BY ORDER OF THE COMMANDER, 18TH WING (PACAF)

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Space, Missile, Command, and Control
WEAPONS RANGES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 13-2, *Air Traffic Control*, *Airspace*, *Airfield*, *and Range Management*; and supplements, AFI 13-212, Volumes I, II, and III. It establishes procedures and guidelines for coordination and scheduling of weapons ranges managed by, or through, the 18th Wing (18 WG); and for the conduct of training and weapons delivery on these ranges. This instruction applies to all forces utilizing the following air-to-air and air-to-surface ranges: W-172, W-173, W-174, W-176, W-179, W-183/A, W-184, and W-185.

SUMMARY OF REVISIONS

This publication supersedes all previous 18 WG publications concerning 18 WG Weapons Ranges. It delineates responsibilities of 18 WG agencies; requires non-18 WG units to implement a Letter of Agreement acknowledging compliance with this instruction; details range scheduling priorities and procedures; and specifies authorized ordnance and range procedures.

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- **1. Regulatory Guidance.** Weapons range operations and management are conducted under guidance provided by AFI 13-212, applicable supplements, inter-service memorandums of agreement, and international letters of agreement. Additionally, all using agencies will comply with regulatory guidance established by and through applicable service directives.
- **2. General.** 18th Wing Current Operations Flight (18OSS/OSO) is the 18 WG point of contact for the coordination and scheduling of activities conducted on local weapons ranges. Any inquiries regarding use of these ranges should be made to 18 OSS/OSOSF (DSN: 634-4412/4597/4684 [STU-III: 634-4493]).
 - 2.1. While 18 OSS/OSOSF maintains scheduling authority, offices of primary responsibility include both USAF and USN forces, under US Forces Japan (USFJ) command.
 - 2.2. International agreements promulgate further guidance appropriate to conduct in and around weapons ranges. Unit requests for special handling or altitude reservations (ALTRVs) adjoining or adjacent to ranges must be submitted through USFJ and Pacific Command channels well in advance of intended usage (at least 30 days).
- **3. Responsibilities.** Commanders are responsible for ensuring all personnel utilizing these ranges understand and comply with this instruction and other applicable directives.
 - 3.1. The 18 WG is the operating agency for ranges W-172, W-173A, W-174, W-176, and W-179. It is responsible for ensuring compliance with regulatory guidance concerning the operations of these ranges.
 - 3.2. 18 OSS/OSOSF is the office of primary responsibility for 18 WG ranges, and serves as the focal point for 18 WG operated (and scheduled) airspace. 18 OSS/OSOSF is the scheduling authority for ranges W-173B and C, W-183/A, W-184, and W-185; however, the controlling and operating agency for these ranges is the US Navy through the Commander, Fleet Air Western Pacific.
 - 3.2.1. 18 OSS/OSOSF is responsible for:

Establishing range maintenance procedures and schedules for 18 WG-operated ranges

Coordinating with range decontamination personnel

Publishing a comprehensive range plan

Determining and publishing airspace/range management and employment procedures

Scheduling range activities

Coordinating between range users and any affected units, agencies, or groups

- **4. Letters of Agreement.** Non-18 WG units using 18 WG-operated ranges on a recurring basis, will implement a letter of agreement (LOA) with the 18th WG (through 18 OSS/OSOSF), consenting to compliance with this instruction. A Host-Tenant Support Agreement or Inter-Service Support Agreement specifically addressing the use of 18 WG managed or scheduled weapons ranges fulfills this requirement in-lieu of the LOA.
- **5. Range Usage Guidance.** Weapons ranges represent an invaluable resource whose efficient use are critical to readiness training. It is essential units reserve ONLY the time necessary to conduct requisite training; thereby enabling other forces' use.

- 5.1. Units no longer requiring a specific range reservation should contact 18 WG Scheduling (18 OSS/OSOSF) at 634-4597/ 98/99/4684, as soon as possible, after becoming cognizant of the situation. Units receiving "block times" of airspace must be especially aware of this provision.
- **6. Range Request Timing.** Requests for ranges should normally be consolidated and prioritized by operational echelons at or above squadron/battalion level prior to being forwarded, in writing, to 18 OSS/OSOSF for processing.
 - 6.1. Requests should be forwarded as far in-advance as possible, but no later than 11 days prior to date of intended use. Requests received after this time (including same-day requests) will not receive priority, but may be honored on a space available basis.
 - 6.2. Those units intending to use air-to-surface ranges W-174, W-176, and W-183 are highly encouraged to submit requests at least 45 days prior to use.
- **7. Range Request Format and Specifics.** Requests may be submitted by message or telephone facsimile. The 18 OSS/ OSOSF fax number is DSN: 634-4395. Range requests must include the following information:

Range requested

Date and times requested

Number and type of aircraft/forces conducting operations during specific time period (Ex: 4xAV-8B and TACP (4 personnel), 8xF/A-18C and 2xDDG, mortar platoon (12 personnel), etc.)

Description of activities (Ex: weapons delivery, parachute training, assault landing, indirect fire coordination and control, live missile shoot, etc.)

Total number and type of ordnance (Use military designation and general description. Example: 18xBSU-49, 500 lbs. live or inert general purpose bomb; 320 rounds of M56, 20mm target practice tracer, ball ammunition; star-cluster signal flares; etc.)

Point of contact (POC) (office symbol or unit designation, telephone number, and fax number)

Special Instructions

- 7.1. The range period requested must be appropriate to the required training activity. Units will not be permitted to block large periods of range time to support only a few minutes of actual use.
- 7.2. Units must be scrupulous and forthright in their description of ordnance, and consideration of its effects.
- 7.3. The unit POC contact must be familiar with range activities, and must be able to discuss requirements and adjustments for the request.
- 7.4. Failure to provide all the above information may result in request denial.
- **8.** Request Processing and Schedule Execution. 18 OSS/OSOSF will collect all range requests and assign available range times. Range use is authorized only for units listed on the schedule, and only for the specifically assigned time periods. These assignments will be forwarded to units in writing (usually by message or fax). Unit points of contact must then acknowledge these assignments through fax or message.

- **NOTE:** The basis for this acknowledgment's requirement is fratricide prevention. In one instance, a near-mishap almost cost the lives of a USMC tactical air control party.
 - 8.1. 18 OSS/OSOSF reserves the right to change previously scheduled range periods, but will only exercise this right under extreme circumstances (and only when positive acknowledgment can be achieved). Also, 18 OSS/OSOSF will schedule other users for non-filled range periods. This enables impromptu/same-day requests to be processed.
 - 8.2. Requests for schedule changes, or additional requests for range time, must be made to 18 OSS/OSOSF. Same day requests may be accomplished telephonically.
 - 8.3. Units do NOT have the authority to "trade" range assignments, or combine airspace, without first coordinating with 18 OSS/OSOSF.
 - 8.4. Abnormal events (such as dropped objects, airspace intrusions, near midair collisions, unauthorized personnel on the range, stores jettison, etc.) should be reported to 18 OSS/OSOSF or 18 WG Command Post (DSN: 634-1800) as soon as possible.

9. Range Priorities.

9.1. Air-to-surface ranges will be assigned by the following priorities:

Fixed-wing weapons delivery

Rotary-wing weapons delivery

Other airborne platform operations

Ground operations

Units must provide detailed descriptions of mission and training requirements in their range request. Special consideration will be given to TDY/TAD units, but mission necessities must be clarified.

