY ORDER OF THE COMMANDER
KADENA AIR BASE**



AIR FORCE MANUAL 91-201

**PACIFIC AIR FORCE
Supplement**

**KADENA AIR BASE
Supplement**

3 OCTOBER 2018

Safety

EXPLOSIVES SAFETY STANDARDS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication

OPR: 18 WG/SEW

Certified by: 18 WG/SE
(Lt Col Joshua C. Chambers)

Supersedes: AFMAN91-201_PACAFSUP_
KADENAABSUP, 6 June 2013

Pages: 9

Air Force Manual (AFMAN) 91-201, *Explosives Safety Standards*, 21 March 2017, and Pacific Air Forces Supplement (PACAFSUP), 10 October 2017, are supplemented as follows: This publication applies to USAF, USA, USN, USMC, and other organizations handling explosives on Kadena Air Base (AB). It is a standalone publication and must be read in conjunction with AFMAN91-201 and PACAFSUP. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Requests for waivers must be submitted through chain of command to the OPR listed above for consideration and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include addition of units responsible to ensure compensatory measure completion; removal of Taxiway Delta compensatory measures; removal of Navy P3 unit explosive loading notification requirement; addition of non-DoD stock listed items storage request process; incorporation of Kadena AB Form 87, *Explosive Safety Risk Assessment Request*; clarification of procedures to deliver munitions to Spots 1-50; removal of Electro Magnetic Radiation (EMR) analysis procedures; and removal of explosive blanket explosive clearance procedures. Additionally, [Attachment 9](#), *Weapons Safety Coordination Flow Chart*, and [Attachment 10](#), *Exception Request to Current Explosive Siting*, were added. Information removed is no longer relevant or is covered in other instructions.

1.3.5.1. **(Added)** The 18th Wing Commander (18 WG/CC) has approved the following compensatory measures to eliminate or reduce the potential for personal injury, in addition to preventing violations to explosive safety standards. Official record of all compensatory measures are contained in the Department of Defense Explosive Safety Board (DDESB) approved explosive site plan, and maintained in the 18 WG Weapons Safety Office. Unless otherwise specified. These compensatory measures are mandatory, and apply to hazard class/division (HD) 1.1 operations.

1.3.5.1.1. **(Added)** Explosives Ordnance Disposal (EOD) will notify the 18th Munitions Squadron (18 MUNS) when disposal operations will be conducted at 49011 (EOD Range), and will coordinate applicable compensatory measure completion. Clear zones will be strictly enforced during operations. The range safety officer will ensure all nonessential personnel and outside munitions not being used for the detonation, have been removed from the clear zone. Entrance gates will be monitored, and nonessential personnel restricted from the area.

1.3.5.1.1.1. **(Added)** Open Air Detonations (Fragmenting): The maximum diameter and Net Explosive Weight (NEW) allowed prevent this location from being utilized to detonate fragmenting Ammunition and Explosives (AE). ***No Open Air detonations of fragmenting AE will occur at 49011.*** All fragmenting AE will be buried during intentional detonation ops to reduce Hazardous Fragmenting Distances (HFD).

1.3.5.1.1.2. **(Added)** Facility 42636 will be cleared of munitions when the explosives involved in the open air intentional detonation is expected to exceed 9 lbs of non-fragmenting munitions.

1.3.5.1.1.3. **(Added)** Facility 42635 will be cleared of munitions when the explosives involved in the open air intentional detonation is expected to exceed 31 lbs of non-fragmenting munitions.

1.3.5.1.1.4. **(Added)** Facility 42648 will be cleared of munitions when the explosives involved in the open air intentional detonation is expected to exceed 37 lbs of non-fragmenting munitions.

1.3.5.1.1.5. **(Added)** Facility 42649 will be cleared of munitions when the explosives involved in the open air intentional detonation is expected to exceed 48 lbs of non-fragmenting munitions.

1.3.5.1.1.6. **(Added)** When holding pads 49011A, 49011C, and 49011D are used, the disposal range will be restricted to training use only, and a maximum of 5 lbs of non-fragmenting munitions.

