BY ORDER OF THE COMMANDER, KADENA AIR BASE

AIR FORCE INSTRUCTION 13-212

KADENA AIR BASE
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Space, Missile, Command, and Control

RANGE PLANNING AND OPERATIONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This supplement implements and extends the guidance of Air Force Instruction (AFI) 13-212, *Range Planning and Operations*, 16 November 2007. This publication sets forth operating procedures and provides additional guidance for the use of 18th Wing training airspace and ranges. It applies to all Department of Defense components and foreign militaries. Failure to observe prohibitions and mandatory provisions of this publication in paragraphs 11.2 and 12.2 is a violation of Article 92, *Uniform Code of Military Justice* (UCMJ). Violations may result in administrative disciplinary action without regard to otherwise applicable criminal or civil sanctions for violation of related laws. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 37-123, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at https://afrims.amc.af.mil/.

SUMMARY OF CHANGES

This publication has been substantially revised and must be completely reviewed. It establishes a focal point for joint range scheduling; adds scheduling procedures; adds range restrictions; establishes standardized range procedures; adds standard tanker tracks.

Chapter 10 (Added)

GENERAL DESCRIPTION AND RESPONSIBILITIES

10.1. (Added) Introduction. This instruction defines Air Force requirements to operate and manage ranges owned and operated by 18th Wing (18 WG), Kadena Air Base (AB). It provides mandatory guidance for units intending to use these ranges. Weapons range operations and management is conducted under guidance provided by AFI 13-212, *Range Planning and Operations*; AFI 13-212 PACAF Supplement; 18 Wing Comprehensive Range Plan; Inter-Service Memorandums of Agreement; and International Letters of Agreement. International agreements promulgate further guidance appropriate to conduct operations in and around local ranges. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF IMT 847, *Recommendation for Change of Publication*; route AF IMT 847s from the field through the appropriate functional's chain of command.

10.2. (Added) Range Descriptions. Specific target information and restrictions can be found on the Joint Okinawa Scheduling Cell (JOSC) website at https://sps.hickam.af.mil/sites/JOSC/default.aspx. Reference attachments for specific range usage requirements and regulations.

10.3. (Added) Focal Points. Current operations flight 18 OSS/OSO is the 18 WG point of contact for coordination and scheduling of activities conducted on local ranges. The JOSC is the scheduling agency for all airspace and ranges in and around Okinawa and consists of a joint staffed scheduling agency with United States Air Force (USAF), United States Navy (USN) and Japan Air Self-Defense Force (JASDF) schedulers. Any inquiries regarding use of these ranges should be made through 18 WG Scheduling, 18 OSS/OSOS (DSN: 315-634-4597 / 4599 / 4797 / 5301, FAX 315-634-4395). Users are encouraged to visit the JOSC website for pertinent information (https://sps.hickam.af.mil/sites/JOSC/default.aspx).

10.4. (Added) Special Handling. Units must submit requests for special handling or altitude reservations (ALTRV) adjoining or adjacent to ranges to 18 OSS/OSOS not later than 7 days in advance to allow sufficient time to coordinate with host nation.

10.5. (Added) Responsibilities.

10.5.1. (Added) Commanders are responsible for ensuring all personnel utilizing local ranges understand and comply with this instruction and other applicable service directives.

10.5.2. (Added) 18 OSS is the Range Operating Authority (ROA) for the following ranges: South Range (W-172), W-173A, Idesuna Jima (W-174), Kume Jima (W-174A), Tori Shima (W-176), and the North Range (W-179). It is responsible for ensuring compliance with regulatory guidance concerning the operation of these ranges.

10.5.3. (Added) Hotel Hotel (W-173D/E/F), W-183/A, W-184, and Mike Mike (W-185); are owned and operated by the USN through the Commander, Fleet Activities Okinawa (CFAO), US

Naval Air Facility, Kadena (CFAO/NAFK). Use of these ranges may be coordinated by contacting the JOSC (DSN: 315-634-4360/4597).

10.5.4. (Added) **18 OSS/OSOS Responsibilities:**

10.5.4.1. (Added) Coordinate range cleanup activities.

10.5.4.1.1. (Added) Coordinate search and rescue coverage for cleanup personnel.

10.5.4.2. (Added) Build and maintain the comprehensive range plan.

10.5.4.3. (Added) Ensure laser certifications are current.

10.5.4.4. (Added) Manage the local range webpage.

10.5.4.5. (Added) Manage weapons safety footprint database.

10.5.4.6. (Added) Develop letters of agreement (LOAs) for new units as necessary.

10.5.5. (Added) **JOSC Responsibilities:**

10.5.5.1. (Added) Schedule range activities.

10.5.5.2. (Added) Coordinate between range users and any affected units, agencies, or groups.

10.5.5.3. (Added) Track range use and preparing Higher Headquarter (HHQ) reports based on applicable guidance.

10.5.5.4. (Added) Track munitions used on ranges by type and quantity.

10.5.5.5. (Added) Schedule Search and Rescue while Explosive Ordinance Disposal (EOD) teams are on ranges due to range clearance.

10.6. (Added) **Letters of Agreement.** Units not under the authority of 18 WG which intend to use local ranges on a recurring basis will implement a LOA with 18 WG via 18 OSS/OSOS. A Host-Tenant Support Agreement or Inter-Service Support Agreement specifically addressing the use and scheduling of local ranges fulfills this requirement in-lieu of an LOA.

10.7. (Added) **Request Processing and Schedule Execution.** 18 OSS/OSOS will collect range requests and assign range times based on availability and unit priority. The range folder located at the 18 OSS is the only official range schedule for local ranges. A copy may be found at the JOSC website (https://sps.hickam.af.mil/sites/JOSC/default.aspx). Range use is authorized only for units listed on the schedule, and only for specifically assigned time periods. These assignments will be forwarded to units in writing (usually by e-mail or fax). Unit points of contact (POCs) must acknowledge range assignments by fax or email.

10.7.1. (Added) 18 OSS/OSOS reserves the right to change previously scheduled range periods, but will only exercise this right under extreme circumstances and only with positive acknowledgment from the user.

10.7.2. (Added) Requests for schedule changes, or additional requests for range time, must be made to 18 OSS/OSOS. Same day requests may be accomplished telephonically, however a Range Request sheet must still be sent. Reference paragraph **11.2.**

10.7.3. (Added) Units do NOT have the authority to "trade" range assignments, or combine airspace, without first coordinating with 18 OSS/OSOS.

10.8. (Added) Daily Range Reports. After every range event units must submit a daily range report (template on the JOSC webpage). Range reports are used to track range utilization and ordnance expenditures. Units failing to submit this report by the end of the flying day will be denied further range time.

10.8.1. (Added) 18 OSS will maintain records of all expenditures (types, quantities, locations, using organization, and estimated dud rates) per target of ammunition and explosives. MAJCOM/ROA will comply with the record keeping requirements of Title 40 C.F.R. § 266, *Military Munitions* and DoD Directive 4715.12.

10.9. (Added) Laser Operation Safety Precautions. Units intending to use lasers within the confines of the air-to-surface ranges must do so in compliance with the range laser certification (accessible on the JOSC website). Upon completion of required training units must ensure the daily report accurately records laser use.

10.10. (Added) Night and Night Vision Device (NVD) Operations. Units must abide by applicable service directives.

10.11. (Added) Holding. Flights required to hold outside the range airspace will hold in visual meteorological conditions (VMC), remain under visual flight rules (VFR), and avoid the Okinawa Terminal Control Area (Class B Airspace). Flights must use extreme caution to avoid dense commercial traffic using air routes adjacent to the ranges. Due to airliner traffic, contact Okinawa Approach Control for traffic advisories.

10.12. (Added) Joint Terminal Attack Controller (JTAC) Operations.

10.12.1. (Added) Users will make a clearing pass of the range 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:

10.12.1.1. (Added) A JTAC is physically located in a position to effectively ensure the range is clear.

10.12.1.2. (Added) Positive two-way radio communication exists between the JTAC and the aircraft.

10.12.1.3. (Added) The JTAC positively clears the aircraft on to the target.

