

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

AVIANO AIR BASE INSTRUCTION 91-201

8 DECEMBER 2015



Safety

***FLIGHTLINE AND MUNITIONS
OPERATIONS HARDENED AIRCRAFT
SHELTERS (HAS), COMBAT
AIRCRAFT PARKING AREAS (CAPA),
HOT CARGO PAD (HCP) EXPLOSIVES
OPERATIONS, MUNITIONS STORAGE
AREA (AREA G)***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Aviano Air Base Instruction (AABI) provides guidance on the net explosives weights (NEWs) authorized at hardened aircraft shelters (HAS), combat aircraft parking areas (CAPA), hot cargo pads (HCP), U.S. Army Personnel Alert Holding Area (PAHA), U.S. Army Heavy Drop Rigging Facility (HDRF)/High Dock and Area G during *Steady state and Contingency* operations and sets forth the compensatory measures needed to be adhered too. This publication implements DOD 6055.9-STD *DOD Ammunitions and Explosives Safety Standards* and AFMAN 91-201 *Explosives Safety Standards*. This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR listed above using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate chain of command. Requests for waivers must be submitted 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 Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

1. General. Explosives safety practices observed during war and peacetime provide personnel and property maximum protection from the damaging effects of potential accidents consistent with operational requirements.

1.1. By design, this instruction is conservative and provides the 31 FW commander (CC) a vehicle for rapid, logical explosives safety decisions IAW all applicable AFIs. During protracted operations or unusual contingencies, risk assessments may provide relief from stipulated procedures. However, because they may require MAJCOM or higher approval, deviations are unauthorized unless directed by 31 FW/CC.

1.2. Commanders and supervisors are responsible for ensuring individuals within their organizations with duties inside explosives clear zones are informed of the risk.

2. Purpose. To provide 31 FW personnel guidance on implementing required compensatory measures to limit hazards and comply with approved explosives site plans.

3. Definitions. 31 FW may operate under two explosives environments. The current explosives environment is declared by the 31 FW/CC and disseminated via Crisis Action Team Directive (CATD).

3.1. *“Steady State” procedures.* *Steady State* operations reflect normal peacetime steady-state airfield operations with no off-flightline impact. Details for HASs are contained in Attachment 2, but generally, under these conditions:

3.1.1. Munitions are not pre-positioned in HASs and cannot exceed the NEW limits identified in attachment 2.

3.1.2. The following table shows the maximum NEW for both steady state and contingency operations in Sierra and Zulu Loop munitions holding areas.

Table 3.1. Maximum NEW for both Steady State and Contingency Operations in Sierra and Zulu Loop Munitions Holding Areas.

Facility	(xx) 1.1	>=1.2.1	<1.2.1	MCE/LSRN	1.2.2	(xx) 1.2.3	1.3	1.4
82001 (Zulu)	22,000	20,000	20,000	401/401	20,000	(07)10,000	30,000	MEQ
82002 (Sierra)	8,000*	1,700	1,700	142/142	20,000	20,000	20,000	20,000

*NOTE: 1.1 NEW is limited to trailers loaded with AIM-9(X) and a maximum of 8 each AIM-120s on a munitions trailer. AIM-120 trailers must be parked a minimum of 8 1/2 feet apart.

3.1.3. The NEW for CAPA throughout the flightline during steady state and contingency operations area is identified in attachment 3. Exceptions to these maximum NEWs are identified in attachment 5.

3.1.4. The HCPs throughout the flightline area can be used to their maximum NEW during both steady state and contingency operations. See attachment 4.

3.1.5. Compensatory measures: The privately own vehicle parking lot just outside the 555th Fighter Squadron's (FS) ECP is within the Zulu Loop Clear Zone (CZ). Active duty members in this parking area are considered an acceptable risk. Dependents momentarily dropping off or picking up active duty spouses are also considered an acceptable risk however; they must not remain longer than the required time. The 555 FS/CC shall ensure the HD 1.1 NEW in HAS Z18 is reduced to 500 lbs. before using the squadron operations building or grounds for other than official duty activities involving non-active duty individuals (i.e. First Friday or squadron parties).