- 9.2. Air-to-air ranges will be assigned by the following priorities:
 - 9.2.1. 18 WG aircraft and dedicated training adversaries.
 - 9.2.2. Other units, on a space-available basis. Units deploying to Kadena AB should consider integrating local training with 18 WG units and aircraft. The 18 WG point of contact for arranging dissimilar air combat training is the 18 WG Weapons and Tactics Flight (18 OSS/OSP);

DSN: 634-4925/4926/28/29.

- **10.** Weapons Delivery and Effects. Weapons delivery and weapons effects must be initiated and remain within range boundaries. This includes chaff and self-protection flares. Run-in headings and delivery parameters will be calculated to ensure off-range incidents do not occur.
- 11. Weapons Expenditure Reports. When actual weapons expenditures differ from those detailed in range requests, unit points of contact will contact 18 OSS/OSOSF. An updated weapons expenditure report will then be filed.
- **12.** Laser Operation Safety Precautions. The following procedures apply for the use of target designating, and other lasers, on or around weapons ranges.

12.1. A clearing pass of the range will be made to ensure unprotected or unauthorized personnel (including boats in close proximity) are not endangered. Clearing passes are not required if all of the following conditions are met:

A Tactical Air Control Party (TACP) is physically located in a position to effectively ensure the range is clear

Positive two-way radio communication exists between the TACP and the aircraft using the range

The TACP positively clears the aircraft on to the target

Release of ordnance on the first pass is necessary to meet a valid training objective, as determined by the mission commander

- 12.2. Targets designated for laser use must be cleared of all spectral reflectors (glass, shiny metal, puddles of water) out to a distance of 2,000 feet from the target (does not include the water surface of island or shoreline ranges).
- 12.3. All personnel working within the nominal Ocular Hazard Distance must wear laser safety goggles of appropriate optical density.
- 12.4. Ensure the laser is always pointed downrange and consistent with laser designation headings specific to the range.
- 12.5. Laser operations will cease, if unprotected or unauthorized personnel enter the range area or laser footprint.
- 12.6. Two-way communications must be maintained between laser operators and all range personnel.
- **13. Range Decontamination.** Periodic range maintenance and cleanup are prescribed by directives and the range plan.
 - 13.1. Explosive ordnance disposal (EOD) personnel will schedule range time through 18 OSS/OSOSF. 18 OSS/OSOSF will in turn ensure Notices to Airmen are published as a warning to aircrews.
 - 13.2. Disposal of ordnance on weapons ranges must first be coordinated through 18 WG Public Affairs and the Defense Facilities Administration Bureau. 18 OSS/OSOSF is responsible for coordination.
 - 13.3. While on Idesuna Jima (W-174) and Tori Shima (W-176) ranges, personnel will maintain communications. EOD control can be raised on VHF/FM 37.90 primary or 60.90 secondary.
 - 13.4. Normally, ranges being decontaminated (and the corresponding airspace) will be closed. In the event airspace usage is allowed, overflight below 10,000 feet AGL or within 2 NM of range decontamination operations is strictly prohibited.
 - 13.4.1. If an overflight occurs while personnel are on the range, they will attempt to warn the aircraft with standard signaling devices and direct communication with the aircraft.
 - 13.4.1.1. Personnel will communicate with the following statement, "Aircraft in the vicinity of Whiskey 174 (or 176), clear the area, personnel are on the range."
 - 13.4.2. Personnel will attempt to identify the violating aircraft by type, service, tail number, or any other distinguishing features, and report the overflight to 18 OSS/OSOSF.

14. Range Descriptions. Detailed range descriptions and procedures for W-174, W-176, W-172, W-173, W-179, W-183/A, W-184, and W-185 are contained in the following attachments.

JOHN R. BAKER, Brigadier General, USAF Commander, 18th Wing

RANGE ORIENTATION AND LOCATIONS RELATIVE TO OKINAWA

A1.1. General. The ranges surrounding Okinawa are oriented such that most air-to-air ranges are located to the east, while two of three air-to-surface ranges are located west of the island. The eastern ranges W-173B, W-173C, W-183/A, W-184, and W-185 are operated by Fleet, Air Western Pacific (US Navy), while the others are operated by the USAF (18th Wing).

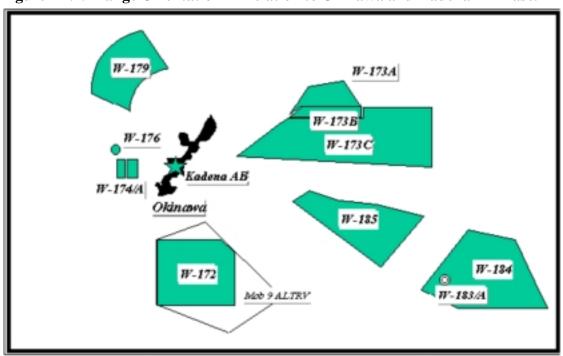


Figure A1.1. Range Orientation in Relation to Okinawa and Kadena Air Base.

- **A1.2. Prioritization of US Navy Ranges.** The US Navy reserves the right to schedule, for its use, any or all ranges under its operation. While USN range reservations are usually made 3 to 4 weeks in advance, no requirement for prior reservation exists. As such, units scheduled for use of these ranges may have range periods withdrawn with little or no warning.
 - A1.2.1. Units should not attempt to enter or operate in these ranges when scheduled for Fleet use, unless specifically authorized to do so. Hazardous activities, such as surface-to-air or surface-to-surface live-fire exercises may taking place. Therefore, though the airspace may appear free of flight activity, aircraft should remain clear.
- **A1.3. Applicable Charts.** See Operational Navigation Chart (ONC) H-13 and Tactical Pilotage Chart (TPC) H-13D.

Table A1.1. Range Type, Altitudes, and Hours of Operation.

RANGE	ТҮРЕ	ORDNANCE	ALTITUDES	HOURS OF OPERATION
W-172	A/A	Conv. A/A	Sfc to Unlimited	Continuous
Mobile 9 ALTRV	A/A	None	Sfc to 40,000'	By special arrange- ment
W-173A	A/A	None	3,000' to 60,000'	0600-2000L, Sun-Sat
W-173B	A/A	None	3,000 to 60,000'	0600-2000L, Sun-Sat
W-173C	A/A, A/S, S/S	Conv. A/A, A/S, S/S	Sfc to Unlimited	0600-2000L, Sun-Sat
W-174/A	A/S, S/S	Trng Only-A/S, S/S	Sfc to 15,000'	0600-2300L, Mon-Sat
W-176	A/S	Inert & Live-A/S	Sfc to 15,000'	0600-2359L, Sun-Sat
W-179	A/A	Conv. A/A	Sfc to Unlimited	Continuous
W-183/A	A/S, S/S	Conv. A/S, S/S	Sfc to Unlimited	Continuous
W-184	A/A, A/S, S/S	Conv. A/A, A/S, S/S	Sfc to Unlimited	Continuous
W-185	A/A, A/S, S/S	Conv. A/A, A/S, S/S	Sfc to Unlimited	0600-1800L, Sun-Sat

Abbreviations

A/A: Air-to-Air, A/S: Air-to-Surface, S/S: Surface-to-Surface, ALTRV: Altitude Reservation

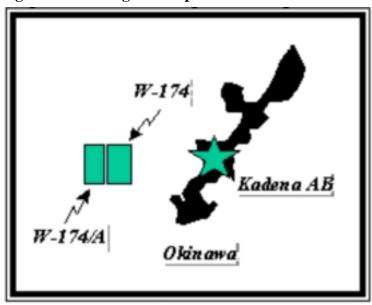
NOTES:

- 1. Absolutely NO Depleted Uranium Rounds, or any ordnance containing nuclear material, will be expended on any of these ranges. Use of other than authorized ordnance may be punishable under the UCMJ.
- 2. Weapons delivery and weapons effects must be initiated and remain within range boundaries. This includes chaff and self-protection flares. Run-in headings and delivery parameters will be calculated to ensure off-range incidents do not occur.
- 3. See following attachments for greater detail on specific ranges.