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

10.12.2. (Added) During JTAC operations all flying units and ground teams will submit separate daily reports logging range usage and ordnance expended. Ground teams will only submit ordnance they fired on the range and not those released by aircraft.

10.13. (Added) Abnormal Events. Report abnormal events (such as dropped objects, airspace intrusions, near midair collisions, unauthorized personnel on the range, stores jettison, etc.) to 18 OSS/OSOS as soon as possible. After hours contact 18 WG Command Post (DSN: 315-634-1800).

10.14. (Added) Range Clearance and Decontamination. Periodic range maintenance and cleanup are necessary to comply with governing directives. Range clearance and decontamination will completely close the range until completion of required activities. 18 OSS/OSOS is the POC for coordinating range cleanup and will not simultaneously schedule Idesuna Jima and Tori Shima for range clearing.

10.14.1. (Added) Due to the nature of range clearing and the numerous players involved, range cleanup will take priority above all other range requests.

10.14.2. (Added) Range maintenance and decontamination must first be coordinated through 18 WG Public Affairs and the Okinawa Defense Bureau (ODB).

10.14.3. (Added) While on Idesuna Jima and Tori Shima ranges, EOD personnel will maintain communications with Kadena Command Post (via satellite phone, cellular phone, 311.0 UHF, etc).

10.14.3.1. (Added) EOD will contact aircraft flying within the range confines on range and guard frequencies.

10.14.4. (Added) 18 CES/CED will:

10.14.4.1. (Added) Observe the requirements of AFI 13-212, as supplemented, when decontaminating weapons ranges.

10.14.4.2. (Added) Give an initial briefing to personnel assigned to operate and maintain weapon ranges on the types of ordnance expended on the ranges. Range personnel will be re-briefed annually thereafter. Range Operations Officer (ROO) will coordinate and track training.

10.14.4.3. (Added) Brief non-EOD augmenting personnel, at a minimum, on the markings used for inert ordnance and possible hazards during range clearance operation. The non-EOD personnel will assist in the removal of Target Practice (TP) ammunition and inert ordnance which has been inspected and marked by EOD personnel for removal.

10.14.4.4. (Added) Upon completion of the briefings required by this supplement, EOD will complete a briefing statement. EOD will submit one copy to the ROO who will retain it until superseded by a more current statement.

10.14.4.5. (Added) Following annual range clearance and prior to range access, EOD will perform a risk assessment and management plan of the areas to be accessed. The risk assessment will include descriptions of work to be performed, ordnance expenditures since the last clearance, and EOD report summaries.

10.15. (Added) Fire Fighting Responsibilities. Idesuna Jima and Tori Shima are classified as government controlled property where no fire hazard exists. Provided there is no hazard to flight/personnel safety, units are authorized to continue operations with fires present.

10.16. (Added) Range Utilization Report Preparation. 18 OSS/OSOS will forward monthly, quarterly and annual reports to HHQ.

Chapter 11 (Added)

SCHEDULING PROCEDURES

11.1. (Added) Range Usage Guidance. Weapon ranges represent an invaluable resource whose efficient use is critical to operational training. It is essential units reserve ONLY the time necessary to conduct required training. Abuse of this principle will result in denial of future range requests. Units no longer intending to use assigned range should contact the JOSC as soon as possible to cancel their range time. Units receiving block times of airspace must be especially aware of this provision.

11.2. (Added) Range Requests. Requests for range time should be consolidated and prioritized by operational echelons at or above squadron/battalion level prior to being forwarded to the JOSC for processing. Requests for all ranges will be submitted using the Range Request Sheet available on the JOSC website (https://sps.hickam.af.mil/sites/JOSC/default.aspx). It is essential that units submit requests only for range time commensurate with the type of training intended. Units are not permitted to block large periods of range time to support only a few minutes of actual use. Submit requests via email JOSC@kadena.af.mil or fax to the JOSC (DSN 315 634-4395).

11.2.1. (Added) Requests should be forwarded as far in advance as possible, but not 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. The JOSC requires 30-minute notice for same day requests in order to coordinate with host nation.

11.2.2. (Added) The weekly range meeting is conducted at the 18 OSS, Building 3382. Air-to-air and air-to-surface requests made at this meeting will be for the current week plus the next 2 weeks for all users. It is highly recommended that transient units attend the weekly meetings to coordinate for airspace requirements and de-conflict from other users.

11.2.3. (Added) Units must ensure that range requests accurately represent the type of training to be accomplished and that information listed is exact. Units will be approved use of the range based on the range request sheet and approval will only be for the specific profile and ordnance on the request sheet. All ordnance use must be approved by the ROO prior to release on range.

11.2.4. (Added) Failure to provide a complete range request sheet will result in automatic denial.

11.2.5. (Added) Deviating from approved range requests may be punished under the UCMJ.

11.3. (Added) Normal Range Support Hours. Reference attachments to this instruction for specific Warning Area Hours of Operations. The JOSC normal business hours are Monday-Friday 0730L-1630L. After hours, weekends and holidays, JOSC schedulers are available 24 hours a day by calling the JOSC scheduling after hours cell-phone (Reference JOSC website or call 18 WG/CP for patch through).

11.4. (Added) Scheduling Responsibilities and Priorities. Reference JOSC website for scheduling responsibilities and priorities for US service branches and host nation requirements.

11.5. (Added) Range EOD/Cleanup Scheduling. Range clearance will be scheduled by the ROO through the JOSC and will be conducted IAW paragraph **10.14.** of this instruction.

Chapter 12 (Added)

OPERATING PROCEDURES AND RESTRICTIONS

12.1. (Added) General. All local ranges are USAF Class C. The flight lead, individual pilot, FAC(A), JTAC, or other briefed person performs the Range Control Officer (RCO) function, with regards to weapons clearance authority. Upon entering an air-to-surface range, aircraft will make at a minimum one dry visual clearing pass to ensure the impact area, as defined for Idesuna (W-174) and Tori-Shima (W-176), is clear of unauthorized personnel or vessels, prior to expending ordnance. Units must ensure that sufficient range clearing passes are conducted to ensure safe operations. No surface range use will occur with ground parties in the vicinity unless prior coordination has occurred.

12.1.1. (Added) If a surface vessel is found within the impact area of the range no attempt will be made to either wave the boat out of the impact area or to fly close enough to record the name or serial number of the vessel. Aircraft will not, in any manner, disturb, scare, provoke, or encourage the surface vessel to exit the impact area.

12.1.2. (Added) Aircraft scheduled for range use may orbit within range boundaries to monitor the surface vessel to determine if it exits the impact area.

12.1.3. (Added) If the surface vessel departs the impact area and the crew determines that air-to-surface events can be safely accomplished, the aircraft may continue range operations.

12.1.4. (Added) If the surface vessel does not depart the impact area or the crew determines that air-to-surface events cannot be safely accomplished due to boat proximity, that part of the mission will be terminated, the aircraft will depart the range and continue with other/alternate mission events or return to base. Upon landing, aircraft will contact 18 OSS/OSOS with details of the range encroachment. Include call sign, type & number of aircraft scheduled for range use; range name; time; type of surface vessel; location within the range and if it was transiting or stationary.

12.2. (Added) Weapons Delivery and Effects. The air-to-surface weapons employment on 18 WG ranges has been analyzed using approved software. The program calculates weapon safety footprint areas to contain 99.99 percent of all initial impacts and ricochets, resulting from the release of a specified weapon type during air-to-surface weapon delivery.

12.2.1. (Added) Weapon effects must remain within impact areas. This includes chaff and self-protection or target-illumination flares. Weapons release outside the special use airspace (SUA) is not authorized.

12.2.2. (Added) When carrying expendable ordnance (live, inert, or training), switch configuration for weapons release will be in a position such that accidental release will not occur outside the impact area.

12.2.3. (Added) The target area (not to be confused with the impact area) for all air-to-surface ranges was calculated using the actual landmass on each range. Areas outside of this target area were not analyzed. Units must ensure their intended point of impact remains inside the target area as described in the weapons delivery profiles. The impact area is defined by international agreements and defines the area all weapons and weapons effects must remain within.

