



**EXPLOSIVES SAFETY STANDARDS**

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This supplement establishes policy, responsibilities, and procedures for all personnel who operate, handle, transport, maintain, load, or dispose of explosives on base. Furthermore, this supplement establishes specific requirements for select C-130, C-5, C-141, and C-17 aircraft modified with Aircraft Defensive Systems (ADS). These systems, when configured, use hazard class/division (HC/D) 1.3G and 1.4S munitions and require special handling and coordination. These requirements apply to all agencies involved in handling munitions or munitions-loaded aircraft. The following procedures, along with aircraft checklists, Technical Orders (T.O.), and local directives, must be followed to ensure munitions are handled safely and expeditiously. This instruction applies to all assigned, attached, tenant, and satellite units to Yokota Air Base (AB).

**SUMMARY OF REVISIONS**

Incorporated the new NEW limits for the hot cargo pads and munitions storage and operating facilities at the flightline dispersal. Added operations security requirements and safety guidance for transporting electro-explosive devices (EED) on base. Identified additional designated aircraft parking areas for chaff and flare loaded aircraft. A bar ( | ) indicates revision from the previous edition.

**AFMAN 91-201, 18 October 2001, is supplemented as follows:**

**2.5.4. (Added) 5083A Explosives Limits (1,255 ft Clear Zone).**

<b>1.1</b>	<b>1.2.1 Maximum Credible Event (MCE)</b>	<b>1.2.2</b>	<b>1.2.3 Inhabited Building Distance (IBD)/MCE</b>	<b>1.3</b>	<b>1.4</b>
29,000 lbs	29,000 lbs > 450	29,000 lbs	29,000 lbs (12) ≤ 450	29,000 lbs	Mission Essential Quantities (MEQ)

2.5.4.1. (Added) Compensatory measures (actions taken to prevent quantity-distance [Q-D] violations and minimize risks).

2.5.4.1.1. (Added) Ensure parking spots 5026, 5027, 5083, 5084, and 1961 are not utilized when 5083A is being used.

**NOTE:** The minimum level of protection from one hot cargo pad to another hot cargo pad is K11. Although in compliance, this level of protection only prevents simultaneous detonation. If aircraft survivability is desired, a level of protection K30 or greater should be used. The following parking spots (aircraft explosives cargo parking areas [AECPA]) have a level of protection below K30: 5023, 5024, 5025, 5028, 5029, 5085, 5087, 5070, and 5072.

**2.5.5. (Added) 5094A Explosives Limits (1,130 ft Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
336 lbs	7,600 lbs ≤ 272	29,000 lbs	29,000 lbs (10) ≤ 272	29,000 lbs	MEQ

2.5.5.1. (Added) Compensatory measures.

2.5.5.1.1. (Added) Ensure parking spots 5095, 5094, and 5093 are not utilized when using 5094A for explosives operation.

**NOTE:** Although in compliance, there are still risks involved. In the event of an explosion, expect fragments and debris to cause damage to aircraft at level of protection below K30. If aircraft survivability is desired, a level of protection K30 or greater should be used. The following are parking spots below K30: 5061, 5063, 5089, 5091, 5090, 5092, 5031, 5032, 5033, and 5122A.

**2.5.6. (Added) 5033A Explosives Limits (1,800 ft Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
15,000 lbs (18)	15,000 lbs ≤ 360	15,000 lbs	15,000 lbs (11) ≤ 360	15,000 lbs	MEQ

2.5.6.1. (Added) Compensatory measures.

2.5.6.1.1. (Added) The following steps must be followed since there are no areas to temporarily store 155 MM munitions with a 1,800' IBD on Yokota:

2.5.6.1.1.1. (Added) The delivery truck will standby until the cargo aircraft departs.

2.5.6.1.1.2. (Added) In case of an aircraft maintenance problem, munitions will be re-loaded in the delivery truck and transported back to the place of origin.

2.5.6.1.1.3. (Added) Ensure parking spot 5095, aircraft decontamination area, is not utilized when conducting operations on 5033A.

2.5.6.1.1.4. (Added) Do not use parking spots 5032 and 5033 when using 5033A for explosives operations.

**NOTE:** The minimum level of protection from one hot cargo pad to another hot cargo pad is K11. Although in compliance, this level of protection only prevents simultaneous detonation. If aircraft survivability is desired, a level of protection K30 or greater should be used. The following parking spots (AECPA) have a level of protection below K30: 5094, 5092, 5030, and 5031.

**2.5.7. (Added) 5122A Explosives Limits (1,250 ft Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
29,000 lbs	20,000 lbs < 403	29,000 lbs	29,000 lbs (12) ≤ 403	29,000 lbs	MEQ

2.5.7.1. (Added) Compensatory measures.

2.5.7.1.1. (Added) When 5122A and 5122 are used concurrently, limit HC/D 1.1 to 6,000 pounds.

2.5.7.1.2. (Added) Ensure parking spot 5095, aircraft decontamination area, is not utilized when using 5122A for explosives operation.