IDESUNA JIMA (W-174) AIR-TO-SURFACE AND SURFACE-TO-SURFACE RANGE PROCEDURES

A2.1. Range Description.

Figure A2.1. Range Description.



A2.1.1. Range Type. W-174 is an uncontrolled tactical air-to-surface and surface-to-surface weapons range (USAF Class C) for training and inert ordnance delivery. The target complex is located on Idesuna Jima, which lies within the confines of W-174.

A2.1.2. Range Boundaries (W-174). Beginning at:

N 26°27'	E 126°56' to
N 26°27'	E 127°07' to
N 26°12'	E 127°07' to
N 26°12'	E 126°56' to

Point of Origin

- A2.1.3. Altitudes. Surface to 15,000' MSL.
- **A2.2. Target Description.** Target is a 2 NM radius circle centered at N 26°23'02" E 127°06'20" [Idesuna Island, 278/36 (TACAN Ch 57)]. The hill located on the southern edge of Idesuna Jima is a no-drop zone. The hill has a bunker for storage of construction equipment and serves as a helicopter landing area.
- **A2.3.** Hours of Operation. 0600L through 2300L; Monday through Saturday.

- **A2.4. Authorized Ordnance.** All practice and inert FREE-FALL ORDNANCE (up to 2,000 lbs.), chaff, self-protection flares, and target illumination flares are authorized. Units employing flares must ensure these remain within the 2 NM target radius described above.
 - A2.4.1. Forward firing ordnance is restricted to: a) inert 2.75-inch rockets and below; and b) 25mm TP and TP tracer, and below. Live ordnance is NOT authorized.
 - A2.4.2. For purposes of self-protection flare employment, Idesuna Island is classified as government controlled property where no fire hazard exists. Therefore, no altitude restrictions are imposed on self-protection flares as long as these flares remain within the 2 NM target radius described above.
 - A2.4.3. Ordnance for ground operations are restricted to the following conditions:

Ordnance will not contain high explosive fillers

Ordnance will not contain white phosphorus

Ordnance will not contain random delay or sensor fuzing (i.e. seismic, acoustic, magnetic)

Ordnance will be limited to 4.2 inches (107mm) in diameter and smaller and will be target practice, smoke, or illumination munitions only

A2.5. Radio Frequencies and Procedures.

- A2.5.1. W-174 operations will be conducted on frequency 287.5. All aircraft and/or ground operations will monitor the range frequency. A blanket call on "GUARD" (243.0) will be made prior to entering the range. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.
- A2.5.2. Radio Failure (NORDO). Weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Weapons delivery may resume ONLY when affected aircraft or ground personnel have regained radio contact, or departed the range.

A2.6. Range Entry, Clearing Passes, and Holding Procedures.

- A2.6.1. Range Entry. Flights may enter the range from any direction.
- A2.6.2. Clearing Passes. All aircraft are required to make a dry, visual clearing pass to ensure the target area is clear of unauthorized personnel or vessels, prior to expending ordnance. Clearing passes will be made at an altitude and speed commensurate with ensuring no conflicting surface activity (including vessels in close proximity), but no lower than 1,000' AGL. Minimum airspeeds will be IAW service or unit directives. Clearing passes are not required if all of the following conditions are met:

A Tactical Air Control Party (TACP) is physically located in a position to effectively ensure the range is clear

Positive two-way radio communication exists between the TACP and the aircraft using the range

The TACP positively clears the aircraft on to the target

Release of ordnance on the first pass is necessary to meet a valid training objective, as determined by the mission commander

A2.6.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA.

A2.7. Weapons Delivery Patterns and Restrictions.

- A2.7.1. Final attack courses will be planned so as to avoid run-ins pointing toward, flying over, or pulling-off towards Tonaki Jima (located 3 NM ESE of the target). Final attack headings of 090° through 130° are prohibited. Units are reminded that weapons delivery and weapons effects must be initiated and remain within the confines of the airspace.
- A2.7.2. Aguni Jima. Never overfly Aguni Jima (NNE of Idesuna Jima) with an armed weapon system, or at an altitude of less than 3,000' AGL. If below 3,000' AGL, fly no closer than 1 NM horizontally.
- A2.7.3. Strafe. Only high angle strafe (greater than 25 degrees dive angle) may be performed on W-174 (not applicable to helicopters).
- A2.7.4. Laser Operations. Airborne platforms (including helicopters) employing lasers must ensure designation heading between 324° and 090°, OR 144° and 270°. Ground-based lasers must be located 70 feet or higher on the ridge line at the southern end of the island. Laser operations must comply with paragraph 11. of this instruction.

A2.8. Jettison Procedures.

- A2.8.1. Controlled Jettison. Fly a run-in course of 025° or 205°.
- A2.8.2. Emergency Jettison. Emergency jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A2.9.** Range Departures. Flights may exit the range in any direction. However, VMC under VFR must be maintained, and the Okinawa TCA avoided, until contact with Okinawa Approach is established.

A2.10. Kume Jima (W-174A) Airspace Description.

- A2.10.1. Range Type. W-174A airspace is used primarily as an extension for W-174. Expenditure of ordnance is NOT authorized.
- A2.10.2. Airspace Boundaries (W-174A). Beginning at:

N 26°27'	E 126°48' to
N 26°27'	E 126°56' to
N 26°12'	E 126°56' to
N 26°12'	E 126°48' to

Point of Origin

- **A2.11. Altitudes.** Surface to 15,000' MSL. Above 15,000' MSL through previous arrangement with 18 OSS/OSOSF, Naha Air Control Center, and NOTAM.
- **A2.12.** Target Description . Not applicable.
- **A2.13. Hours of Operation.** Same as W-174. Unless otherwise notified, W-174A will be automatically scheduled with W-174 range periods.
- A2.14. Authorized Ordnance. None.
- **A2.15. Radio Frequencies and Procedures.** Same as W-174.
- **A2.16.** Range Entry, Clearing Passes, and Holding Procedures. Same as W-174.
- **A2.17.** Weapons Delivery Patterns and Restrictions. Weapons delivery not authorized.
- **A2.18. Jettison Procedures.** Use and follow procedures for W-174.
- **A2.19. Range Departures.** Same as W-174.

TORI SHIMA (W-176) AIR-TO-SURFACE RANGE PROCEDURES

A3.1. Range Description.

- A3.1.1. Range Type. Tori Shima (W-176) is an uncontrolled tactical air-to-surface weapons range (USAF Class C) for delivery of practice, inert, and live ordnance. The range is located within W-176 airspace.
- A3.1.2. Range Boundaries (W-176). W-176 range space is comprised of a circular area of 5 NM radius centered at N 26°36' E 126°50'.
- A3.1.3. Altitudes. Surface to 15,000' MSL.

Figure A3.1. Range Description.



- **A3.2. Range Boundaries and Target Description.** The target is Tori Shima Island. The weapons impact boundaries include the island and the water surface contiguous to Tori Shima within a 3 NM radius centered at N 26°35'30" E 126°50'06" [290/53 (TACAN Ch 57)].
- **A3.3.** Hours of Operation. 0600L through 2359L, Sunday though Saturday (7-days per week).