12.2.4. (Added) Units must reference the weapons delivery profiles on the JOSC website for authorized employment. Aircraft, profiles or ordnance not listed are NOT authorized unless specific provisions are made through 18 OSS/OSOS at least 1-week in advance. The restriction remarks define attack headings and target designation limitation for the given profile. If "approach side island" is listed, the aircrew must target the closest half of the target island area as they face the island within the designated final attack heading.

12.2.5. (Added) Units utilizing ground parties (e.g. JTAC, TACP, etc) must ensure compliance with AFI 11-214, Attachment 6, *Minimum Safe Distances for Ground Parties (Live Fire Training).*

12.2.6. (Added) Absolutely no depleted uranium rounds, or any ordnance containing nuclear material, will be expended on any range. Use of weapons not approved for a range, the use of weapons outside of weapons delivery profiles, or both, unless authorized in advance by the ROO, is prohibited. Violations of these rules is punishable under the UCMJ.

12.2.7. (Added) For air-to-air ranges, weapons delivery and weapons effects must be initiated and remain within range boundaries. This includes chaff and self-protection or target-illumination flares.

12.3. (Added) Overflight Restrictions.

12.3.1. (Added) Avoid flying lower than 3,000' AGL over land outside ranges.

12.3.2. (Added) Avoid overflight of maritime vessels. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels.

12.3.3. (Added) Do not fly below 5,000' AWL within 20 NM of an aircraft carrier, unless specifically authorized to do so.

12.4. (Added) Supersonic Flight Restrictions.

12.4.1. (Added) Supersonic flight over Japan is prohibited over land areas as a matter of policy except for tactical missions or emergencies IAW United States Force Japan Instruction (USFJI) 11-101, *Aircraft Noise Abatement.*

12.4.2. (Added) In accordance with Aeronautical Information Publication (AIP) Japan ENR 1.1-3, unless otherwise authorized by the Minister of Land, Infrastructure and Transport (MLIT), aircraft subject to operational control by MLIT shall not be operated at supersonic speed: over a congested area of persons or houses, within a control area or control zone, at any altitude that will cause public nuisance or damages to persons or properties on the ground or on the sea by sonic boom, or when flight visibility is less than 10km (approximately 5 NM).

12.4.3. (Added) All open water areas (W-172, MOB-9 ALTRV, W-173A/D/E/F, W-179, SHOVEL ALTRV, W-184 and W-185) are authorized for supersonic flight at any altitude. Remain well clear of surface vessels IAW paragraph **12.3.2.** of this instruction.

12.5. (Added) Chaff and Flare Use.

12.5.1. (Added) Chaff and self-protection or target illumination flare usage is authorized for all training ranges and must be initiated and remain within range boundaries.

12.5.1.1. (Added) Chaff is not authorized in W-179 or the SHOVEL ALTRV if the winds aloft exceed 50kts.

12.5.1.2. (Added) All target-illumination flares must burn out at or above 500' AGL/AWL and must remain within the range boundaries.

12.6. (Added) Laser Use.

12.6.1. (Added) Ground based and aircraft targeting lasers are authorized only in W-174/176 IAW the specific Range Laser Certification documents posted on the JOSC website. Other laser usage must be requested at least 2 months in advance for coordination with the Air Force Research Laboratory for approval.

12.7. (Added) Radio Procedures.

12.7.1. (Added) **Radio Failure (NORDO).** Weapons delivery will cease anytime radio failure is recognized. Weapons delivery may resume ONLY when affected aircraft or ground personnel have regained radio contact or departed the range.

12.8. (Added) Jettison Procedures.

12.8.1. (Added) Emergency jettison of stores may be accomplished whenever safety dictates. Aircrews should attempt to jettison stores at least 1 NM from any land mass, and well clear of surface vessels. 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.

12.8.2. (Added) Reference attachments 3-5 for controlled jettison procedures.

12.9. (Added) Local Area Briefing. Prior to first-time operations in 18 WG SUA, all non-18 WG aircrew will receive a local area briefing by 18 OG/OGV to include a briefing on the airspace they will be using. Additionally, all hosted flyers will review the range restrictions posted on the JOSC website, as well as this supplement, prior to deployment to the Okinawa Area of Operations. Units participating in long-range missions staging outside of Okinawa are responsible for contacting the JOSC, or 18 OSS/OSOS (DSN 315-634-4360/4597), prior to the mission to obtain sufficient information to conduct the mission. When unable to conduct face-to-face briefings, telephonic contact accompanying products such as a PowerPoint® briefing are the minimum requirements. The airspace depictions, this supplement, and other appropriate regulations can be found at https://sps.hickam.af.mil/sites/JOSC/default.aspx.

12.10. (Added) Incident Reporting.

12.10.1. (Added) In order to ensure the safety of EOD and other ground personnel, the following shall be reported immediately to the JOSC:

12.10.1.1. (Added) Ordnance impacts outside the impact area boundaries.

12.10.1.2. (Added) Heavyweight ordnance (live or inert) impacting more than 1 km from a designated target.

12.10.1.3. (Added) Ordnance released in violation of range weapons delivery profile restrictions.

12.10.1.4. (Added) Dud live ordnance.

12.10.1.5. (Added) Inadvertent releases.

12.10.2. (Added) The JOSC will annotate and forward reportable incidents to 18 OG/CC, 18 WG/SE, and the flying unit within 24 hours. Incidents resulting in injury to aircrew or ground personnel will be reported to the 18 WG Command Post and 18 WG/SE IAW paragraph **13.3.** of this instruction.

12.10.3. (Added) **Runaway Gun.** Aircrew will make every effort, consistent with flight safety, to ensure bullet impact is within the range boundaries.

Chapter 13 (Added)

RANGE SAFETY PROCEDURES

13.1. (Added) General. Safety is the responsibility of all aircrew and ground personnel working with air assets on 18 WG ranges. At no time will training continue when risk to personnel or equipment outweighs training benefit.

13.2. (Added) Ordnance Safety. All ordnance expenditures carry a level of risk. Risk levels have been mitigated by restrictions imposed on aircrew and personnel. Aircrew and personnel will abide by 18 WG restrictions located in this document and on the JOSC website while utilizing ranges.

13.2.1. (Added) Munitions will not be aimed at, nor directed towards any infrastructure that is not deemed an official range target. Official range targets may be found on the JOSC website.

13.2.2. (Added) There are no motorized targets on any range. If non-environmental movement is seen on any ranges other than coordinated ground parties (JTAC, etc.), the range is unsafe for expenditures.

13.2.3. (Added) Ground personnel will not move/remove any foreign debris without EOD approval. Unexploded ordnance (UXO) present a considerable hazard to ground personnel. They should be avoided and moved only by EOD personnel.

13.3. (Added) Ground Safety. Ground safety will be IAW the 18 WG Combined Range Plan located on the JOSC website (https://sps.hickam.af.mil/sites/JOSC/default.aspx).

13.4. (Added) Mishaps. Any mishaps will cause a local area training termination. Mishaps will be reported IAW AFI 91-204 through a designated squadron representative. If no representative is available contact 18 WG/SE via phone (DSN 634-SAFE / 634-7233) to set up a meeting. Do not disclose mishap information over the phone.

13.4.1. (Added) Situations requiring an on-scene commander (OSC) will comply with the 18 WG In-Flight Guide (IFG), *"Peacetime Rescap"* located on the JOSC website (https://sps.hickam.af.mil/sites/JOSC/default.aspx).