**NOTE:** The minimum level of protection from one hot cargo pad to another hot cargo pad is K11. Although in compliance, this level of protection only prevents simultaneous detonation. If aircraft survivability is desired, a level of protection K30 or greater should be used. The following parking spots (AECPA) have a level of protection below K30: 5059, 5061, 5091, 5093, 5094, 5092, 5031, 5032, 5033, 5035, 5094A, and 5033A.

2.5.8. (Added) **5122 Explosives Limits (1,250 ft Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
29,000 lbs	6,000 lbs < 247	29,000 lbs	29,000 lbs (10) ≤ 247	29,000	MEQ

2.5.8.1. (Added) Compensatory measures.

2.5.8.1.1. (Added) When 5122A and 5122 are used concurrently, limit HC/D 1.1 to 6,000 pounds.

2.5.8.1.2. (Added) Ensure parking spot 5095, aircraft decontamination area, is not utilized when storing HC/D 1.1 and HC/D 1.2.1 munitions on 5122.

2.5.8.1.3. (Added) Explosive ordnance disposal (EOD) training range 1392 cannot be used when storing HC/D 1.1 munitions on 5122.

**NOTE:** The minimum level of protection from a flightline munitions holding area to a hot cargo pad is K11. Although in compliance, this level of protection only prevents simultaneous detonation. If aircraft survivability is desired, a level of protection K30 or greater should be used. The following parking spots (AECPA) have a level of protection below K30: 5059, 5061, 5093, 5094, 5035, 5094A, and 5122A.

2.5.9. (Added) **29-Bay Multicube 1310 Explosives Limits (850 ft Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
164 lbs	177 lbs < 49	8,444 lbs	5,000 lbs (03) ≤ 49 lbs	5,000 lbs	Capacity

2.5.10. (Added) **Maintenance and Inspection Building 1308 Explosives Limits (670' Clear Zone).**

1.1	1.2.1 MCE	1.2.2	1.2.3 IBD/MCE	1.3	1.4
100 lbs	212 lbs < 54	5,000 lbs	5,000 lbs (04) ≤ 54	5,000 lbs	MEQ

2.5.10.1. (Added) Compensatory measures. The 670' clear zone encompasses parking apron 1903, which is being utilized by the Aero Club when aircraft maintenance needs to be performed in Hangar 1502 to create more room. In accordance with (IAW) AFMAN 91-201, *Explosives Safety* Standards, Table 3.3,

Note 79, Aero Club aircraft are required to be outside the 670’ clear zone. Therefore, munitions storage area (MSA) and Flight Training Center (FTC) schedules will be deconflicted in order to avoid violations.

2.5.10.1.1. (Added) The FTC will coordinate with MSA the time, date, and duration of when they plan to park their aircraft on parking apron 1903.

2.5.10.1.2. (Added) The MSA will coordinate with FTC the time, date, and duration of when they plan to use HC/D 1.1 munitions in bay 2.

2.5.10.1.3. (Added) If a conflict exists between these operations, the MSA has priority and FTC will not park aircraft within the clear zone.

2.5.11. (Added) **Chaff and Flare Building 1307 Explosives Limits (190 ft Clear Zone).**

1.1	1.2.1	1.2.2	1.2.3	1.3	1.4
None	None	None	None	20,000 lbs	MEQ

2.59.1. (Added) Operations Security (OPSEC). All personnel transporting explosives will make every effort to conceal routes and schedules. This information is not classified, but could be used against 374th Airlift Wing (374 AW) operations and should be protected accordingly. Efforts should include, but not be limited to, not talking openly across land mobile radios (LMR), holding phone conversations on secure telephone unit (STU) III, and changing schedule so no set pattern is identifiable.

2.67.1. (Added) Utilized South Gate (primary) or Supply Gate (alternate) for all incoming vehicle explosives shipments. All incoming motor vehicles carrying HC/D 1 explosives and other hazard class items that carry an explosives compatibility group, except HC/D 1.4, will be inspected using DD Form 626, **Motor Vehicle Inspection (Transporting Hazardous Materials).**

2.67.2. (Added) Gate security will notify a 374th Logistics Readiness Squadron Traffic Management Office (TMO) Cargo Section representative (374 LRS/LGRDC) (225-8044/9154) or a TMO trained unit representative of the vehicle explosives shipment arrival. Consequently, a representative will perform a visual inspection, using DD Form 626, prior to allowing the vehicle to its final destination on base. 374th Security Forces Squadron Law Enforcement (374 SFS/SFOL) will escort the vehicle to the appropriate sited explosives location if no discrepancies are found.

2.67.3. (Added) If the vehicle is found hazardous or identified as “suspect,” Law Enforcement will escort the vehicle to hot cargo pad 5083 (primary) or hot cargo pad 5094 (alternate) until discrepancies can be resolved by the appropriate authorities and qualified experts. When moving the vehicle creates a more hazardous situation, correct discrepancies at its current location.

2.68.1. (Added) Review **Attachment 13 (Added)** of this supplement illustration map for clarification. The following routes are explained only going in one direction but can be used in the opposite direction.