A3.4. Authorized Ordnance.

- A3.4.1. Only ordnance listed in the paragraphs below are authorized for use in W-176. Absolutely no Depleted Uranium Rounds, or any ordnance containing nuclear material, will be expended on this range. No ordnance with fusing delays will be authorized. Mk 36 Destructor series munitions will NOT be used. USE OF UNAUTHORIZED ORDNANCE ON W-176 MAY BE PUNISHABLE UNDER THE UCMJ.
- A3.4.2. Practice, Training, or Inert Ordnance.

- A3.4.2.1. All practice and inert FREE-FALL ORDNANCE (up to 2,000 lbs.), chaff, self-protection flares, and target illumination flares are authorized.
- A3.4.2.2. Forward firing inert ordnance is restricted to: a) inert 5-inch rockets; b) inert 2.75-inch rockets and below; c) 20mm TP and TP tracer, and below; d) 25mm TP and TP tracer; e) 30mm TP and TP tracer; and f) 40mm TP and TP tracer.
- A3.4.2.3. Chaff and Flares. Chaff, self-protection flares, and target illumination flares are authorized. Units employing flares must ensure these remain within the 3 NM target radius described above. For purposes of self-protection flare employment, Idesuna Island is classified as government controlled property where no fire hazard exists. Therefore, no altitude restrictions are imposed on self-protection flares as long as these flares remain within the 3 NM target radius.
- A3.4.3. Live Forward Firing Ordnance. Live forward firing ordnance is restricted to:
 - A3.4.3.1. 5-inch Rockets, Inert or High Explosive (NO white phosphorous or flechette warheads).
 - A3.4.3.2. 2.75-inch Rockets, Inert or High Explosive (NO white phosphorous or flechette warheads).
 - A3.4.3.3. 20mm (and below) HE, HEI, HEIT, and AP (absolutely NO Depleted Uranium Rounds).
 - A3.4.3.4. 25mm HE and AP (absolutely NO Depleted Uranium Rounds).
 - A3.4.3.5. 30mm HE (absolutely NO Depleted Uranium Rounds).
 - A3.4.3.6. 40mm HE (absolutely NO Depleted Uranium Rounds).
 - A3.4.3.7. TOW Missiles (Restricted headings apply (See A.A3.7.3.) fire must be initiated and weapons effects must remain within 3 NM radius target boundaries); and Hellfire Missiles (Restricted headings apply (See A3.7.3.) fire must be initiated and weapons effects must remain within 3 NM radius target boundaries)
- A3.4.4. Live Freefall Ordnance. Live freefall ordnance is restricted to the following:
 - A3.4.4.1. Mk 117, 750 lbs. HE.
 - A3.4.4.2. Mk 81, 250 lbs. HE (and all applicable guidance packages).
 - A3.4.4.3. Mk 82, 500 lbs. HE (and all applicable guidance packages).
 - A3.4.4.4. Mk 83, 1000 lbs. HE (and all applicable guidance packages).
 - A3.4.4.5. Mk 84, 2000 lbs. HE (and all applicable guidance packages).

A3.5. Radio Frequencies and Procedures.

A3.5.1. W-176 operations will be conducted on frequency 287.2. All aircraft and/or ground operations will monitor the range frequency. A blanket call on "GUARD" (243.0) will be made prior to entering the range. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.

A3.5.2. Radio Failure (NORDO). Weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Weapons delivery may resume only when affected aircraft have regained radio contact, or departed the range.

A3.6. Range Entry, Clearing Passes, and Holding Procedures.

- A3.6.1. Range Entry. Flights may enter the range from any direction.
- A3.6.2. Clearing Passes. All aircraft are required to make a dry, visual clearing pass to ensure the target area is clear of unauthorized personnel or vessels, prior to expending ordnance. Clearing passes will be made at an altitude and speed commensurate with ensuring no conflicting surface activity (including vessels in close proximity), but no lower than 1,000' AGL. Minimum airspeeds will be IAW service or unit directives. Clearing passes are not required if all of the following conditions are met:
 - A3.6.2.1. A Tactical Air Control Party (TACP) is physically located in a position to effectively ensure the range is clear.
 - A3.6.2.2. Positive two-way radio communication exists between the TACP and the aircraft using the range.
 - A3.6.2.3. The TACP positively clears the aircraft on to the target.
 - A3.6.2.4. Release of ordnance on the first pass is necessary to meet a valid training objective, as determined by the mission commander.
- A3.6.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA.

A3.7. Weapons Delivery Patterns and Restrictions.

- A3.7.1. All weapons delivery patterns authorized by service and unit directives are allowed on W-176. Though no final attack courses for non-guided weapons are stipulated, aircraft will avoid overflight of islands or surface craft. Units are reminded that weapons delivery and weapons effects must be initiated and remain within the confines of the airspace.
- A3.7.2. Laser Operations. Airborne platforms (including helicopters) employing lasers for freefall weapons must use a designation heading between 032° and 093°, OR 211° and 273°. Laser operations must comply with paragraph 12. of this instruction.
- A3.7.3. TOW and Hellfire Missile Restrictions.
 - A3.7.3.1. TOW missiles must be employed on a flyout heading between 270° and 060°.
 - A3.7.3.2. Hellfire missiles must be employed on a flyout heading between 230° and 273°, OR 032° and 060°. The intent of these limitations is to meet the laser restrictions while considering the loss of missile guidance.

A3.8. Jettison Procedures.

A3.8.1. Controlled Jettison. Jettison stores so as to impact Tori Shima Island.

- A3.8.2. Emergency Jettison. Emergency jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A3.9.** Range Departures. Flights may exit the range in any direction. However, VMC under VFR must be maintained, and the Okinawa TCA avoided, until contact with Okinawa Approach is established.
- **A3.10. Ground Operations.** Tori Shima is a live fire air-to-surface bombing and gunnery range. The island contains armed, unexploded ordnance items in questionable states of stability. Therefore, ground operations will be limited to range clearance, decontamination, and maintenance operations conducted by or under the supervision of Kadena EOD personnel.
 - A3.10.1. Before conducting ground operations on Tori Shima, units must coordinate with the Kadena Radiation Safety Officer (18 AMDS/SGPB, DSN: 634-4752).

W-172 AND MOBILE 9 AIR-TO-AIR RANGE PROCEDURES

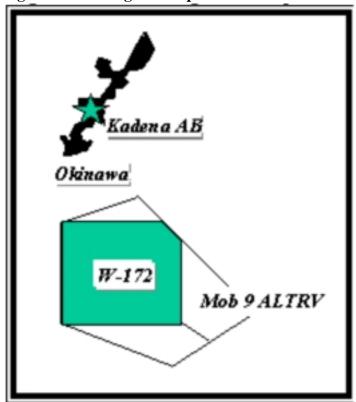
A4.1. Range Description.

- A4.1.1. Range Type. W-172 is an air-to-air range located southeast of Okinawa. While air-to-air weapons may be employed in the airspace, air-to-surface weapons delivery is prohibited.
- A4.1.2. Range Boundaries (W-172). Beginning at:

N 25°14'00"	E 127°35'00" to
N 24°16'30"	E 127°35'00" to
N 24°16'30"	E 128°40'00" to
N 25°04'30"	E 128°40'00" to
N 25°14'00"	E 128°30'00" to

A4.1.3. Altitudes. Surface to Unlimited.

Figure A4.1. Range Description.