3.2. "*Contingency*" Procedures. Allows the 31 FW to expand explosives operations and implements the highest permissible explosives environment. During *Contingency* operations all munitions and aircraft must be placed inside HASs, and off-flightline impact is limited to a few facilities.

3.2.1. Munitions can be pre-positioned inside HASs up to sited NEW, see attachment 5.

3.2.2. Compensatory measures:

3.2.2.1. Jogging/roller-blading/walking/bike riding is not permitted on the perimeter jogging path between the golf course and 510 FS, building 1173.

3.2.2.2. Building 1100 falls within the Sierra Loop CZ. Only related individuals on necessary and required duty are permitted in the facility. No Italian national employees are permitted to work within the facility under *Contingency*.

3.2.2.3. The 555 FS POV parking lot is within the Zulu Loop CZ. Active duty members in this parking are considered an acceptable risk. Dependents momentarily dropping off or picking up active duty spouses are considered an acceptable risk. The 555 FS/CC shall ensure dependents do not remain longer than the required time.

4. Responsibilities:

4.1. 31st Munitions Squadron (MUNS) shall post the highest hazard division on pads 82001 and 82002 and notify Fire Department as updates occur.

4.2. Sierra, Tower and Zulu loops will not be individual posted with fire symbol or hazard signs when paragraph 4.3. is followed.

4.3. 31st Aircraft Maintenance Squadron (AMXS) CC shall:

4.3.1. Ensure notification of the Maintenance Operations Center (MOC) when hazard division (HD) 1.1 and 1.2.# munitions are loaded/downloaded at HASs or CAPAs.

4.3.2. Ensure notification of MOC when the HAS or CAPA contains no HD 1.1 or 1.2.# munitions when an aircraft leaves.

4.3.3. Ensure notification of MOC when an aircraft returns to a HAS or CAPA with un-expended HD 1.1 and 1.2.# munitions.

4.4. 31 MUNS/Munitions Control shall:

4.4.1. Notify Emergency Command Center (ECC) when 31 MUNS Line Delivery drops off HD 1.1 and 1.2.# munitions to HASs or CAPAs.

4.4.2. Notify ECC when 31 MUNS Line-Delivery picks-up munitions from HAS/CAPAs and there are no HD 1.1 or 1.2.# munitions in the HAS or on the CAPA.

4.5. MOC shall track aircraft/munitions locations in HASs or on CAPAs.

4.6. MOC and Munitions Control shall notify 31 FW Weapons Safety (SEW) if established HAS/CAPA NEW limits must be exceeded for any reason before authorizing the violation. HAS NEW calculations are only for explosives inside the shelter.

4.7. 31 FW/SE shall:

4.7.1. Perform spot inspections to verify control center explosives environment information tracking accuracy.

4.7.2. Perform spot inspections on munitions loading/unloading operations.

4.7.3. Perform spot inspections on munitions delivery operations to ensure HASs and CAPAs do not exceed sited NEW.

4.7.4. Notify wing leadership when U.S. Army plans munitions operations at 1204, 12041 and 1446.

4.7.5. Shall provide a course of actions for wing leadership when US Army operations hazard USAF or Italian personnel.

5. 31st Operations Group (OG) CC shall:

5.1. Ensure CAPAs and HAS hardstands have required munitions specific aircraft parking areas marked in paint within 180 days of this publication's implementation.

5.2. Ensure 31 OG individuals with duties inside explosives clear zones are informed of the risk.

5.3. Ensure Italian national employees are evacuated from all 31 OG facilities when HD 1.1 munitions are introduced into the explosives clear zones.

6. 31st Maintenance Group (MXG) CC shall:

6.1. Upon delivery of munitions, ensure shelter doors are closed as expeditiously as possible. This is a shared responsibility.

6.2. HAS doors must remain closed whenever explosives are inside. Closed doors provide the highest degree of protection to personnel and assets inside the shelter from other Potential Explosion Sites (PESs) and to Exposed Sites (ESs) from the explosives inside the HAS. Doors may be opened to move support equipment and aircraft in and out of the HAS, and for some maintenance activities, but must be closed when those operations are concluded. Refueling inside the HAS shall be conducted with the doors open.