1.3.5.1.2. **(Added)** Taxiway Delta Explosive Operations: Personnel in Bldg 3579 will restrict access to the tower to mission essential personnel only. If possible, evacuate the tower of all personnel during explosive operations at Taxiway Delta. Before non-mission essential personnel enter the tower, ensure that Taxiway Delta is free of explosives.

1.3.5.1.3. **(Added)** In the event an explosive operation at facility 46803 exceeds 3,000 lbs of HD 1.1, Navy Munitions Command (NMC) will ensure all explosive operations in facility 46805 will cease, and all personnel will evacuate beyond the appropriate intraline distance. If needed, call 18 WG/SEW for assistance.

1.3.5.1.4. **(Added)** 18 MUNS (e.g.. Munitions Control) will notify the 18 MXG (e.g. Maintenance Operations Center [MOC]) whenever live combat missiles, bombs, or any other HC/D 1.1 munitions loads are delivered to any Combat Aircraft Parking Area (CAPA), Hard-Stand, or Hardened Aircraft Shelter (HAS). When HC/D 1.1 munitions are introduced to these locations and compensatory measures are required, 18 MXG will contact the affected facilities, and notify of the requirement for unrelated personnel to evacuate. The primary test to be applied in determining combat aircraft related facilities is that the function provides essential daily and direct support for the site presenting the hazard. Commanders will define which personnel in these location are considered related. Examples may be found in AFMAN 91-201, paragraph 12.40.

1.3.5.1.4.1. **(Added)** To ensure compliance with CAPA, Holding Area and Hardened Aircraft Shelter (HAS) site plans, the following compensatory measures must be adhered to. Unrelated personnel must be evacuated when H/D 1.1 munitions are present at the following respective locations:

1.3.5.1.4.2. **(Added)** CAPA spots 1-4 (evacuate unrelated personnel at Bldgs 728 and 730).

1.3.5.1.4.3. **(Added)** CAPA spot 5-7 (evacuate unrelated personnel at Bldgs 728 and 733).

1.3.5.1.4.4. **(Added)** CAPA spots 8-10 (evacuate unrelated personnel at Bldg 733).

1.3.5.1.4.5. **(Added)** CAPA spot 11 (evacuate unrelated personnel at Bldgs 733 and 762).

1.3.5.1.4.6. **(Added)** CAPA spots 12-17 (evacuate unrelated personnel at Bldg 762).

1.3.5.1.4.7. **(Added)** CAPA spots 18-20 (evacuate unrelated personnel at Bldgs 762 and 766).

1.3.5.1.4.8. **(Added)** CAPA spots 21-24 (evacuate unrelated personnel at Bldg 766).

1.3.5.1.4.9. **(Added)** CAPA spots 26-30 (evacuate unrelated personnel at Bldg 775).

1.3.5.1.4.10. **(Added)** CAPA spots 31-35 (evacuate unrelated personnel at Bldgs 763, 764, and 775).

1.3.5.1.4.11. **(Added)** CAPA spot 36 (evacuate unrelated personnel at Bldgs 763 and 764).

1.3.5.1.4.12. **(Added)** CAPA spots 37-40 (evacuate unrelated personnel at Bldgs 763, 764 and 780).

1.3.5.1.4.13. **(Added)** CAPA spot 41 (evacuate unrelated personnel at Bldgs 764 and 780).

1.3.5.1.4.14. **(Added)** CAPA spots 42-45 (evacuate unrelated personnel at Bldgs 764, 780, and 781).

1.3.5.1.4.15. **(Added)** CAPA spots 46-50 (evacuate unrelated personnel at Bldgs 780 and 781).

1.3.5.1.4.16. **(Added)** HS1129A (304) and HS1129B (304) (evacuate Aero Club personnel from spots 401/402).

1.3.5.1.4.17. **(Added)** Bldg 879 (HAS 1) (evacuate unrelated personnel at Bldgs 728, 729, 730, 733, 762 and 766).