2.68.2. (Added) Primary explosives routes. Starting from the northwest of the flightline at building 79, driving on the flightline road, and heading south towards the wash rack entry control point (ECP). From this point, there are three destination options. First, beginning from the wash rack ECP, turning left on McGuire Avenue and right on James Avenue, and finally proceeding to the South Gate (primary for incoming and outgoing explosives shipments). Supply Gate is the alternate gate entrance and exit for explosives transport. Second option: starting from the wash rack ECP, turning left on McGuire Avenue, crossing south overrun, and turning left onto the road next to 374th Operations Support Squadron (374 OSS) building 1374. After removing the guard rails, drive across dispersal 8 then to the MSA for transport

completion. The third option, which is limited to 300 pounds or less of HC/D 1.3 and MEQ of HC/D 1.4, is similarly close to the second option. Instead of turning left onto the road next to 374 OSS building 1374, continue to drive straight and then turn left onto Walker Boulevard. Immediately after driving past the East Fire Department, turn left onto the Dental Clinic access road. Proceed west going around a parking lot, driving past the 374 OSS building 1374, turning right to cross dispersal 8, and finally ending the trip at MSA.

2.68.3. (Added) Alternate explosives routes. Only utilize the two alternate routes, including Supply Gate, when primary routes are not available for use or using K-loaders (primarily use Taxiway Charlie). The first alternate route starts from the MSA or the flightline munitions holding area 5122, driving north of dispersal 9, exiting north perimeter flightline ECP (close to 374th Civil Engineer Squadron Entomology [374 CES/CEOIB] building 1394), proceeding left of Walker Boulevard to the northwest perimeter and crossing the north overrun, continuing south of Walker Boulevard onto Airlift Avenue and turning left on Deseversky Street, turning left on Davis Street and finishing at building 79.

***NOTE: Do not use this route when transporting EED, except for leadless EEDs in metal containers.*** The other alternate route, normally utilized when 40K loaders are used, starts from the MSA or 5122, going south of dispersal 7, crossing Taxiway Charlie from east to west, driving and turning right on the flightline road, and ending at building 79.

2.68.4. (Added) Exceptions to explosives movement routes on base. Movements of munitions within the MSA, to and from licensed storage locations, transportation of explosives in support of the Military Working Dogs training, and Law Enforcement or Air Force Office of Special Investigations (AFOSI) personnel performing official duties are not restricted to designated routes.

2.71.1. (Added) EEDs will never be transported exposed (no container protection). All EEDs will be transported using their original sealed outer package, box, or container. Metal ammo-type containers with proper inner packing are preferred. This will ensure maximum protection from electro-magnetic radiation.

## Chapter 8 (Added)

### C-130/C-5/C-141/C-17 AIRCRAFT DEFENSIVE SAFETY PROCEDURES

#### 8.1. (Added) Individual Roles and Responsibilities.

8.1.1. (Added) Supervisors are responsible for instructing personnel on safety practices applicable to the operations being performed and enforcing all safety requirements governing these activities. Supervisors will act swiftly to eliminate any potential hazards existing in operations under their control.

8.1.2. (Added) Operating personnel are responsible for understanding and strictly adhering to all safety standards, briefings, requirements, and precautions applicable to the tasks and duties performed. Personnel will not begin maintenance or perform any task that they are not qualified to accomplish or do not fully understand.

8.1.3. (Added) Operating personnel will immediately report to their supervisor any condition, equipment item, or material that is, or could be considered, unsafe.

8.1.4. (Added) Stop work immediately when an abnormal condition is noted and pertinent procedures contained herein, or other directives do not specifically relate to the noted irregularity. Consult technically qualified personnel before continuing the operation.

#### 8.2. (Added) Training Requirements.

8.2.1. (Added) Personnel selected to perform chaff and flare loading duties must complete annual explosive safety training and chaff and flare load qualification. Supervisors will ensure that personnel receive the appropriate training prior to personnel getting involved with explosives operations.

8.2.2. (Added) Electronic countermeasures (ECM) personnel will provide initial and recurring chaff and flare load qualification training on modified aircraft

8.2.3. (Added) Chaff and flare load qualification training will include academic instruction and practical demonstration and evaluation.

8.2.4. (Added) Prior to working on explosives loaded aircraft, personnel will receive familiarization training on armed aircraft identification and involved hazards.

#### 8.3. (Added) Personnel Limits.

8.3.1. (Added) Load crews will adhere to the following personnel limits while performing chaff and flare operations:

8.3.1.1. (Added) Minimum. At least two chaff and flare load qualified personnel are required to perform chaff and flare loading task.

8.3.1.2. (Added) Maximum. No more than two load qualified personnel, one loading supervisor, and one casual may be present at the aircraft during chaff and flare loading operations.

8.3.1.3. (Added) Stop explosives operation and provide a safety briefing when visitors are present. Continue explosives operation when visitors depart the area.

#### 8.4. (Added) Explosives Limits.

8.4.1. (Added) Expose the minimum number of personnel to the minimum amount of explosives for the minimum amount of time.