- **A4.2.** Target Description. Not applicable.
- **A4.3. Hours of Operation.** Continuous.

A4.4. Authorized Ordnance. All conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles. Units are reminded that weapons delivery and weapons effects must be initiated and remain within the confines of the airspace. Use of chaff, self-protection flares, and target illumination flares is authorized. Units employing flares must ensure these remain within the confines of the airspace.

A4.5. Radio Frequencies and Procedures.

- A4.5.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants of W-172 must monitor the "Area Common Frequency" of 347.0. Generally, working frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 260.2 and/or 359.9.
- A4.5.2. Live-fire Operations. Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.
- A4.5.3. Radio Failure (NORDO). Air combat training and/or weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training and/or weapons delivery may resume when affected aircraft have regained radio contact or departed the range.

A4.6. Range Entry, Range Sweeps, and Holding Procedures.

- A4.6.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. However, flights in instrument meteorological conditions and/or under radar control should file to the Area Entry/Exit Point located at N 25°14' E 128°05'.
- A4.6.2. Range Sweeps. Prior to expending ordnance within the confines of the range, all aircraft are required to make a dry, visual range sweep to ensure the ordnance "box" (potential ordnance impact area) is clear of maritime activity, and the airspace clear of unauthorized aircraft (or those in close proximity). Range sweeps will be made at an altitude and speed commensurate with providing a wide area visual scan for surface activity and low enough to detect small vessels. Minimum airspeeds will be IAW service or unit directives. Suggested range sweep altitudes are between 1,000' and 3,000' AWL.
 - A4.6.2.1. Range sweeps may be performed utilizing airborne or shipborne radar platforms (such as E-3, P-3, E-2, etc.); however, the flight leader maintains overall responsibility for weapons effects safety.
- A4.6.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA.

A4.7. Weapons Delivery Patterns and Restrictions. IAW paragraph 10. of this instruction.

- A4.7.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- A4.7.2. Laser Operations. Not applicable.

A4.8. Jettison Procedures. Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.

A4.9. Range Departures. Flights under VFR and in VMC may exit the range in any direction. However, flights in instrument meteorological conditions and under radar control should use the Area Exit Point located at N 25°14' E 128°05'. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established.

A4.10. Mobile 9 (Mob 9) ALTRV Description.

A4.10.1. Range Type. Mobile 9 is a large ALTRV overlaying and extending W-172 airspace on all sides. It has a primary axis of Northwest to Southeast, and may be used in its entirety or divided into an Eastern area (Mob 9E) and a Western area (Mob 9W). Of the two, Mob 9E is the larger. Since Mob 9 is an ALTRV, expenditure of ordnance (other than chaff and self-protection flares) is NOT authorized outside the confines of W-172. Units desiring to utilize Mobile 9 must specifically request it from 18 OSS/OSOSF, since these requests must in-turn be submitted through PACOM channels.

A4.10.2. Airspace Boundaries (Mob 9). Beginning at:

N 25°14'	E 127°35' to
N 25°32'	E 128°10' to
N 24°24'	E 129°27' to
N 23°52'	E 128°33' to
N 24°16'	E 127°35' to

Point of Origin

A4.10.3. Mobile 9 is subdivided into Mob 9E and Mob 9W using a line running from N 25°07' E 127°36' to N 24°08' E 129°00'.

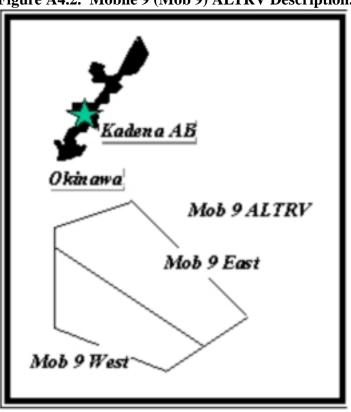


Figure A4.2. Mobile 9 (Mob 9) ALTRV Description.

A4.11. Altitudes. Surface to 40,000' MSL. Above 40,000' MSL through special arrangement (units must specifically request).

A4.12. Target Description. Not applicable.

A4.13. Hours of Operation. Variable. Dependent upon special arrangement between PACOM Airspace Manager and Naha Air Control Center. Unless otherwise notified, W-172 will be automatically scheduled during Mob 9 range periods.

A4.14. Authorized Ordnance. None, other than use of chaff and self-protection flares. Units employing flares must ensure these remain within the confines of the airspace.

A4.15. Radio Frequencies and Procedures.

A4.15.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants must monitor the "Area Common Frequency." The Mob 9 and Mob 9E Common is 347.0. The Mob 9W Common is 292.1. Generally, other frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 260.2, 359.9, 312.5, and 297.3 when using Mob 9 in its entirety. 260.2 and/or 359.9 are available for Mob 9E, and 312.5 and/or 297.3 are available for Mobile 9W.

A4.15.2. Live-fire Operations. Not applicable.

A4.15.3. Radio Failure (NORDO). Training will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training may resume when affected aircraft have regained radio contact, or departed the range.

A4.16. Range Entry, Range Sweeps, and Holding Procedures.

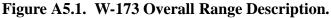
- A4.16.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. However, flights in instrument meteorological conditions and under radar control should file to the Area Entry/Exit Points. The Mob 9 and Mob 9E point is located at N 25°25' E 127°50'. The Mob 9W point is N 24°45' E 127°35'.
- A4.16.2. Range Sweeps. Not applicable to Mobile 9 operations. See W-172 procedures.
- A4.16.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA.

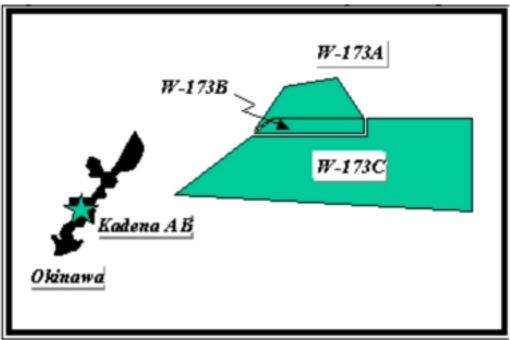
A4.17. Weapons Delivery Patterns and Restrictions. Not applicable to Mobile 9 operations.

- A4.17.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- A4.17.2. Laser Operations. Not applicable to Mobile 9 operations.
- **A4.18. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A4.19. Range Departures.** Flights under VFR and in VMC may exit the range in any direction. However, flights in instrument meteorological conditions and under radar control should use the Area Exit Points located at N 25°25' E 127°50' for Mob 9 and Mob 9E, or N 24°45' E 127°35' for Mob 9W. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established.

W-173 A/B/C (ALPHA/HOTEL-HOTEL) AIR-TO-AIR AND AIR-TO-SURFACE RANGE PROCEDURES

A5.1. W-173 Overall Range Description. W-173 is composed of three (3) areas and is located NE of Kadena AB. The majority of this airspace is comprised of W-173C, which is a predominantly East - West, rectangular range space used for air-to-air, air-to-surface, and surface-to-surface weapons delivery and training. W-173B is a small rectangular airspace (again running predominantly East - West), adjoining W-173C in the Northwest. W-173A adjoins the northern border of W-173B. No ordnance expenditure, other than chaff and self-protection flares, is authorized in either W-173A or W-173B.





A5.2. W-173A Range Description.

A5.2.1. Range Type. Air-to-air training airspace.