13.5. (Added) Adopted Forms:
AF IMT 847, *Recommendation for Change of Publication*

Attachment 1 (Added)

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

18 WG In-Flight Guide, *Peacetime Rescap,* current edition
Aeronautical Information Publication Japan, September 2005
AFI13-212 PACAF Supplement, *Range Planning and Operations,* June 28, 2002
COMNAVFORJAPANINST 3500.3T, *USN Training/Operating Areas Adjacent to Okinawa, Japan,* August 5, 2003
USFJI 11-101, *Aircraft Noise Abatement,* October 1, 2002
AFI33-360, *Publications and Forms Management,* May 18, 2006

Abbreviations and Acronyms

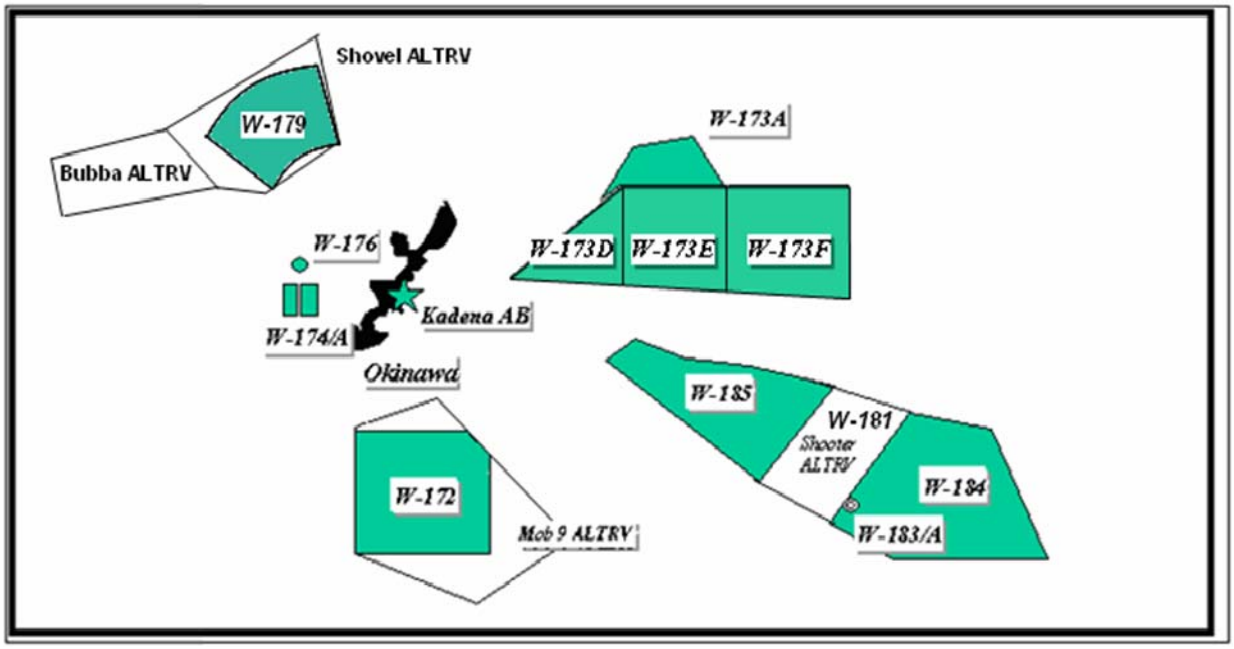
AFI - Air Force Instruction
AFMAN - Air Force Manual
AFPD - Air Force Policy Directive
AGL - Above Ground Level
ALTRV – Altitude Reservation
AWL - Above Water Level
API - Armor Piercing Incendiary
ATC - Air Traffic Control
CAS - Close Air Support
CE - Civil Engineer
COMFLEACT – Commander, Fleet Activities
CRP - Comprehensive Range Plan
CTR - Combat Training Range
DEW - Directed Energy Weapon
DMPI - Designated Mean Point(s) of Impact
DoD - Department of Defense
DoDD - Department of Defense Directive
DoDI - Department of Defense Instruction
DU - Depleted Uranium
EA - Electronic Attack
ECM - Electronic Counter-Measures
EOD - Explosive Ordnance Disposal
EW - Electronic Warfare
FAC(A) - Forward Air Controller (Airborne)
HTSA - Host-Tenant Support Agreement
IAW - In Accordance With
IFR - Instrument Flight Rules
JTAC - Joint Terminal Attack Controller
LOA - Letter of Agreement
LSO - Laser Safety Officer
LZ - Landing Zone
MOA - Military Operations Area

MSL - Mean Sea Level
MTR - Military Training Route
NOTAM - Notice to Airmen
NVDs - Night Vision Devices
PACAF - Pacific Air Forces
ROA - Range Operating Authority
ROO - Range Operations Officer
SDZ - Surface Danger Zone
SUA - Special Use Airspace
TACP - Tactical Air Control Party
UXO - Unexploded Ordnance
WDZ - Weapons Danger Zone

Attachment 3 (Added)

RANGE ORIENTATION AND GENERAL GUIDELINES

Figure A3.1. (Added) Range Orientation in Relation to Okinawa and Kadena Air Base.



A3.1. (Added) 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. All coordinates listed are WGS-84 Datum.

A3.2. (Added) General Range Guidelines.

A3.2.1**.** (Added) **NORDO.** IAW paragraph **12.7.1.** of this instruction.

A3.2.2. (Added) **Chaff and Flare Operations.** Except as noted in specific range attachments, use of chaff, self-protection flares, and target-illumination flares are authorized. Units employing flares must ensure these remain within the confines of the airspace.

A3.2.3. (Added) **Jettison Procedures.**

A3.2.3.1. (Added) **Emergency Jettison.** IAW paragraph **12.8.1.** of this instruction.

A3.2.3.2. (Added) **Controlled Jettison:** Fuel and emergency permitting, jettison hung ordinance within the confines of the W-176 Tori Shima Weapons Delivery Range (N 26^{o} 35’44.3” E 126^{o} 49’ 59.2”) if able. Contact the Kadena AB Supervisor of Flying on 302.5 to ensure the W-176 range is clear prior to entering. Otherwise controlled jettison within the confines of W-185 is authorized after clearing the range of surface vessels.

A3.2.3.3. (Added) If unable to return to the W-176 weapons delivery range, jettison ordinance beyond 12 NM from land and visually clear the area of surface vessels.

A3.2.3.4. (Added) **For Night/Instrument meteorological conditions (IMC):** Jettison westbound on KAD (112.0, CH 57) 288 radial at 52 DME (W-176, Tori Shima range). Jettison so that stores impact the island if able.

A3.3. (Added) Air-to-Ground Ranges. All air-to-ground ranges are uncontrolled low threat tactical air-to-surface and surface-to-surface weapon ranges (USAF Class C).

A3.3.1. (Added) **Radio Procedures.** 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 call sign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.

A3.3.2. (Added) **Weapons Delivery Restrictions.** Refer to Chapter 12 of this supplement and weapons delivery profiles posted on the JOSC website.

A3.3.2.1. (Added) Aircraft, ordnance, or profiles not listed on the JOSC website must specifically be coordinated and approved by the ROO.

A3.3.2.2. (Added) **Clearing Passes.** All aircraft are required to make a dry, visual clearing pass to ensure the weapon impact area is clear of unauthorized personnel or vessels, prior to expending ordnance. Clearing passes will be made at an altitude and airspeed commensurate with ensuring no conflicting surface activity (including vessels in close proximity), but no lower than 1,000' AGL/AWL for fixed-wing aircraft and no lower than 100' AGL/AWL for rotary-wing aircraft. Minimum airspeeds will be IAW service or unit directives.

A3.3.2.3. (Added) Munition containers will not be dropped or left on the range.

A3.3.3. (Added) **Laser Operations.** Ground based and aircraft targeting lasers are authorized IAW the specific Range Laser Certification documents posted on the JOSC website and joint regulations. Other laser usage must be requested at least 2 months in advance for coordination with the AFRL for approval.

A3.3.4. (Added) **Entry/Exit Procedures.**

A3.3.4.1. (Added) **Range Entry.** Flights may enter the range from any direction.

A3.3.4.2. (Added) **Holding.** Flights required to hold outside the range airspace, for any period of time, will hold in VMC, remain under VFR, and avoid the Okinawa TCA (Class B Airspace). Flights must use extreme caution to avoid dense commercial traffic on air routes adjacent to the range. Due to commercial traffic, contact Okinawa Approach Control for traffic advisories.

A3.3.4.3. (Added) **Range Departure.** Flights may exit the range in any direction. However, VMC under VFR must be maintained and the Okinawa TCA (Class B Airspace) avoided until

contact is established with Okinawa Approach and a specific TCA (Class B Airspace) or IFR clearance is issued by ATC.