6.3. Place and maintain signs in/on each HAS/CAPA showing steady state and contingency NEW limits. Place signs on the inside of the HAS doors. Signs should reflect both the declared explosives operations state and the specific NEW limits for that particular spot.

6.4. Ensure 31 MXG individuals with duties inside this publication's various explosives clear zones are informed of the risk.

6.5. Ensure Italian national employees are evacuated from all 31 MXG facilities when HD 1.1 munitions are introduced into the explosives clear zones.

6.6. When 2,260 pounds or more, with a maximum of 4,000 pounds of HD 1.1 are on CAPA-Z9A and B perimeter road shall be closed. 31 MXG shall request 31st Mission Support Group (MSG) close the perimeter road around Zulu Loop due to the hazard to personnel.

6.7. Ensure the following compensatory measures for Area G are complied with when the net explosives are increased at 1525PAD, 1568PAD and 82206.

6.7.1. When 1525PAD NEW increases to 50,000 pounds of HD 1.1:

6.7.1.1. All explosives shall be removed from building 1525 and personnel not involved in the explosives operation on 1525PAD shall be evacuated beyond intra-line distance.

6.7.1.2. Building 1500 (Entry Control Point) shall be evacuated when quantity of explosives on 1525PAD is more than 6,680 lbs. of net explosive weight for quantity-distance (NEWQD) of HD 1.1; or 3,993 lbs. NEWQD of HD 1.2.1; or 10,000 lbs. NEWQD of (09) HD 1.2.2; or when the HD 1.2.1 or HD 1.2.3 maximum credible event (MCE) is > 207 lbs.

6.7.2. When 1568PAD NEW increases to 50,000 pounds of HD 1.1:

6.7.2.1. Explosives shall not be present in building 1568 and personnel who are not involved in the explosives operation at 1568PAD shall be evacuated beyond intra-line distance.

6.7.2.2. 82206 (Container Stuff/Un-stuff Pad) shall not be used when explosives are present on 1568PAD.

6.7.2.3. Building 1500 (Entry Control Point) shall be evacuated when the quantity of explosives at 1568PAD is more than 6,296 lbs. NEWQD of HD 1.1; or 3,993 lbs. NEWQD of HD 1.2.1; or 10,000 lbs. NEWQD of (10) HD 1.2.3; or when the HD 1.2.1 or HD 1.2.3 MCE is > 99 lbs.

6.7.3. When 82206 pad NEW increase to 50,000 pounds of HD 1.1:

6.7.3.1. All explosives shall be removed and all personnel evacuated from building 1568.

6.7.3.2. All explosives shall be removed and all personnel evacuated from 1568PAD.

7. 31 MSG/CC shall:

7.1. Ensure Italian national employees are evacuated from all 31 MSG facilities within explosives clear zones.

7.2. Coordinate with 31 OG/CC and 31 MXG/CC to provide facilities for evacuated civilian personnel.

7.3. Post signs banning jogging and skating on specified roads.

7.4. When notified of US Army contingency operations close perimeter road by building 1204 and 12041.

7.5. Ensure 31 MSG individuals with duties inside explosives clear zones are informed of the risk.

8. US Army shall:

- 8.1. Notify the 31 FW/SEW when the US Army plans to introduce munitions into buildings 1204 or 12041.
- 8.2. Post appropriate fire symbol sign/hazard sign on 1204 and 12041.
- 8.3. Notify ECC with fire symbol sign/hazard sign being posted on building 1204 or 12041.
- 8.4. Notify ECC when munitions are removed from facility and the fire symbol/hazard sign is removed.
- 8.5. Maximum NEWs in buildings 1204 and 12041 are in the following table.

Table 8.1. Maximum NEWs in buildings 1204 and 12041.