8.4.2. (Added) The following aircraft parking locations will be used for day-to-day aircraft chaff and flare operations. Loading aircraft with chaff and flares will not be performed at any other location unless supplemented by this instruction. The HC/D columns list the maximum net explosive weight (NEW) for each aircraft parking location.

<u>LOCATION</u>	<u>HC/D 1.3</u>	<u>HC/D 1.4</u>
A-2 thru A-9	3,000 pounds	MEQ
5004 thru 5014	3,000 pounds	MEQ
A-10 thru A-16	7,000 pounds	MEQ
5015 thru 5020	7,000 pounds	MEQ
C-5-1 thru C-5-4	7,000 pounds	MEQ
5083A taxiway parking	29,000 pounds	MEQ
5094A taxiway parking	29,000 pounds	MEQ
*5122A taxiway parking	29,000 pounds	MEQ

8.4.3. (Added) During contingencies, these additional C-130 AECPA can be used:

8.4.3.1. (Added) 2,000 pounds of HC/D 1.3 and MEQ of HC/D 1.4 are authorized for dispersal parking spots 5022, 5023, 5024, **5025**, **5026**, **5027**, 5028, 5029, 5030, 5031, **5032**, **5033**, 5035, 5036, **5037**, 5038, 5039, 5057, 5059, 5060, 5061, 5062, 5063, 5065, 5067, 5069, 5070, 5071, 5072, 5073, 5074, **5075**, 5076, 5078, 5080, 5081, 5082, **5083**, **5084**, 5085, 5087, 5088, 5089, 5090, 5091, 5092, **5093**, and **5094**. **NOTE:** See paragraph **8.4.3.2. (Added)** for compensatory measures for bold numbers.

8.4.3.2. (Added) Compensatory measures (actions that prevent Q-D violations and minimize risks).

8.4.3.2.1. (Added) Parking spots 5032 and 5033 can be used as AECPA's when 5033A taxiway aircraft explosives parking area is not used.

8.4.3.2.2. (Added) Parking spots 5092, 5093, and 5094 can be used as AECPA's when 5094A taxiway aircraft explosives parking area is not used.

8.4.3.2.3. (Added) Parking spots 5025, 5026, 5027, 5083, and 5084 can be used as AECPA's when 5083A taxiway aircraft explosives parking area (or take-off rated thrust [TRT] area) is not used.

8.4.3.2.4. (Added) Blue Route crossing will be shut down whenever AECPA's 5064, 5065, or 5089 are being used.

8.4.3.2.5. (Added) 100 pounds of HC/D 1.3 and MEQ of HC/D 1.4 are authorized for dispersal parking spots 5056, 5058, 5064, 5066, and 5068. These parking spots are Q-D exempt due to its NEW capacity.

8.4.4. (Added) Parking spots C5-5, 5001-5003, 5021, and dispersal 8 taxiway parking (near the southeast ECP) are considered **Designated Aircraft Parking Areas** with the following provisions.

8.4.4.1. (Added) When aircraft only have a single aircraft load of defensive system chaff and flare munitions installed.

8.4.4.2. (Added) The aircraft does not carry explosives cargo.

8.4.4.3. (Added) The defensive system chaff and flare munitions can be uploaded and downloaded at the designated parking area provided the quantity of munitions being loaded or unloaded is limited to a single aircraft load.

8.4.5. (Added) No Q-D separation is necessary from explosives-loaded cargo aircraft when parked 24 hours or less for refueling, servicing, crew rest or change, or maintenance performed under T.O. 11A-1-33, *Handling and Maintenance of Explosives Loaded Aircraft*, (applies with all HC/Ds). Keep the aircraft under constant surveillance and do not load, unload, or handle explosives. Park these aircraft on sited aircraft explosives parking areas. Every available AECPA must be used before deciding to park aircraft on unsited parking locations. The use of this rule is not to be abused and will not be utilized only for convenience. When finding a sited parking spot is not possible, coordinate with the 374 OSS Airfield Management (374 OSS/OSAM) and 374 AW Weapons Safety (374 AW/SEW) to find a parking spot that is as remote as possible from other explosives or populated areas.

### **8.5. (Added) Fire-Fighting Guidance.**

8.5.1. (Added) Prior to start of chaff and flare operations, report fire symbol status to either 374 AW Maintenance Operations Center (MOC) (374 AW/CPM) or 730th Air Mobility Squadron Air Mobility Control Center (730 AMS/AMCC), who will consequently notify the 374 CES Fire Alarm Communication Center (FACC) (374 CES/CEFC).

8.5.2. (Added) During chaff and flare operations, post an explosives operation sign and either the 12" or 24" fire symbol sign at the front (nose) of the aircraft as a minimum.

8.5.3. (Added) In the event of a contingency, disregard posting explosives operation signs and fire symbols because of OPSEC and foreign object damage (FOD) hazard reasons.

8.5.4. (Added) (Pacific Air Forces [PACAF], 374 AW C-130s) When chaff and flare loaded aircraft are parked and not currently involved in an operation, ensure the armament placard, located near the aircraft crew entry door, is annotated with the type of munitions loaded. (Air Mobility Command [AMC], 730 AMS) When chaff and flare loaded aircraft are parked and not currently involved in an operation, fire symbol sign(s) will remain posted until the aircraft is ready for departure or all ADS munitions are down-loaded. Ensure the FACC is informed of the aircraft's munitions configuration status.