A3.4. (Added) Air-to-Air Ranges. All air-to-air ranges are uncontrolled, Class C ranges.

A3.4.1. (Added) **Radio Procedures.** 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 in the warning airspace must monitor the area common frequency. Controlling agencies will monitor the published area common frequency to the maximum extent possible when controlling aircraft on a separate frequency.

A3.4.2. (Added) **Live-Fire Operations.** Prior to any live-fire or ordnance expenditure, a blanket call on GUARD will be made. The GUARD call will include call-sign and length of time the range will be hot, along with other pertinent information. No GUARD call is required on range departure.

A3.4.3. (Added) **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.

A3.4.3.1. (Added) 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.

A3.4.4. (Added) Avoid overflight of maritime craft. All aircraft will maintain a distance of at least 1 NM horizontally from any vessels. Do not fly below 5,000’ MSL within 20 NM of an aircraft carrier, unless specifically authorized to do so.

A3.4.5. (Added) **Laser Operations.** Laser operations will be conducted IAW paragraph **12.6.** of this instruction.

A3.4.6. (Added) **Entry/Exit Procedures.**

A3.4.6.1. (Added) **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 an IFR flight plan and/or request clearance to the area entry/exit point (reference specific airspace attachment).

A3.4.6.2. (Added) **Holding.** IAW paragraph **10.11.** of this instruction.

A3.4.6.3. (Added) **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 (reference specific airspace attachment). In VMC and under VFR, the Okinawa TCA (Class B Airspace) must be avoided until contact with Okinawa Approach is established and a specific TCA (Class B Airspace) or IFR clearance is issued by ATC. Attempt to contact Okinawa Approach Control on 258.3 at 50 NM but no later than 40 NM if returning to Okinawa for flight sequencing.

A3.5. (Added) Applicable Charts. See Operational Navigation Chart (ONC) H-13 and Tactical Pilotage Chart (TPC) H-13D.

Table A3.1. (Added) Range Type, Altitudes, and Hours of Operation. (Reference FLIP AP-3A).

RANGE	TYPE	ORDNANCE	ALTITUDES	HOURS OF OPERATION
W-172	A/A	Conv. A/A	SFC to Unlimited	Continuous
*Mobile 9 ALTRV	A/A	None	5,500' to 40,000'	By Special Arrangement
W-173A	A/A	None	3,000' to 60,000'	0600-2000L, Sun-Sat
W-173D	A/A, A/S, S/S	Conv. A/A, A/S, S/S	SFC to Unlimited	0600-2000L, Sun-Sat
W-173E	A/A, A/S, S/S	Conv. A/A, A/S, S/S	SFC to Unlimited	0600-2000L, Sun-Sat
W-173F	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
*SHOVEL ALTRV	A/A	None	5,500' to 40,000'	By Special Arrangement
W-181	A/A, A/S, S/S	Conv. A/A, A/S, S/S	SFC to 4,000'	By NOTAM
W-183/A	A/S, S/S	Conv. A/S, S/S	SFC to Unlimited	Continuous (Note 5)
W-184	A/A, A/S, S/S	Conv. A/A, A/S, S/S	SFC to Unlimited	0600-1800L, Sun-Sat
W-185	A/A, A/S, S/S	Conv. A/A, A/S, S/S	SFC to Unlimited	0600-1800L, Sun-Sat

Abbreviations:
Conv.: Conventional , ALTRV: Altitude Reservation
A/A: Air-to-Air, A/S: Air-to-Surface, S/S: Surface-to-Surface

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 or target-illumination flares. Units must reference the weapons delivery profiles on the JOSC website for authorized employment.
3. Ground based and aircraft targeting lasers are authorized only in W-174/176 IAW the specific Range Laser Certification documents posted on the JOSC website.
4. See following attachments for greater detail on specific ranges.
5. (Only Applies to W-183/A) Hours of usage for the water area is 24 hours a day, averaging 15 days per month, not to exceed 180 days a year.

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Attachment 4 (Added)

W-174 (IDESUNA JIMA) AND W-174A (KUME JIMA)

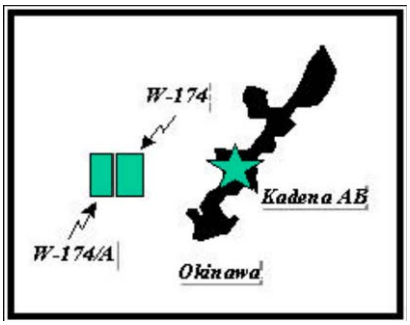
A4.1. (Added) W-174 and Idesuna Jima Range. (Reference **Attachment 3** and **Table A3.1.** for general information). The range consists of a circular island approximately 500m wide with a small hill on the southern side. The target area includes the entire lower portion of the island with the exception of the hill on the southern side.

Figure A4.1. (Added) Idesuna Jima Range.

A4.1.1. (Added) **Impact Area:** The Idesuna Jima impact area includes the land and water surface area contiguous to the land and within a 2 NM arc centered on N 26° 23’16.0” E 127° 06’ 13.4”.

A4.1.2. (Added) **Airspace Boundaries:** The W-174 warning area encompassing Idesuna Jima Range is a 10 NM by 15 NM rectangle defined by:
N 26° 27’ 14.1” E 126° 55’ 53.3” to
N 26° 27’ 14.0” E 127° 06’ 53.4” to
N 26° 12’ 14.0” E 127° 06’ 53.4” to
N 26° 12’ 14.4” E 126° 55’ 53.2” to
Point of Origin.

Figure A4.2. (Added) Location



A4.2. (Added) General Restrictions.

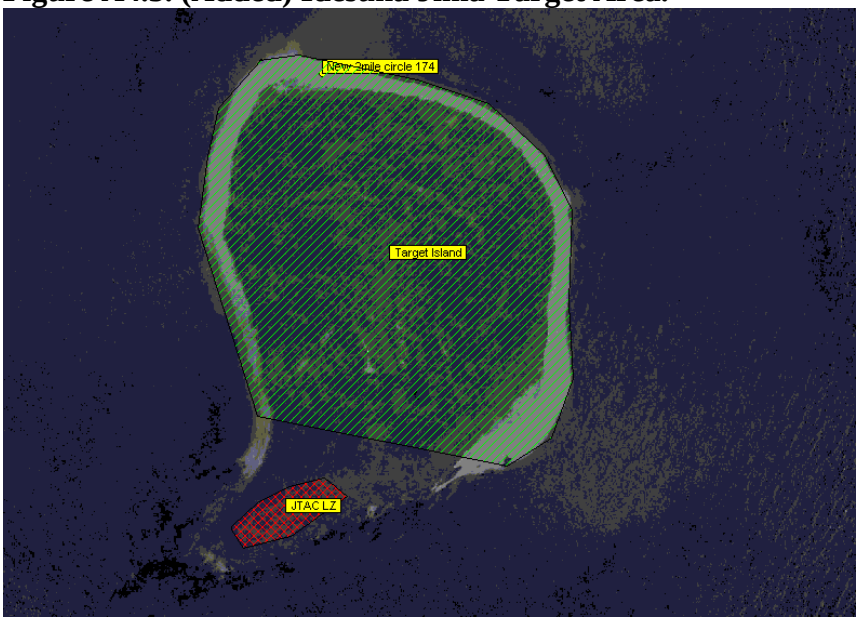
A4.2.1. (Added) Live ordnance is NOT authorized.

A4.2.2. (Added) Depleted uranium rounds are NOT authorized.

A4.2.3. (Added) High explosive or white/red phosphorus warheads are NOT authorized.

A4.2.4. (Added) All ordnance will be targeted against the target island area designated below. The hill located on the southern edge of Idesuna Jima is a helicopter landing zone (LZ) and is designated a no-drop/no-fire zone. Targeting the hill is strictly prohibited.

Figure A4.3. (Added) Idesuna Jima Target Area.



A4.2.5. (Added) Personnel are NOT authorized on the island without EOD training. Contact the ROO at the JOSC to schedule training. Personnel are NOT authorized outside of the JTAC LZ without EOD escort.