1.3.5.1.4.18. **(Added)** Bldg 880 (HAS 2) and Bldg 881 (HAS 3) (evacuate unrelated personnel at Bldgs 728, 730, 733, 762 and 766).

1.3.5.1.4.19. **(Added)** Bldg 882 (HAS 4) and Bldg 883 (HAS 5) (evacuate unrelated personnel at Bldgs 728, 729, 730, 733, 762 and 766).

1.3.5.1.4.20. **(Added)** Bldg 884 (HAS 6) (evacuate unrelated personnel at Bldgs 728, 733 and 766).

1.3.5.1.4.21. **(Added)** Bldg 885 (HAS 7) (evacuate unrelated personnel at Bldg 762).

1.3.5.1.4.22. **(Added)** Bldg 886 (HAS 8) (evacuate unrelated personnel at Bldgs 728, 729, 730 and 733).

1.3.5.1.4.23. **(Added)** Bldg 888 (HAS 10) (evacuate unrelated personnel at Bldgs 728 and 730).

1.3.5.1.5. **(Added)** Taxiway Bravo (near K-5R): When explosive operations at Taxiway Bravo South exceeds 18,000 lbs H/D 1.1, or 1.2.1 maximum credible event (MCE) exceeds 375 lbs the Air Terminal Operations Center (ATOC) will notify Marine Wing Liaison Kadena (MWLK) and the 18th Logistics Readiness Squadron (18 LRS) representatives at building 3473. Unrelated personnel will be removed from the cargo processing pad and directed to remain indoors at building 3473 or evacuate the area.

1.3.8.1. **(Added)** Units requesting waivers and exemptions (e.g. explosive limit increase) may do so by submitting a commander approved memorandum to 18 WG/SEW (see [Attachment 10](#)). The request must include the requirements of **paragraphs** 1.10.3.3 and 1.10.3.6 through 1.10.3.8, and will be included in the request to the appropriate authority for acceptance.

3.12.5. **(Added)** Storing of Japan Air Self-Defense Forces munitions will comply with AFMAN 91-201 to every extent possible. Requests to keep non-DoD stock listed items will be routed to the 18 WG/SEW, who will request permission from MAJCOM and the AFSEC.

4.2.3. **(Added)** Risk assessment is required to assess explosive hazards to personnel not directly related to explosive storage and operations (e.g. construction workers, visitors). Commanders should limit exposure of non-related personnel to explosives when possible. Prior to these personnel entering the airfield or munitions storage area, units will verify the destination against the Explosive Quantity Distance Map (located on 18 WG/SEW SharePoint), or may contact the Wing Weapons Safety Office at 634-2122. If the destination is within the explosive clear zone, submit the Kadena AB Form 87, *Explosive Safety Risk Assessment Request* (see [Attachment 9](#)). It is highly recommended to submit requests at least 45 days prior, to avoid work or visit delays. If explosive hazards are present and cannot be mitigated, exceptions to quantity distance criteria and risk acceptance requires a thorough review and often proves a lengthy process.

7.6.3. **(Added)** H/D 1.1 munitions trailers servicing Spots 1-50 (Flows), are only permitted during active loading and down-loading of the aircraft. In the event the aircraft is not ready for loading, munitions will be returned to the Munitions Storage Area (MSA) or an appropriately sited flight line holding area (e.g. HS 212). Maintenance, Munitions, and Weapons leadership must make every effort to ensure staging times are kept to a minimum. Empty munitions trailers remaining at the location after upload, or staged prior to download, are not an explosive safety concern. Ensure the following guidelines for munitions delivery to the flight line are followed:

7.6.3.1. **(Added)** 18 MUNS (e.g. MUNS Control) will notify the 18 MXG (e.g. MOC) of all HD 1.1 munitions deliveries to the flight line. The responsible Aircraft Maintenance Unit (AMU) personnel will notify Maintenance Operations when aircraft are loaded with munitions and when the site contains HD 1.1 explosives. Responsible AMU personnel will ensure the total NEW does not exceed the maximum allowable limit for each location. Munitions trailers may not contain a higher NEW than authorized for a single aircraft, when servicing Spots 1-50.