A5.2.2. Range Boundaries (W-173A). Beginning at:

N 23°53'	E 128°55' to
N 27°24'	E 129°15' to
N 27°29'	E 129°35' to
N 27°33'	E 130°00' to
N 27°06'	E 130°15' to
N 27°06'	E 129°10' to

Point of Origin

A5.2.3. Altitudes. 3,000' MSL to 60,000' MSL.

- **A5.3.** Target Description. Not applicable.
- **A5.4. Hours of Operation.** 0600L through 2000L, Sunday through Saturday (7 days per week).
- **A5.5. Authorized Ordnance.** None, other than use of chaff and self-protection flares. Units employing flares must ensure these remain within the confines of the airspace.

A5.6. Radio Frequencies and Procedures.

- A5.6.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants using only W-173A must monitor the "Area Common Frequency" of 227.4. Generally, other frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 321.0 and/or 270.2.
- A5.6.2. Live-fire Operations. Not applicable.
- A5.6.3. Radio Failure (NORDO). Training will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training may resume when affected aircraft have regained radio contact, or departed the range.

A5.7. Range Entry, Range Sweeps, and Holding Procedures.

- A5.7.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. There is no designated entry/exit point for W-173A.
- A5.7.2. Range Sweeps. Not applicable.
- A5.7.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA. Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to the range space.

A5.8. Weapons Delivery Patterns and Restrictions. Not applicable.

- A5.8.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- **A5.9. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A5.10. Range Departures.** Flights under VFR and in VMC may exit the range in any direction. There is no designated exit point for W-173A. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established. Flights must use extreme caution upon exiting the area in avoiding dense commercial traffic using air routes adjacent to the range space.

A5.11. W-173B Range Description.

- A5.11.1. Range Type. Air-to-air training airspace.
- A5.11.2. Range Boundaries (W-173B). Beginning at:

N 26°50'	E 128°51' to
N 27°06'	E 129°10' to
N 27°06'	E 130°15' to
N 26°50'	E 130°15' to

Point of Origin

- A5.11.3. Altitudes. 3,000' MSL to 60,000' MSL.
- **A5.12.** Target Description. Not applicable.
- **A5.13. Hours of Operation.** 0600L through 2000L, Sunday through Saturday (7 days per week).
- **A5.14. Authorized Ordnance.** None, other than use of chaff and self-protection flares. Units employing flares must ensure these remain within the confines of the airspace.

A5.15. Radio Frequencies and Procedures.

- A5.15.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). W-173B is always scheduled in conjunction with either W-173A or W-173C. Unless under positive control of a ground or airborne controlling agency, all occupants must monitor the appropriate "Area Common Frequency" of either W-173A or W-173C, 227.4 or 339.0 respectively.
- A5.15.2. Live-fire Operations. Not applicable.

A5.15.3. Radio Failure (NORDO). Air combat training will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training may resume only when affected aircraft have regained radio contact, or departed the range.

A5.16. Range Entry, Range Sweeps, and Holding Procedures.

- A5.16.1. Range Entry. Entry into W-173B can be gained only through W-173A or W-173C. See applicable procedures.
- A5.16.2. Range Sweeps. Not applicable.
- A5.16.3. Holding. Not applicable. See W-173A or W-173C.

A5.17. Weapons Delivery Patterns and Restrictions. Not applicable.

- A5.17.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- **A5.18. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A5.19. Range Departures.** Not applicable. See W-173A or W-173C.

A5.20. W-173C Range Description.

- A5.20.1. Range Type. W-173C is an air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range.
- A5.20.2. Range Boundaries (W-173C). Beginning at:

N 26°23'	E 26°23' to
N 26°50'	E 128°51' to
N 26°50'	E 130°15' to
N 27°06'	E 130°15' to
N 27°06'	E 131°00' to
N 26°10'	E 131°00' to

Point of Origin

A5.20.3. Altitudes. Surface to Unlimited.

A5.21. Target Description. Not applicable.

A5.22. Hours of Operation. 0600L through 2000L, Sunday through Saturday (7 days per week).

- **A5.23. Authorized Ordnance.** Only ordnance listed in the paragraphs below are authorized for use in W-173. Absolutely no Depleted Uranium Rounds, or any ordnance containing nuclear material, will be expended.
 - A5.23.1. All conventional naval ordnance, all conventional aircraft ordnance (to include bombs), and all conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles. Units are reminded that weapons delivery and weapons effects must take place and remain within the confines of the airspace. Use of chaff, self-protection flares, and target illumination flares is authorized. Units employing flares must ensure these remain within the confines of the airspace.

A5.24. Radio Frequencies and Procedures.

- A5.24.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants using only of W-173C must monitor the "Area Common Frequency" of 339.0. Generally, other frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 292.2 and/or 343.4.
- A5.24.2. Live-fire Operations. Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.
- A5.24.3. Radio Failure (NORDO). Air combat training and/or weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training and/or weapons delivery may resume when affected aircraft have regained radio contact or departed the range.

A5.25. Range Entry, Range Sweeps, and Holding Procedures.

- A5.25.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. However, flights in instrument meteorological conditions and under radar control should file to the Area Entry/Exit Point located at N 26°30' E 128°29'.
- A5.25.2. Range Sweeps. Prior to expending ordnance within the confines of the range, all aircraft are required to make a dry, visual range sweep to ensure the ordnance "box" (ordnance impact area) is clear of maritime activity, and the airspace is clear of unauthorized aircraft (or those in close proximity). Range sweeps will be made at an altitude and speed commensurate with providing a wide area visual scan for surface activity and low enough to detect small vessels. Minimum airspeeds will be IAW service or unit directives. Suggested range sweep altitudes are between 1,000' and 3,000' AWL.
 - A5.25.2.1. Range sweeps may be performed utilizing airborne or shipborne radar platforms (such as E-3, P-3, etc.); however, the flight leader maintains overall responsibility for weapons effects safety.
- A5.25.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA. Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to the range space.

A5.26. Weapons Delivery Patterns and Restrictions. IAW paragraph 10. of this instruction.

- A5.26.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- A5.26.2. Laser Operations. Laser operations must comply with paragraph 12. of this instruction.
- **A5.27. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A5.28. Range Departures.** Flights under VFR and in VMC may exit the range in any direction. However, flights in instrument meteorological conditions and under radar control should use the Exit point located at N 26°30' E 128°29'. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established. Flights must use extreme caution upon exiting the area in avoiding dense commercial traffic using air routes adjacent to the range space.

W-179 AIR-TO-AIR RANGE PROCEDURES

A6.1. Range Description.

A6.1.1. Range Type. W-179 is an air-to-air range located northwest of Kadena AB. While air-to-air weapons may be employed in the airspace, air-to-surface weapons delivery is prohibited.

A6.1.2. Range Boundaries (W-179). Beginning at:

N 27°04'31" E 126°39'12" to N 27°30'00" E 127°57'00" then

Clockwise along the arc of 120 NM radius circle centered at N 26°22'00" E 127°48'00" to

N 28°17'00" E 127°08'00" to N 27°31'48" E 127°25'42" then

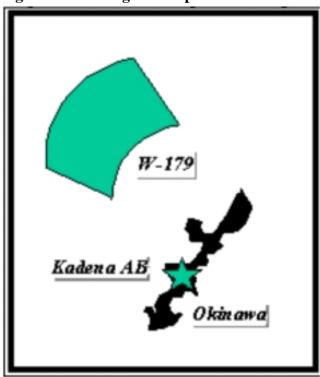
Counterclockwise along the arc of 72 NM radius circle centered at N 26°22'00" E 127°48'00" to

N 26°22'00" E 127°48'00" to N 27°05'12" E 126°43'06" to

Point of Origin

A6.1.3. Altitudes. Surface to Unlimited.