A4.3. (Added) Authorized Ordnance. Practice inert ordnance is authorized including chaff, self-protection flares, target-illumination flares and photo flashes in accordance with the profiles listed on the JOSC website.

A4.3.1. (Added) Inert/non-explosive ammunition is authorized including ball, target practice (TP), or armor piercing (AP) with or without tracers up to 40mm.

A4.3.2. (Added) Ground teams will limit ordnance to 4.2 inches (107mm) in diameter and will be target practice, smoke, or illumination munitions only.

A4.4. (Added) Radio Procedures. Idesuna Jima range operations will be conducted on frequency 287.5 with a call made prior to entry.

A4.5. (Added) Chaff and Flare Operations. All illumination flares must burn out 500' AGL/AWL and must remain within the range boundaries.

A4.6. (Added) Helicopter Landing Operations. Reference paragraph **A4.2.5.** of this supplement. The top of the hill on the south side is an approved helicopter landing zone (HLZ). Units requesting to land on Idesuna Jima must ensure a current copy of the LZ survey is on file with the ROO.

A4.7. (Added) Ground Operations. The entirety of Idesuna Jima's landmass lies within the defined 2 NM weapons danger zone. Personnel requiring ground access to Air Force target areas must prior coordinate with ROO. Use of the JTAC landing zone area is authorized for mission essential personnel while the range is active and essential personnel while the range is inactive provided all personnel have completed required EOD training.

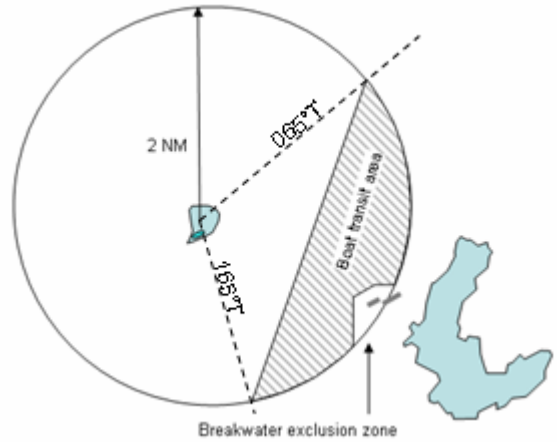
A4.8. (Added) Weapons Delivery Restrictions. Reference **A3.3.1.**

A4.8.1. (Added) Clearing Passes.

A4.8.1.1. (Added) The fishing port in Tonaki Jima is 2 NM due east of Idesuna Jima, reference figure A4.4. A joint use agreement allows construction of a breakwater that lies within the 2 NM mile circle of the impact area. Boats are authorized to work inside the impact area but no closer than 1.4 NM from the target island. This is accounted for within the restrictions imposed by the weapons delivery profiles. Do not employ weapons with any other vessels within the 2 NM impact area.

A4.8.1.2. (Added) Daily scheduled water vessels transit Tonaki Jima port through the eastern third of the impact area during the times of 0945L-1115L (Mar-Nov on Fri, Sat only, additional transits occur 1500L-1600L). Do not employ weapons when these vessels are transiting the impact area.

Figure A4.4. (Added) Tonaki Jima Breakwater Exclusion Zone.



A.4.8.2. (Added) Clearing passes are not required if all of the following conditions are met:

A.4.8.2.1. (Added) JTAC personnel are physically located in a position to effectively ensure the range is clear.

A.4.8.2.2. (Added) Positive two-way radio communication exists between the JTAC and the aircraft using the range.

A.4.8.2.3. (Added) The JTAC positively clears the aircraft on to the target.

A4.9. **(Added) Laser Operations**. Airborne platforms (including helicopters) employing lasers must ensure the laser to target designation heading is between 324° and 090°, or 144° and 270°.

A4.10. (Added) Jettison Procedures.

A4.10.1. (Added) **Controlled Jettison.** Jettison stores on target island using course of 025° or 205°.

A4.11. (Added) Overflight Restrictions. Overflight of Aguni Jima (NNE of Idesuna Jima) with an armed weapon system, or at an altitude of less than 3,000' AGL or 1 NM horizontally is prohibited.

A4.12. (Added) W-174A Airspace (Kume Jima). W-174A airspace is used primarily as an extension for W-174 and for air-to-surface simulated instrumented maneuvers. Expenditure of ordnance is ***NOT*** authorized. Unless otherwise notified, W-174A will be automatically scheduled with W-174 range periods.

A4.13. (Added) Water Area. The water surface area is a 1 NM radius centered at N 26^{o} 20' 56.9" E 126^{o} 52' 22.4". This point will be used as the simulated target area.

A4.14. (Added) Airspace Boundaries (W-174A). Begin at:

N 26° 27’ 13.9” E 126° 47’ 53.5” to
N 26° 27’ 14.1” E 126° 55’ 53.3” to
N 26° 12’ 14.4” E 126° 55’ 53.2” to
N 26° 12’ 14.0” E 126° 47’ 53.5” to
Point of Origin

A4.15. (Added) General Restrictions.

A4.15.1. (Added) Simulated Air to Ground Range: No live or inert ordnance is authorized.

A4.16. (Added) Authorized Ordnance. None.

A4.17. (Added) Radio Procedures. Same as W-174.

A4.18. (Added) Chaff and Flare. Same as W-174.

A4.19. (Added) Weapons Delivery Restrictions. Weapons delivery not authorized.

A4.20. (Added) Laser Operations. Same as W-174.

A4.21. (Added) Jettison Procedures. Same as W-174.

Attachment 5 (Added)

W-176 (TORI SHIMA)

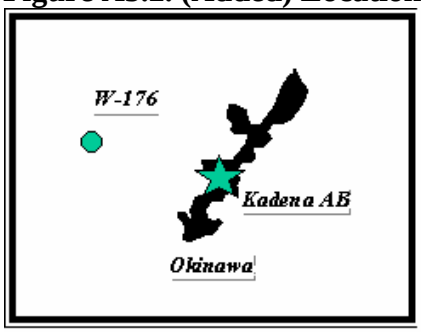
A5.1. (Added) W-176 and Tori Shima Range. (Reference **Attachment 3** and **Table A3.1.** for general information). The range consists of three coral islands varying in size.

Figure A5.1. (Added) Tori Shima Impact Area at Mid-Tide.

A5.2. (Added) Impact Area: The Tori Shima weapons impact area includes the land and water surface area within 3 NM of N 26° 35’ 44.3” E 126° 49’ 59.2”.

A5.3. (Added) Airspace Boundaries: The W-176 airspace is defined as a circular area of 5 NM radius centered at:
N 26° 36’ 14.3” E 126° 49’ 53.2”

Figure A5.2. (Added) Location.



A5.4. (Added) Altitudes: Above 15,000’ will be authorized by NOTAM. Coordinate with ROO.

A5.5. (Added) General Restrictions.

A5.5.1. (Added) Ordnance with sensor fusing delays are NOT authorized.

A5.5.2. (Added) Mk-36 DST, QUICK STRIKE type munitions or cluster munitions (e.g. CBU-87, CBU-89, MK 20 etc.) are NOT authorized.

A5.5.3. (Added) Live or inert ordnance larger than 2000lbs is NOT authorized.

A4.5.4. (Added) White/red phosphorous or flechette warheads are NOT authorized.

A5.5.5. (Added) Use of unauthorized ordnance in Tori Shima range is punishable under the UCMJ.

A5.6. (Added) Authorized Ordnance. Practice, inert and live conventional ordnance is authorized including chaff, self-protection flares, target-illumination flares and photo flashes in accordance with the profiles listed on the JOSC website.

A5.7. (Added) Radio Procedures. Tori Shima operations will be conducted on frequency 287.2.

A5.8. (Added) Ground Operations. Ground operations will be limited to range clearance, decontamination, and maintenance operations conducted by or under the supervision of 18 CES/CED, EOD personnel.

A5.8.1. (Added) Before conducting ground operations on Tori Shima, units must coordinate with the 18 WG Radiation Safety Officer, 18 AMDS/SGPB.