### **8.6. (Added) Warnings and Safety Requirements.**

8.6.1. (Added) Before the beginning of any explosive loading operation, personnel will remove all rings, watches, and jewelry in accordance with AFOSHSTD 91-66, *General Industrial Operations*, and AFOSHSTD 91-100, *Aircraft Flight Line - Ground Operations and Activities*.

8.6.2. (Added) Halon, dry chemical, or water-type fire extinguishers will not be used on fires involving pyrotechnics or magnesium incendiaries due to the risk of aggravating the fire. These extinguishers may be used for incidental fires in surrounding areas. Unless dictated by a specific aircraft munitions loading manual, two fire extinguishers, suitable for the hazards involved, will be present at any location where munitions are being handled.

8.6.3. (Added) A safety briefing will be given to all personnel involved in the explosives operation to include, but not limited to, emergency actions, withdrawal distances, and fire fighting guidance.

8.6.4. (Added) Munitions will be unloaded prior to aircraft being positioned in hangars, to include the wash rack.

8.6.5. (Added) Aircraft T.O.s, checklists, and local directives will dictate what maintenance actions require the munitions to be unloaded. Some maintenance actions that require munitions unloading are certain types of aircraft jacking and open fuel cell maintenance.

8.6.6. (Added) Personnel will not unnecessarily stand or park vehicles or aerospace ground equipment (AGE) in front of, or directly below, loaded munitions magazines.

8.6.7. (Added) Radios, cell phones, or other transmitting devices will not be permitted within 10 feet of countermeasure chaff and flares.

8.6.8. (Added) All personnel not involved with the explosives operation will remain outside a 50-foot radius while loading is taking place.

8.6.9. (Added) Anytime the C-5 aircraft visor is open and flares are loaded, the counter measures defense system (CMD5) becomes a forward firing ordnance. Standing, stopping, or parking directly in front of an aircraft, with visor open for the purpose of observation, will be limited to no closer than 100 feet.

8.6.10. (Added) Chaff and flare magazines unloaded from an aircraft will be placed in an M548 metal transport cans with proper markings. The cans will be placed on the ground and out of the way of possible traffic. For security and safety reasons, a member of a load crew must stay with the downloaded chaff and flare at all times. Call MOC or AMCC for coordinating munitions pick-up with the MSA. In addition, munitions cans containing chaff and flare may be temporarily stored in the cargo compartment of secured aircraft when load crews are performing successive operations.

8.6.11. (Added) M548 cans holding chaff and flare temporarily stored in the cargo area of the aircraft due to successive operations, will not be kept there overnight, for extended periods nor will they be treated as aircraft equipment for cargo purposes.

8.6.12. (Added) Personnel will ground themselves before beginning chaff and flare operations, and at frequent intervals while working, to discharge any spark potential.

8.6.13. (Added) Two load crews conducting concurrent munitions operations on the same aircraft is prohibited.

8.6.14. (Added) Personnel will not wear static producing clothing such as nylon, wool, rayon, silk, or materials of 100 percent polyester while handling electrically primed munitions. Gore-Tex garments may be worn during explosive operations if there are no exposed explosives.

8.6.15. (Added) Personnel will remove all jewelry items prior to handling munitions.

8.6.16. (Added) Flightline heaters will not be within 25 feet of chaff and flare. If 25 feet cannot be maintained because the hose is connected to the aircraft, then the flightline heater will be placed as far away as permitted by the hose.

8.6.17. (Added) Discontinue all explosive flightline operations when lightning is within 5 nautical miles (5.75 miles) or winds exceed 30 knots. Other conditions that could effect munitions operations will be evaluated on a case-by-case basis.

**NOTE:** If safety is in question, stop the operation until technically qualified personnel and competent authorities can make a determination.

## **8.7. (Added) Procedures for Munitions Pre-load Checks.**

8.7.1. (Added) MOC or AMCC (the agency with operational control of the aircraft) will do the following:

8.7.1.1. (Added) Coordinate with appropriate production supervision to schedule the aircraft 6 hours prior to crew show time to accomplish pre-load checks.

8.7.1.2. (Added) Notify the appropriate munitions load crew of the scheduled time for pre-load checks.

8.7.1.3. (Added) Notify the 374th Maintenance Squadron Munitions Flight (374 MXS/MXMW) of required munitions in-place time.

8.7.1.4. (Added) The munitions load crew will notify MOC or AMCC when pre-load checks are complete and the aircraft is ready for munitions upload.

8.7.1.5. (Added) This is a guideline and times will be flexible to meet mission requirements. 730 AMS could have different requirements due to en route tasking.

### **8.8. (Added) Procedures for Requesting, Transporting, and Loading Munitions.**

8.8.1. (Added) MOC or AMCC will:

8.8.1.1. (Added) Contact Munitions Flight to arrange delivery of munitions to and/or from the aircraft

8.8.1.2. (Added) Notify the FACC when munitions are being transported to and from the aircraft, and when transportation is complete.