A6.2. Target Description. Not applicable.

A6.3. Hours of Operation. Continuous.

A6.4. Authorized Ordnance. All conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles. Units are reminded that weapons delivery and weapons effects must be initiated and remain within the confines of the airspace. Use of chaff, self-protection flares, and target illumination flares is authorized. Units employing flares must ensure these remain within the confines of the airspace.

A6.4.1. Use of Chaff. Chaff use is prohibited when winds aloft (at or above 5,000' MSL) are forecast to be greater than 50 knots.

A6.5. Radio Frequencies and Procedures.

- A6.5.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants of W-179 must monitor the "Area Common Frequency" of 306.1. Generally, working frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 305.4 and/or 255.9.
- A6.5.2. Live-fire Operations. Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.

A6.5.3. Radio Failure (NORDO). Air combat training and/or weapons delivery will cease (and a "kock-it-off" broadcast) anytime radio failure is recognized. Training and/or weapons delivery may resume when affected aircraft have regained radio contact, or departed the range.

A6.6. Range Entry, Range Sweeps, and Holding Procedures.

- A6.6.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. However, flights in instrument meteorological conditions and/or under radar control should file to the Area Entry/Exit Point located at N 27°21' E 127°00'.
- A6.6.2. Range Sweeps. Prior to expending ordnance within the confines of the range, all aircraft are required to make a dry, visual range sweep to ensure the ordnance "box" (potential ordnance impact area) is clear of maritime activity, and the airspace clear of unauthorized aircraft (or those in close proximity). Range sweeps will be made at an altitude and speed commensurate with providing a wide area visual scan for surface activity and low enough to detect small vessels. Minimum airspeeds will be IAW service or unit directives. Suggested range sweep altitudes are between 1,000' and 3,000' AWL.
 - A6.6.2.1. Range sweeps may be performed utilizing airborne or shipborne radar platforms (such as E-3, P-3, etc.); however, the flight leader maintains overall responsibility for weapons effects safety.
- A6.6.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA.

A6.7. Weapons Delivery Patterns and Restrictions. IAW paragraph 10. of this instruction.

- A6.7.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- **A6.8. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A6.9. Range Departures.** Flights under VFR and in VMC may exit the range in any direction. However, flights in instrument meteorological conditions and under radar control should use the Exit point located at N 27°21' E 127°00'. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established.

W-184, W-183, W-183A (INDIA-INDIA, OKINO DAITO JIMA) AIR-TO-AIR AND AIR-TO-SURFACE RANGE PROCEDURES

A7.1. W-184 Overall Range Description. W-184 is located approximately 210 NM ESE of Kadena AB. The W-184, W-183, and W-183A range is described as follows: The majority of this range is comprised of W-184. This large air-to-air, air-to-surface, and surface-to-surface weapons delivery and training range includes within its confines both W-183 and W-183A, which are located in its western corner W-183 is the 6 NM diameter air and surface space surrounding a very small island, Okino Daito Jima. This island is utilized for air-to-surface and surface-to-surface gunnery and weapons delivery W-183A is a concentric circle surrounding W-183, and extending the range boundary out to 5 NM from Okino Daito Jima.

A7.2. W-184, W-183, W-183A Range Description.

A7.2.1. Range Type. W-184 is an air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range. W-183 and W-183A are the air and surface space surrounding Okino Daito Jima, which serves as an air-to-surface and surface-to-surface gunnery range. W-183 is an uncontrolled (USAF Class C) range.

A7.2.2. Range Boundaries.

A7.2.2.1. W-184. Beginning at:

N 24°23'	E 130°48'	to
N 25°26'	E 131°42'	to
N 25°13'	E 132°31'	to
N 24°00'	E 133°00'	to
N 24°00'	E 131°23'	to
N 24°07'	E 131°11'	to

Point of Origin

A7.2.2.2. W-183 and W-183A Range Boundaries. W-183 range space encompasses a circular area of 3 NM radius centered at N 24°28' E 131°11' (Okino Daito Jima). W-183A encloses W-183 with an arc of 3 to 5 NM radius.

A7.2.3. Altitudes. Surface to Unlimited.

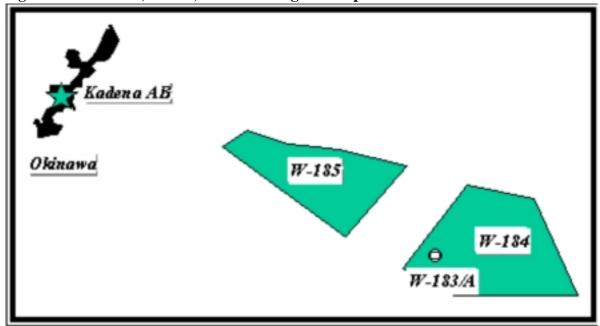


Figure A7.1. W-184, W-183, W-183A Range Description.

A7.3. Target Description. For W-183, the target is Okino Daito Jima Island. The weapons impact boundaries include the island and the water surface contiguous to Okino Daito Jima within a 3 NM radius centered at N 24°28'30" E 131°11'. If W-183 is scheduled in conjunction with W-183A and W-184, weapons impact may occur anywhere within the confines of W-184.

A7.4. Hours of Operation. Continuous.

A7.5. Authorized Ordnance. Only ordnance listed in the paragraph below are authorized for use in W-183 and W-184. Absolutely no Depleted Uranium Rounds, or any ordnance containing nuclear material, will be expended on these ranges.

A7.5.1. All conventional naval ordnance, all conventional aircraft ordnance (to include bombs), and all conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles. Units are reminded that weapons delivery and weapons effects must take place (and remain) within the confines of the airspace. Use of chaff, self-protection flares, and target illumination flares is authorized. Units employing flares must ensure these remain within the confines of the airspace.

A7.6. Radio Frequencies and Procedures.

- A7.6.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). The assigned area frequency for W-184 is 287.5. W-183, and W-183A do not have specifically assigned frequencies.
- A7.6.2. Live-fire Operations. Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.

A7.6.3. Radio Failure (NORDO). Air combat training and/or weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training and/or weapons delivery may resume when affected aircraft have regained radio contact or departed the range.

A7.7. Range Entry, Range Sweeps, Clearing Passes, and Holding Procedures.

- A7.7.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. There is no designated entry/exit point. Aircrews must be advised that because of this area's distance, flight operations will most likely be conducted under "Due Regard," unless under Naha Center's control. All aircraft on a local tactical departure clearance (Edna, Sara, or Nelson) flying beyond 100 NM of Kadena and not in a designated warning area must be in radio contact with a Japanese Air Self Defense Force (JASDF), USAF, USMC GCI site, or AWACS. The JASDF sector Operations Center, callsign RODERICK, continuously monitors UHF frequency 276.3 and is available for flight following to and from the areas. In addition, remember to maintain all squawks on until within the confines of the area.
- A7.7.2. Range Sweeps. Prior to expending ordnance within the confines of W-184 (not including W-183), all aircraft are required to make a dry, visual range sweep to ensure the ordnance "box" (ordnance impact area) is clear of maritime activity, and the airspace is clear of unauthorized aircraft (or those in close proximity). Range sweeps will be made at an altitude and speed commensurate with providing a wide area visual scan for surface activity and low enough to detect small vessels. Minimum airspeeds will be IAW service or unit directives. Suggested range sweep altitudes are between 1,000' and 3,000' AWL.
 - A7.7.2.1. Range sweeps may be performed utilizing airborne or shipborne radar platforms (such as E-3, P-3, etc.); however, the flight leader maintains overall responsibility for weapons effects safety.
 - A7.7.2.2. Clearing Passes. When using W-183, all aircraft are required to make a dry, visual clearing pass to ensure the target area is clear of unauthorized personnel or vessels, prior to expending ordnance. Clearing passes will be made at an altitude and speed commensurate with ensuring no conflicting surface activity (including vessels in close proximity), but no lower than 1,000' AGL. Minimum airspeeds will be IAW service or unit directives. Clearing passes are not required if all of the following conditions are met:

A Tactical Air Control Party (TACP) is physically located in a position to effectively ensure the range is clear

Positive two-way radio communication exists between the TACP and the aircraft using the range

The TACP positively clears the aircraft on to the target

Release of ordnance on the first pass is necessary to meet a valid training objective, as determined by the mission commander

- A7.7.2.3. Clearing passes performed for other units by 18 WG F-15s will be executed by LOWAT qualified flight leads at 300 KCAS.
- A7.7.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR). See Paragraph

- **A6.7.1.**, for Due Regard and flight following guidelines. Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to (especially immediately to the west of) the range space.
- **A7.8.** Weapons Delivery Patterns and Restrictions. All weapons delivery patterns authorized by service and unit directives are allowed on W-183 and in W-184. Though no final attack courses are stipulated, aircraft will avoid overflight of surface craft. Weapons delivery will be conducted IAW paragraph **10.** of this instruction.
- **A7.9.** Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.
- **A7.10.** Laser Operations. Laser operations must comply with paragraph 12. of this instruction.

A7.11. Jettison Procedures.

- A7.11.1. Controlled Jettison. Jettison stores so as to impact Okino Daito Jima Island.
- A7.11.2. Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A7.12. Range Departures.** Flights under VFR and in VMC may exit the range in any direction. Flights must use extreme caution upon exiting the area in avoiding dense commercial traffic using air routes adjacent to (especially immediately to the west of) the range space. Aircrews must be advised that because of this area's distance, flight operations will most likely be conducted under "Due Regard," unless under Naha Center's control. All aircraft flying beyond 100 NM of Kadena and not in a designated warning area must be in radio contact with a Japanese Air Self Defense Force (JASDF), USAF, USMC GCI site, or AWACS. The JASDF sector Operations Center, callsign RODERICK, continuously monitors UHF frequency 276.3 and is available for flight following to and from the areas. In addition, remember to turn on all squawks prior to leaving the area, especially Mode 4. The JASDF is adamant about Mode 4 usage.

W-185 (MIKE-MIKE) AIR-TO-AIR AND AIR-TO-SURFACE RANGE PROCEDURES

A8.1. W-185 Range Description.

- A8.1.1. Range Type. W-185 is an air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range.
- A8.1.2. Range Boundaries (W-185). Beginning at:

N 25°41'00"	E 128°52'00"	to
N 25°48'22"	E 129°02'26"	to
N 25°44'00"	E 129°26'00"	to
N 25°44'00"	E 130°11'00"	to
N 25°43'09	E 130°36'00"	to
N 25°41'00"	E 130°45'00"	to
N 24°53'00"	E 130°04'00"	to
Point of Origin		

A8.1.3. Altitudes. Surface to Unlimited.

Figure A8.1. W-185 Range Description.



- **A8.2.** Target Description. Not applicable.
- **A8.3. Hours of Operation.** 0600L through 1800L, Sunday through Saturday (7 days per week).
- **A8.4. Authorized Ordnance.** Only ordnance listed in the paragraphs below are authorized for use in W-185. Absolutely no Depleted Uranium Rounds, or any ordnance containing nuclear material, will be expended.

A8.4.1. All conventional naval ordnance, all conventional aircraft ordnance (to include bombs), and all conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles. Units are reminded that weapons delivery and weapons effects must take place (and remain) within the confines of the airspace. Use of chaff, self-protection flares, and target illumination flares is authorized. Units employing flares must ensure these remain within the confines of the airspace.

A8.5. Radio Frequencies and Procedures.

- A8.5.1. When occupying the airspace, all aircraft must monitor "GUARD" (243.0). Additionally, unless under positive control of a ground or airborne controlling agency, all occupants of W-185 must monitor the "Area Common Frequency" of 291.6. Generally, other frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequencies 225.6 and/or 240.6.
- A8.5.2. Live-fire Operations. Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include callsign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.
- A8.5.3. Radio Failure (NORDO). Air combat training and/or weapons delivery will cease (and a "knock-it-off" broadcast) anytime radio failure is recognized. Training and/or weapons delivery may resume when affected aircraft have regained radio contact, or departed the range.

A8.6. Range Entry, Range Sweeps, and Holding Procedures.

- A8.6.1. Range Entry. Flights under VFR and in VMC may enter the range from any direction. However, flights in instrument meteorological conditions and under radar control should file to the Area Entry/Exit Point located at N 25°47' E 129°00'.
- A8.6.2. Range Sweeps. Prior to expending ordnance within the confines of the range, all aircraft are required to make a dry, visual range sweep to ensure the ordnance "box" (ordnance impact area) is clear of maritime activity, and the airspace is clear of unauthorized aircraft (or those in close proximity). Range sweeps will be made at an altitude and speed commensurate with providing a wide area visual scan for surface activity and low enough to detect small vessels. Minimum airspeeds will be IAW service or unit directives. Suggested range sweep altitudes are between 1,000' and 3,000' AWL.
 - A8.6.2.1. Range sweeps may be performed utilizing airborne or shipborne radar platforms (such as E-3, P-3,E-2, etc.); however, the flight leader maintains overall responsibility for weapons effects safety.
- A8.6.3. Holding. Flights required to hold outside the range airspace, for any period of time, will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa TCA. In addition, flights must use extreme caution in avoiding commercial traffic using air routes adjacent to the range space.

A8.7. Weapons Delivery Patterns and Restrictions. IAW paragraph 10. of this instruction.

A8.7.1. Overflight of maritime craft should be avoided. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.

- A8.7.2. Laser Operations. Laser operations must comply with paragraph 12. of this instruction.
- **A8.8. Jettison Procedures.** Controlled and Emergency Jettison. Jettison of stores may be accomplished whenever safe to do so. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of shipping. Jettison stores at the lowest possible altitude, consistent with aircraft safety and weapons envelopes (to include ordnance broaching). Attempt to fix jettison point using INS, TACAN, or radar references.
- **A8.9.** Range Departures. Flights under VFR and in VMC may exit the range in any direction. However, flights in instrument meteorological conditions and under radar control should use the exit point located at N 25°47' E 129°00'. In VMC and under VFR, the Okinawa TCA must be avoided until contact with Okinawa Approach is established. In addition, flights must use extreme caution upon exiting the area in avoiding commercial traffic using air routes adjacent to the range space.

SAMPLE LETTER OF AGREEMENT

LETTER OF AGREEMENT

Between Marine Wing Liaison Kadena and 18th Wing (PACAF)

The Marine Wing Liaison Kadena (MWLK) acknowledges receipt of 18th Wing Instruction 13-204, Weapons Ranges. USMC units on temporary duty assignment to Kadena, and sponsored through MWLK, will comply with the intent and provisions of this directive when scheduling range use through the 18th Wing, and conducting operations on 18th Wing ranges.

U. S. MARINE, Lt Col, USMC Commander, MWLK

JOHN T. CORRIGAN, Maj, USAF Commander, Current Operations Flight

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