A5.9. (Added) Weapons Delivery Restrictions. Reference **A3.3.1.**

A5.10. (Added) Laser Operations. Airborne platforms (including helicopters) employing lasers for freefall weapons must use a designation heading between 032° and 093°, OR 211° and 273°.

A5.11. (Added) Jettison Procedures.

A5.11.1. (Added) **Controlled Jettison.** Jettison stores to impact Tori Shima Island. If jettisoning live ordnance, jettison the weapons armed to reduce potential EOD hazards.

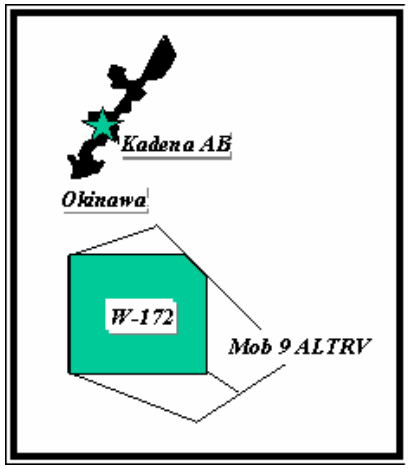
Attachment 6 (Added)

W-172 (SOUTH RANGE) AND MOBILE 9 (MOB 9) ALTRV

A6.1. (Added) W-172 (South Range). (Reference **Attachment 3** and **Table A3.1.** for general information). 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.

A6.2. (Added) Range Boundaries (W-172). Begin at:
N 25° 14’15” E 127° 34’53” to
N 24° 16’45” E 127° 34’53” to
N 24° 16’45” E 128° 39’53” to
N 25° 04’45” E 128° 39’53” to
N 25° 14’15” E 128° 29’53” to
Point of Origin

Figure A6.1. (Added) W-172 Airspace Depiction.



A6.3. (Added) 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.

A6.4. (Added) Radio Frequencies and Procedures. 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.

A6.5. (Added) Weapons Delivery Restrictions. Weapons delivery will be conducted IAW paragraph **12.2.** of this instruction.

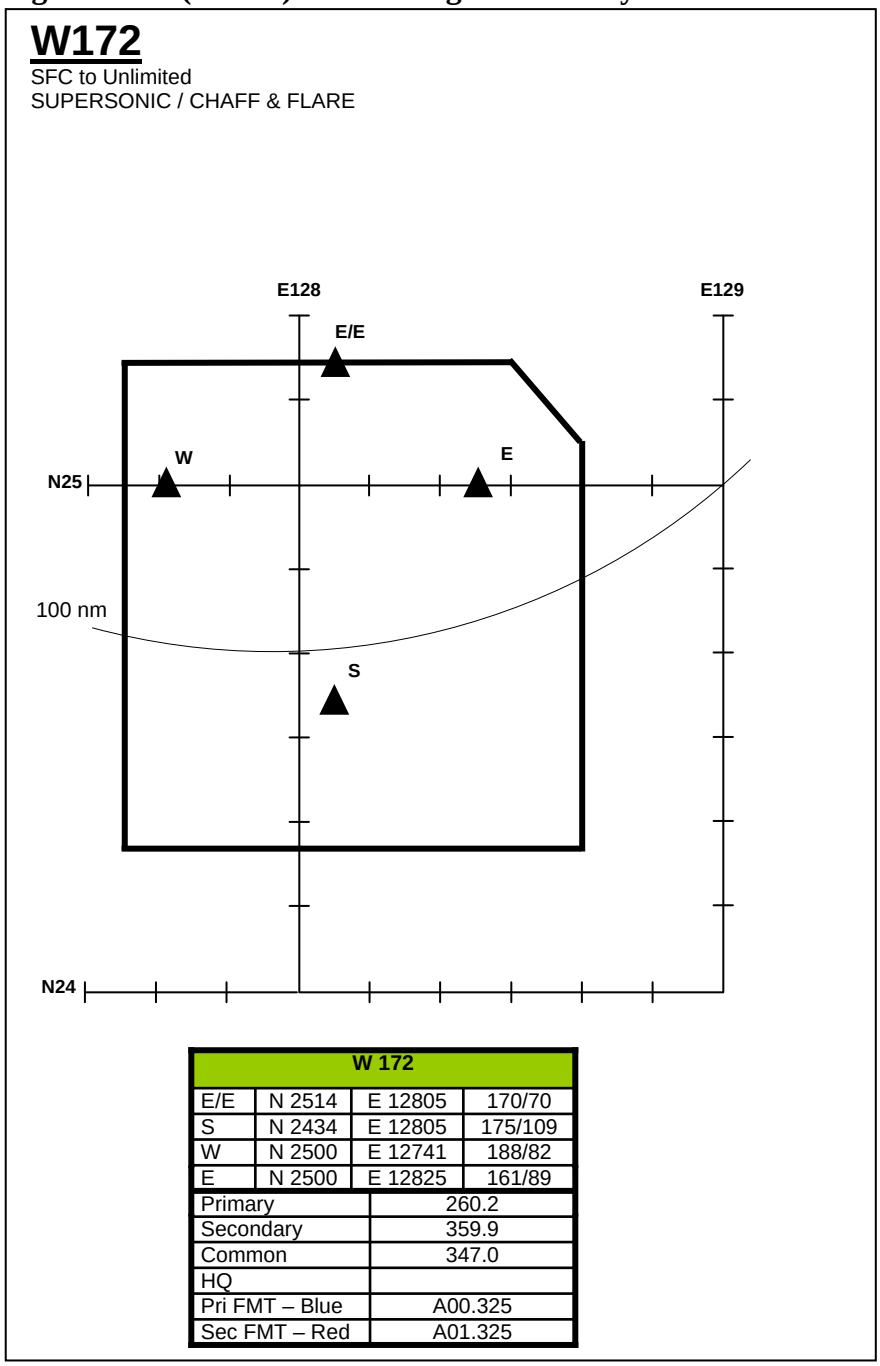
A6.6. (Added) Jettison Procedures. Reference **Attachment 3**.

A6.7. (Added) Entry/Exit Procedures.

A6.7.1. (Added) **Range Entry.** Area entry/exit point located at N 25° 14’ E 128° 05’ (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

A6.7.2. (Added) **Range Departures.** Area exit point located at N 25° 14’ E 128° 05’.

Figure A6.2. (Added) South Range W-172 Layout.

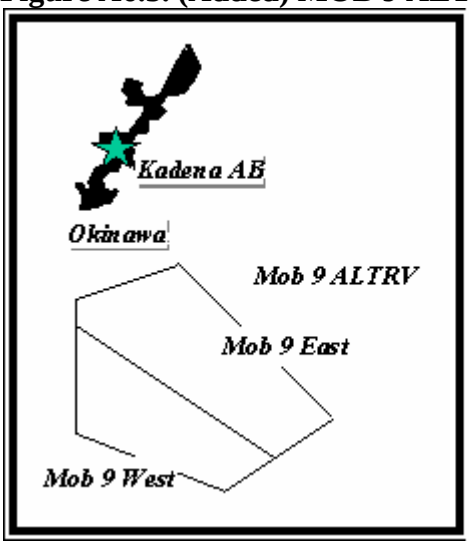


W 172			
E/E	N 2514	E 12805	170/70
S	N 2434	E 12805	175/109
W	N 2500	E 12741	188/82
E	N 2500	E 12825	161/89
Primary		260.2	
Secondary		359.9	
Common		347.0	
HQ			
Pri FMT – Blue		A00.325	
Sec FMT – Red		A01.325	

A6.8. (Added) MOB 9 ALTRV. MOB 9 is an 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. Units desiring to utilize MOB 9 must specifically request it from 18 OSS/OSOS, since these requests must in-turn be submitted through PACOM channels. Unless otherwise notified, W-172 will be automatically scheduled during MOB 9 range periods.

A6.9. (Added) Airspace Boundaries: MOB 9. Begin 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

Figure A6.3. (Added) MOB 9 ALTRV Depiction.



A6.9.1. (Added) MOB 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’.