8.8.1.3. (Added) Notify the FACC of fire symbol status and each time the status changes. Provide aircraft tail number, parking spot location, and fire symbol for the most hazardous item present.

8.8.2. (Added) Munitions load crew will:

8.8.2.1. (Added) Position operation sign and fire symbol upon arrival of munitions. See paragraph **8.5. (Added)** of this supplement.

8.8.2.2. (Added) Notify MOC or AMCC when a fire symbol is removed or changed.

8.8.2.3. (Added) Sign for munitions delivered to the aircraft

8.8.2.4. (Added) Before the start of munitions upload operations, the appropriate load crew will undertake the following actions:

8.8.2.4.1. (Added) Follow all local directives, aircraft checklists, and T.O.s.

8.8.2.4.2. (Added) Perform a safety briefing for personnel involved in the explosives operation.

8.8.2.4.3. (Added) Purge the area of all non-essential personnel prior to munitions upload.

8.8.2.4.4. (Added) Notify MOC or AMCC and the appropriate Production Superintendent upon commencement and completion of munitions loading.

8.8.2.4.5. (Added) Enter appropriate write-up in the aircraft forms. **NOTE:** Qualified munitions load crew personnel will annotate entries in AFTO Form 781, **ARMS Aircrew/Mission Flight Date Document**, pertaining to munitions configurations per local directives.

8.8.3. (Added) Munitions Flight will:

8.8.3.1. (Added) Notify MOC or AMCC when transporting munitions to and from the flightline.

8.8.3.2. (Added) Notify MOC or AMCC when delivering or picking up munitions. Provide aircraft tail number, parking location, and munitions type.

8.8.3.3. (Added) Have munitions load crew sign for munitions.

**8.9. (Added) Procedures for Launching Munitions Configured Aircraft**

8.9.1. (Added) Follow established procedures to launch aircraft

8.9.2. (Added) All chaff and flare configured aircraft will carry empty M548 cans (enough for all the magazines loaded in the ADS) in case the aircraft has to divert and download at other than home station.

8.9.3. (Added) Aircrews *should* also consider carrying fire symbol placards for use at scheduled divert bases.

8.9.4. (Added) The flight crew at the designated ARM/DE-ARM areas will remove chaff and flare safety devices as required by mission tasking.

8.9.5. (Added) MOC or AMCC will notify the FACC of the parking location and fire symbol status change after aircraft taxies.

**8.10. (Added) Procedures for Recovering and Downloading Munitions Configured Aircraft**

8.10.1. (Added) Follow established procedures to recover and download munitions configured aircraft

8.10.2. (Added) Any munitions configured aircraft that has ejected chaff and flare or had safety pins for the ADS removed will stop at the appropriate ARM/DE-ARM area based on the landing runway and aircraft cargo status and perform an end of runway (EOR) check. Aircraft carrying explosives cargo in addition to the munitions loaded into the ADS can expect to proceed to parking spot 5033A (primary) or 5083A (alternate) and perform their EOR checks prior to beginning cargo download. Aircraft not carrying explosives cargo will perform their EOR checks in areas at the end of the runways. For runway 36, this area is the northwest hammerhead past the instrument landing system (ILS) hold line. For runway 18, the ARM/DE-ARM area is Taxiway Echo. While in the proper EOR location, the following actions must take place. An aircrew member will use established procedures to exit the aircraft and check for hung flares or any other abnormality. This person needs to be familiar with the ADS system. If no hung flare or other problems are in evidence, the aircraft may proceed to its parking location. If a hung flare is discovered, perform the steps outlined in paragraph **8.11. (Added)** of this supplement.

8.10.3. (Added) When inbound notification of munitions configured aircraft is received, the 374 AW Command Post (374 AW/CP) will notify MOC or AMCC of the aircraft's munitions status.

8.10.4. (Added) MOC or AMCC will contact the appropriate 730 AMS or 36th Airlift Squadron (36 AS) munitions load crew, Production Superintendent, Transit Alert (if required), and the Munitions Flight (if required).

8.10.5. (Added) MOC or AMCC will ensure aircrews perform EOR checks, if required, prior to taxiing to a parking location.

8.10.6. (Added) Before the start of munitions downloading operations, the appropriate munitions load crew will undertake the following actions:

8.10.6.1. (Added) Follow all local directives, aircraft checklists, and T.O.s.

8.10.6.2. (Added) Perform safety briefings for personnel involved in the explosive operations.

8.10.6.3. (Added) Purge the area of all non-essential personnel prior to munitions download.

8.10.6.4. (Added) Notify MOC or AMCC and the appropriate Production Superintendent prior to download operation and upon completion. MOC or AMCC will notify FACC of aircraft and munitions status before and after download.

8.10.7. (Added) Enter appropriate write-up in the aircraft forms.

8.10.8. (Added) Coordinate with aircrew to verify any requirements for fire symbol placards at scheduled landing or divert bases.