7.6.3.2. **(Added)** For explosive cargo, 733d Air Mobility Squadron (733 AMS) personnel will track NEW after delivery and notify the Air Terminal Operations Center as NEW changes occur. Ensure explosive limits are not exceeded.

7.25.2.5. **(Added)** Simulator munitions training must include a supervised hands-on evaluation following approved classroom academic instruction. This training is conducted by 18 CES/EOD as mission permits. 18 CES/EOD will certify individuals assigned to other units as trainers for simulators and smoke producing devices. 18 CES/EOD and the unit will maintain training documentation of EOD-certified trainers. The unit will maintain a list of persons trained by EOD-certified trainers. All persons trained to initiate simulator munitions, including EOD-certified trainers, will receive an AF Form 483, *Certificate of Competency*, listing qualified munitions. A current AF Form 483 is required before receiving, handling or initiating simulator munitions.

8.12.1. Primary and alternate on-base explosive movement routes are identified on the Explosive Arcs Map. With the exception of Tengan Pier operations, explosive-laden vehicles entering Kadena AB will use Highway 74, and enter the base via Gate 19. Explosive items will not be used during exercises on routes designated as "Contingency Only."

8.26.3.1. **(Added)** Placarding HD 1.4 material on base is not required.

10.7.8.5. **(Added)** Flight line sited locations (e.g., hardstands, Taxiway Bravo/Delta, HAS) require fire symbol posting when explosives are introduced to the location. The unit responsible for the aircraft or location, is also responsible for supplying and updating fire symbols at that location.

10.8.8.1. **(Added)** Flight line spots 1-50 are exceptions to posting fire symbols. Munitions delivery drivers will contact Munitions Control whenever H/D 1.1 and 1.2 munitions are delivered to or removed from spots 1-50. Munitions Control will notify MOC, who in-turn will make fire symbol change notifications to the Emergency Communication Center (ECC).

12.77.5. 18 WG/SEW will be notified prior to conducting off-range operations using tools and explosives listed in Paragraph 12.77.4 of the basic manual.

CASE A. CUNNINGHAM, Brigadier General, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFMAN 33-363, *Management of Records*, 1 March 2008