BARRE R. SEGUIN, Brigadier General, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DOD 6055.9-STD *DOD Ammunitions and Explosives Safety Standards*

AFMAN 91-201 *Explosives Safety Standards*, 12 January 2011

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AMXS — Aircraft Maintenance Squadron

CATD —Crisis Action Team Directive

CAPA — Combat Aircraft Parking Areas

CZ —Clear Zone

ECC —Emergency Command Center

ES —Exposed Sites

FS – Fighter Squadron—FW – Fighter Wing

HAS —Hardened Aircraft Shelters

HCP —Hot Cargo Pad

HD —Hazard Division

HDRF —Heavy Drop Rigging Facility

LSRN - Largest Single Round Net Explosive Weight for Quantity Distance—MCE –
Maximum Credible Event

MSG —Mission Support Group

MOC —Maintenance Operation Center

MXG —Maintenance Group

NEW —Net Explosive Weight

NEWQD - Net Explosive Weight for Quantity-Distance—OG – Operations Group

PAHA —Personnel Alert Holding Area

PES —Potential Explosive Sites

Attachment 2

STEADY STATE OPERATIONS

HD 1.1

Table A2.1. Steady State Operations.

Facility	(xx) 1.1	1.2.1	MCE _≤	1.2.2	(xx) 1.2.3	1.3	1.4
1204	10,000	3,000	175	20,000	0	3,000	3,000
12041	20,000	3,000	175	20,000	0	3,000	3,000

Attachment 3

CAPAS – STEADY STATE AND CONTINGENCY

HD 1.1

Table A3.1. CAPAs – Steady State and Contingency

TOWER LOOP		ZULU LOOP		SIERRA LOOP	
HAS	NEW	HAS	NEW	HAS	NEW
8230(T35)	3,000	7830(Z17)	500	1182(S51)	1,900
8250(T34)	3,000	7870(Z13)	500	1183(S53)	500
8270(T32)	1,000	7910(Z11)	500	1184(S52)	2,000
8280(T33)	2,000	7920(Z18)	2,000	1185(S54)	500
8310(T30)	500	7930(Z9)	500	1186(S55)	1,100
8320(T29)	500	7940(Z16)	500	1189(S57)	0
8360(T27)	500	7960(Z10)	500	1190(S60)	1,000
8370(T25)	500	7970(Z6)	500	1191(S58)	500
8380(T26)	1,100	7980(Z7)	500	1192(S62)	500
8410(T23)	500	7990(Z5)	500	1193(S59)	500
8440(T22)	1,100	8000(Z1)	5,000	1194(S64)	1,100
		8010(Z2)	1,900	1195(S61)	500
		8020(Z3)	1,100	1196(S63)	500
		8030(Z4)	4,000		

* CAPA-Z9A, B and C: NEW Limit is 4,000 pounds of HD 1.1 with the following compensatory measures:

- HAS 7930 shall be limited to 3,314 pounds of HD 1.1.
- CAPA-Z9C shall not be used.

Attachment 4

HCPS

Table A4.1. Steady state and Contingency.

TOWER LOOP		ZULU LOOP		SIERRA LOOP		MIKE LOOP	
CAPA	NEW	CAPA	NEW	CAPA	NEW	CAPA	NEW
T21	57	Z01A	29.5	S82A	29.5	M37A	57
T23	57	Z01B	29.5	S82B	29.5	M37B	57
T24	57	Z01C	29.5	S82C	29.5	M38A	57
T28	57	Z01D	29.5	S82D	29.5	M38A	57
T29A	57	Z01E	29.5	S92A	29.5	M40A	57
		Z01F	29.5	S92B	29.5	M40B	57
		Z09A*	29.5	S92C	29.5	M41A	57
		Z09B*	29.5	S92D	29.5	M41B	57
		Z09C*	29.5	S96A	29.5		
		Z17A	29.5	S96B	29.5		
		Z17B	29.5	S96C	29.5		
		Z17C	29.5				
		Z17D	29.5				
		Z17E	29.5				

** HCP shall **only** be used for logistical support aircraft and with the following measures:

- 1270PAD will have no HD 1.2.1 munitions.
- HAS 8230 and 8250 will have no HD 1.1 munitions.

Attachment 5
CONTINGENCY

Table A5.1. Contingency.