### **8.11. (Added) Emergency Procedures.**

8.11.1. (Added) This section is not intended to cover all emergencies but to give general guidance to enhance local directives and checklists that cover emergency procedures.

8.11.2. (Added) If any munitions item or procedure is questionable, **STOP** the operation and seek technical guidance.

8.11.3. (Added) Munitions Transport or Loading Emergencies.

8.11.3.1. (Added) In the event of a munitions related emergency during munitions transport or loading or downloading operations, munitions load crews or munitions storage personnel will:

8.11.3.1.1. (Added) Contact the appropriate maintenance control center (374 AW MOC for 374 AW load crews and 730 AMS Maintenance Aircrew Coordination Center for AMC load crews) advising them if EOD is required.

8.11.3.1.2. (Added) Evacuate all personnel to a minimum distance of 300 feet (600 feet if fire is involved).

8.11.3.1.3. (Added) Take charge of controlling the situation, whoever is senior ranking or designated, until relieved of the duty by an on-scene commander (i.e., 374th Mission Support Group Commander [374 MSG/CC], senior fire official, or designated representative).

8.11.3.2. (Added) Upon notification, the maintenance control center will assess the situation and run the appropriate emergency action checklist. As a minimum, the maintenance control center will contact:

8.11.3.2.1. (Added) Fire Department.

8.11.3.2.2. (Added) EOD (if required).

8.11.3.2.3. (Added) 374 AW/SEW.

8.11.3.3. (Added) 374 AW/SEW and the Fire Department will respond immediately, evaluate the situation, and take necessary actions.

**NOTE:** Yokota AB has no local EOD. If EOD is required, the maintenance control center will contact EODMU5 DET Japan at Yokosuka Naval Base for assistance.

8.11.4. (Added) Hung Flare or Partial Ejection.

8.11.4.1. (Added) If a hung flare or partial ejection is detected at the EOR check, the aircrew will:

8.11.4.1.1. (Added) Advise appropriate command and control and ground agency (374 AW/CP for PACAF and 730 AMS Command Post for AMC).

8.11.4.1.2. (Added) Follow normal shutdown procedures.

8.11.4.1.3. (Added) Expeditiously egress the aircrew and passengers to a minimum distance of 600 feet.

8.11.4.1.4. (Added) Take charge of controlling the situation, whoever is senior ranking or designated, until relieved of the duty by an on-scene commander (i.e., 374 MSG/CC, senior fire official, or designated representative).

8.11.4.2. (Added) Upon notification of a hung flare or partial ejection, Command Post will assess the situation and run the appropriate emergency action checklist. As a minimum, Command Post will contact:

8.11.4.2.1. (Added) Fire Department.

8.11.4.2.2. (Added) EOD.

8.11.4.2.3. (Added) 374 AW/SEW.

8.11.4.2.4. (Added) 36 AS or 730 AMS munitions load crew.

**NOTE:** Yokota AB has no local EOD. The closest EOD unit is EODMU5 DET Japan at Yokosuka Naval Base, Japan.

8.11.4.3. (Added) 374 AW/SEW and the Fire Department will respond immediately, evaluate the situation, and take necessary actions.

8.11.4.4. (Added) A munitions load crew from the squadron involved will respond with a weapon composite tool kit (CTK). The crew will report to the on-site commander and await instructions.

8.11.4.5. (Added) After the hung flare or partial ejection is deemed “clear” by EOD, the aircraft may taxi to its parking location and normal operations may be resumed.

**Attachment 12 (Added)****REFERENCES AND TERMS**

**A12.1. (Added) References.** Refer the following publications. T.O. 1C-130A-33-1-2, *Nonnuclear Munitions Loading Procedures, AN/ALE-47(V) Countermeasures Dispensing Set, C-130E and C-130H Aircraft*, T.O. 1C-5A-33-1-2, *Nonnuclear Munitions Loading Procedures, AN/ALE-40(V) Countermeasures Dispenser System (SA-All Prepared)*, T.O. 1C-141B-33-1-2, *Nonnuclear Munitions Loading Procedures, Countermeasures Dispenser System - Selected C-141B Aircraft*, T.O. 1C-17A-33-1-2, *Loading Procedures - AN/ALE-47(V) Countermeasures (McDonnell Douglas Aerospace Transport Aircraft Unit*, T.O. 11A-1-33, *Handling and Maintenance of Explosives Loaded Aircraft - (ATOS)*, T.O. 11A-1-46, *Fire Fighting Guidance, Transportation and Storage Management Data - (ATOS)*, AFMAN 91-201, *Explosives Safety Standards*, PACAFI 21-101, *Objective Wing Aircraft Maintenance* and AMCI 21-101, *Maintenance Management Policy*, AFI 91-202, *The US Air Force Mishap Prevention Program*.

**A12.2. (Added) Terms.**

A12.2.1. (Added) Dud Flare. An aircraft loaded flare that has failed to eject or ignite due to an impulse cartridge misfire or ADS fault. The flare weather seal is intact and flare (explosive) material is not evident at the ejection end of the flare. This flare is no more or less hazardous than a normal flare and may be downloaded using the appropriate technical data. EOD personnel not required.