AFMAN 91-201, *Explosives Safety Standard*, 21 March 2017

AFMAN 91-201, PACAF Supplement, *Explosives Safety Standard*, 10 October 2017

Prescribed Form

Kadena AB Form 87, *Explosive Safety Risk Assessment Request*

Adopted Forms

AF Form 483, *Certificate of Competency*

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AB—Air Base

AE—Ammunition and Explosives

CAPA—Combat Aircraft Parking Area

EOD—Explosives Ordnance Disposal

HAS—Hardened

IAW—In accordance with

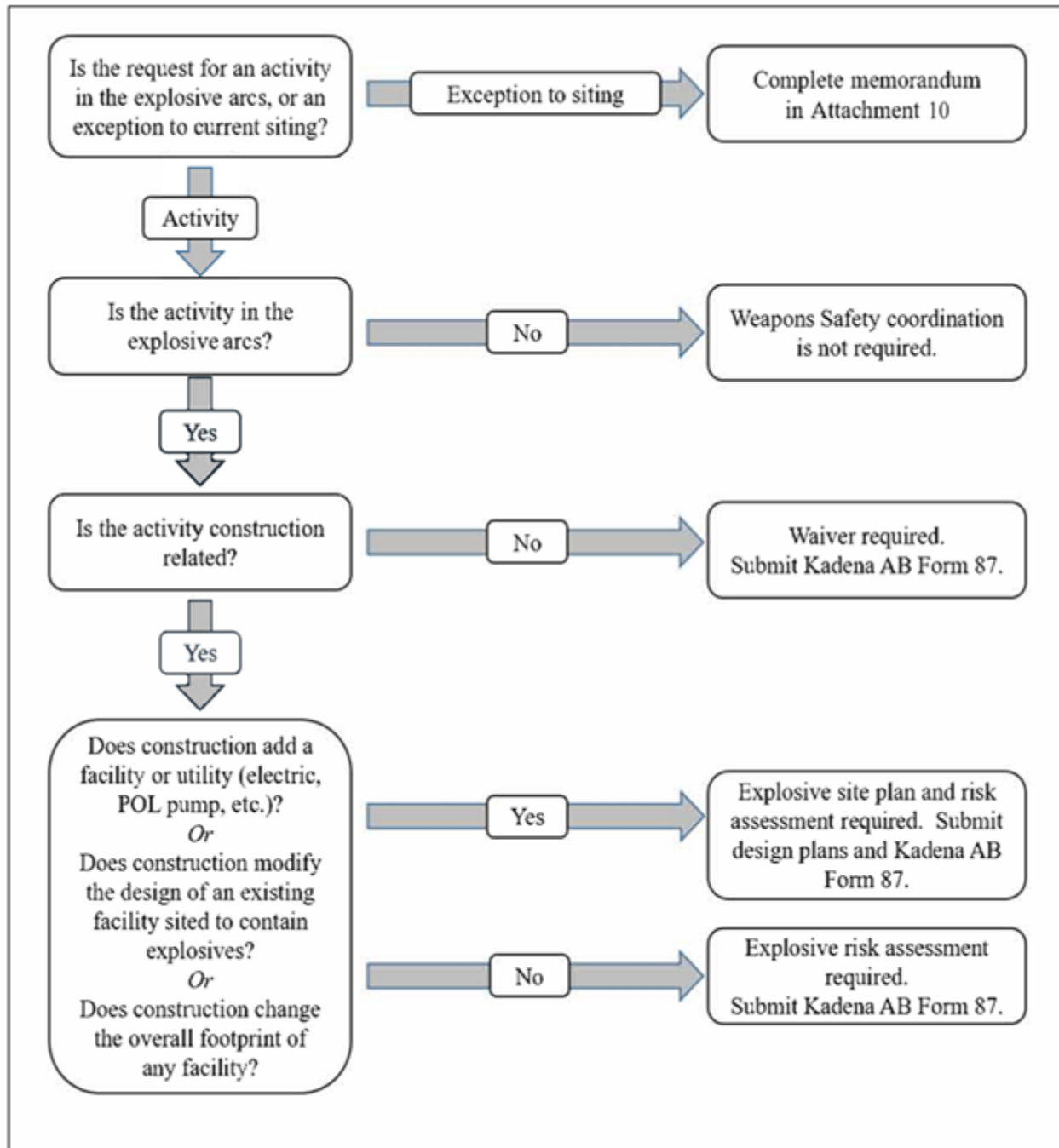
MOC—Maintenance Operations Center

NEW—Net Explosive Weight

Attachment 9

WEAPONS SAFETY COORDINATION FLOW CHART

Figure A9.1. Weapons Safety Coordination Flow Chart.



Attachment 10

EXCEPTION REQUEST TO CURRENT EXPLOSIVE SITING

Figure A10.1. Exception Request to Current Explosive Siting.

DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

Date

MEMORANDUM FOR 18 WG/SEW

FROM: *Requesting Unit*SUBJECT: *Self Explanatory*

1. **NARRATIVE:** *Background of why the unit is requesting the waiver or exemption.*
2. **JUSTIFICATION:** *In narrative form, provide a detailed explanation of the "strategic or compelling operational" reason for requesting the waiver or exemption. (see 1.11.6. for further detail)*
3. **CORRECTIVE ACTIONS:** *Discuss any and all actions taken or planned to mitigate the effects of an explosives mishap. Consider such things as building techniques, barricading, glass protection, tiered siting, or planned construction. Identify the proposed specific corrective action or actions to ultimately correct the waiver or exemption. (see 1.11.8. for further detail)*
4. **OPTIONS:** *Discuss fully all reasonable options considered by the unit but rejected in favor of the proposed action. Give details as to why each of the other options was not chosen. Discuss limitations to funding, real estate, or other constraints, as appropriate.*
5. Please direct any questions concerning this memorandum to *POC name and phone number*.

NAME, Rank, USAF
CommanderAttachment:
Include any attachments if applicable