HCP	(xx) 1.1	1.2.1	MCE _≤	1.2.2	(xx) 1.2.3	1.3	1.4
749A	0	0	0	0	0	5,000	5,000
750A	0	0	0	0	0	5,000	5,000
751A	0	0	0	0	0	5,000	5000
800	30,000	28,118	450	30,000	(450)30,000	30,000	30,000
SR-S1	0	176	48	8,000	0	83,000	MEQ
SR-S2	0	287	62	25,000	0	83,000	MEQ
SR-S3	0	389	72	47,000	0	72,000	MEQ
SR-S4	0	284	48	25,000	0	72,000	MEQ
13114	0	864	104	40,000	0	40,000	MEQ
13115	0	1,980	152	40,000	0	40,000	MEQ
13116	0	4,727	222	40,000	0	40,000	MEQ
99917**	0	5,000	275	0	0	5,000	5000
1100HCP	0	0	0	810	0	10,000	MEQ
921HCP	0	0	0	0	0	9,000	MEQ
925HCP	0	0	0	0	0	4,500	MEQ
933HCP	0	0	0	0	0	4,500	MEQ

Table A5.2. Contingency Continuation.

HAS	(xx) 1.1	1.2.1	MCE≤	1.2.2	(xx) 1.2.3	1.3	1.4
SIERRA LOOP (Note 1)							
1182 (S-51)	6,000	865	105	2,000	(105)2,000	20,000	2,000
1183 (S-53)	6,000	865	105	2,000	(105)2,000	2,000	2,000
1184 (S-52)	6,000	865	105	2,000	(105)2,000	2,000	2,000
1185 (S-54)	5,000	865	105	2,000	(105)2,000	2,000	2,000
1186 (S-55)	6,000	865	105	2,000	(105)2,000	2,000	2,000
1188 (S-56)	500	300	0	2,000	2,000	2,000	2,000
1190 (S-60)	2,000	865	105	2,000	(105)2,000	2,000	2,000
1191 (S-58)	500	865	0	2,000	2,000	2,000	2,000
1192 (S-62)	3,500	865	105	2,000	(105)2,000	2,000	2,000
1193 (S-59)	500	865	0	2,000	2,000	2,000	2,000
1194 (S-64)	6,000	865	105	2,000	(105)2,000	2,000	2,000
1195 (S-61)	1,100	865	0	2,000	2,000	2,000	2,000
1196 (S-63)	2,750	865	105	2,000	(105)2,000	2,000	2,000
ZULU LOOP							
7830 (Z-17)	500	0	99	2,000	(55)2,000	2,000	2,000
7870 (Z-13)	4,000	865	105	2,000	(105)2,000	2,000	2,000
7910 (Z-11)	4,000	865	105	2,000	(105)2,000	2,000	2,000
7920 (Z-18)	6,000	865	105	2,000	(105)2,000	2,000	2,000
7930 (Z-9)	4,000	865	105	2,000	(105)2,000	2,000	2,000
7940 (Z-16)	6,000	865	105	2,000	(105)2,000	2,000	2,000
7960 (Z-10)	4,000	865	105	2,000	(105)2,000	2,000	2,000
7970 (Z-6)	4,000	865	105	2,000	(105)2,000	2,000	2,000
7980 (Z-7)	5,000	865	105	2,000	(105)2,000	2,000	2,000
7990 (Z-5)	4,000	865	105	2,000	(105)2,000	2,000	2,000
8000 (Z-1)	5,000	865	105	2,000	(105)2,000	2,000	2,000
8010 (Z-2)	4,000	865	105	2,000	(105)2,000	2,000	2,000
8020 (Z-3)	6,000	865	105	2,000	(105)2,000	2,000	2,000
8030 (Z-4)	4,000	865	105	2,000	(105)2,000	2,000	2,000

NOTE: CAPA-Z9A, B and C: NEW Limit is 4,000 pounds of HD 1.1 with the following compensatory measures:

1. HAS 7930 shall be limited to 3,314 pounds of HD 1.1
2. CAPA-Z9C shall not be used