A12.2.2. (Added) Burn-In-Place. A flare that ignited in place and burned completely leaving the casing entirely empty. This flare is no more or less hazardous than a normal flare and may be downloaded using the appropriate technical data. EOD personnel not required. Damage caused by burn-in-place flares will be reported to either the 374 AW Safety Office or 730 AMS Safety Office.

A12.2.3. (Added) Hung Flare. An aircraft loaded flare that partially ejected. The flare weather seal is damaged or missing and flare material is evident or protruding at the ejection end of the flare. Implement appropriate emergency procedures because these flares are more hazardous than a normal flare. **NOTE: Only qualified EOD personnel will handle these flares!**

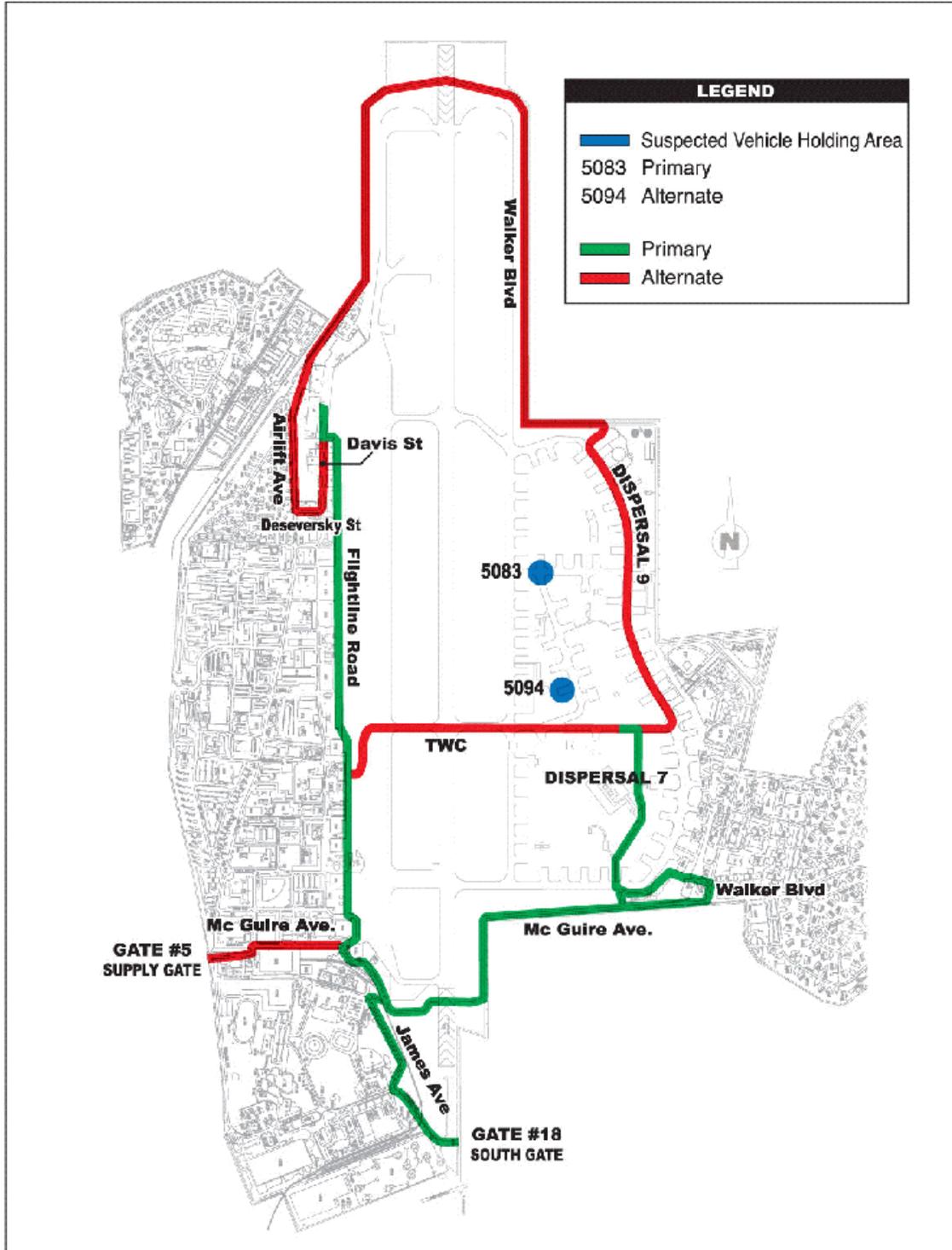
A12.2.4. (Added) Loading. The term chaff and flare loading as used throughout the rest of this instruction refers to both loading and unloading actions. The terms “upload” and “download” will be used specifically to identify that action.

A12.2.5. (Added) Casuals. Persons not normally part of an explosives operation but have duties that require their presence, such as Quality Assurance, Safety, or inspection personnel.

A12.2.6. (Added) Concurrent Operations. Two or more explosives operations within a single facility, aircraft, or location.

Attachment 13 (Added)

EXPLOSIVE ROUTES



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