A6.10. (Added) Altitudes. Above 40,000’ MSL through special arrangement (units must specifically request).

A6.11. (Added) Authorized Ordnance. None, other than use of chaff and self-protection flares. Live-fire operations are not authorized outside of W-172 airspace.

A6.12. (Added) Radio Frequencies and Procedures. Area common frequency of 347.0. 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 MOB 9W.

A6.13. (Added) Weapons Delivery Patterns and Restrictions. Not applicable to MOB 9 operations. See W-172 (South Range).

A6.14. (Added) Laser Operations. Not applicable to MOB 9 operations. See W-172 (South Range).

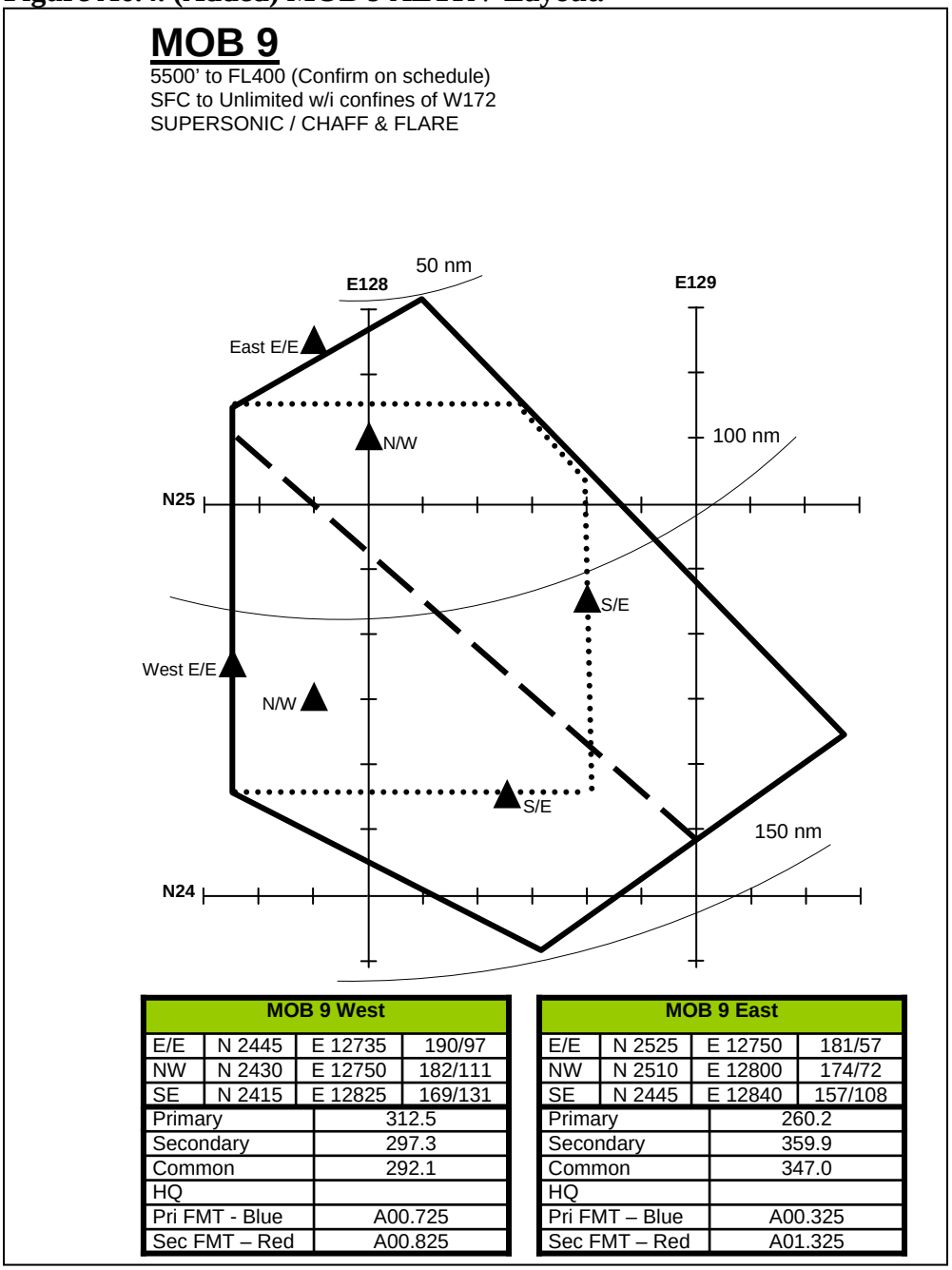
A6.15. (Added) Jettison Procedures. Reference **Attachment 3**.

A6.16. (Added) Entry/Exit Procedures.

A6.16.1. (Added) **Range Entry.** The MOB 9 and MOB 9E area entry/exit point is located at N 25° 25’ E 127° 50’. The MOB 9W point is N 24° 45’ E 127° 35’ (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

A6.16.2. (Added) **Range Departures.** 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.

Figure A6.4. (Added) MOB 9 ALTRV Layout.



MOB 9 West			
E/E	N 2445	E 12735	190/97
NW	N 2430	E 12750	182/111
SE	N 2415	E 12825	169/131
Primary	312.5		
Secondary	297.3		
Common	292.1		
HQ			
Pri FMT - Blue	A00.725		
Sec FMT – Red	A00.825		

MOB 9 East			
E/E	N 2525	E 12750	181/57
NW	N 2510	E 12800	174/72
SE	N 2445	E 12840	157/108
Primary	260.2		
Secondary	359.9		
Common	347.0		
HQ			
Pri FMT – Blue	A00.325		
Sec FMT – Red	A01.325		

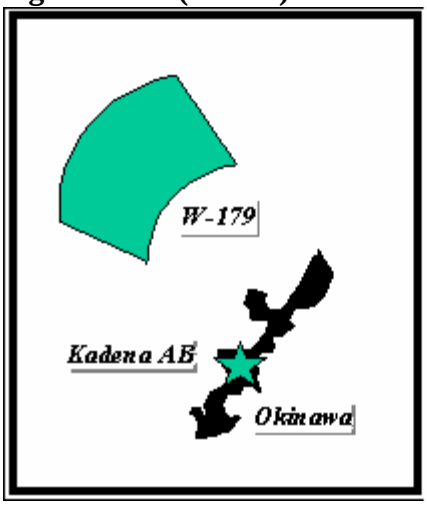
Attachment 7 (Added)

W-179 (NORTH RANGE) AND SHOVEL ALTRV

A7.1. (Added) W-179 (North Range). (Reference **Attachment 3** and **Table A3.1.** for general information). 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.

A7.2. (Added) Range Boundaries (W-179). Begin at:
N 27° 04’45” E 126° 39’05” to
N 27° 30’14” E 125° 56’53” then
Clockwise along the arc of 120 NM radius circle centered at
N 26° 22’14” E 127° 47’53” to
N 28° 17’14” E 127° 07’53” to
N 27° 32’02” E 127° 25’35” then
Counterclockwise along the arc of 72 NM radius circle centered at
N 26° 22’14” E 127° 47’53” to
N 27° 05’26” E 126° 42’59” to
Point of Origin

Figure A7.1. (Added) W-179 Airspace Depiction.



A7.3. (Added) Authorized Ordnance. All conventional air-to-air ordnance including: 0.50 Caliber, 20mm, 25mm, 30mm, 40mm, 5-inch rockets, 6-inch rockets, and missiles are authorized. Weapons delivery and weapons effects must be initiated and remain within the confines of the airspace.

A7.4. (Added) Radio Frequencies and Procedures. Area common frequency of 360.1. Generally, working frequencies will be coordinated through the controlling agency. Unless otherwise specified, aircraft may use frequency 255.9.

A7.5. (Added) Chaff and Flare Operations. Chaff use is prohibited when winds aloft (at or above 5,000' MSL) are greater than 50 knots.

A7.6. (Added) Weapons Delivery Restrictions. Weapons delivery will be conducted IAW paragraph **12.2.** of this instruction.

A7.7. (Added) Laser Operations. Laser Operations will be conducted IAW paragraph **12.6.** of this instruction.

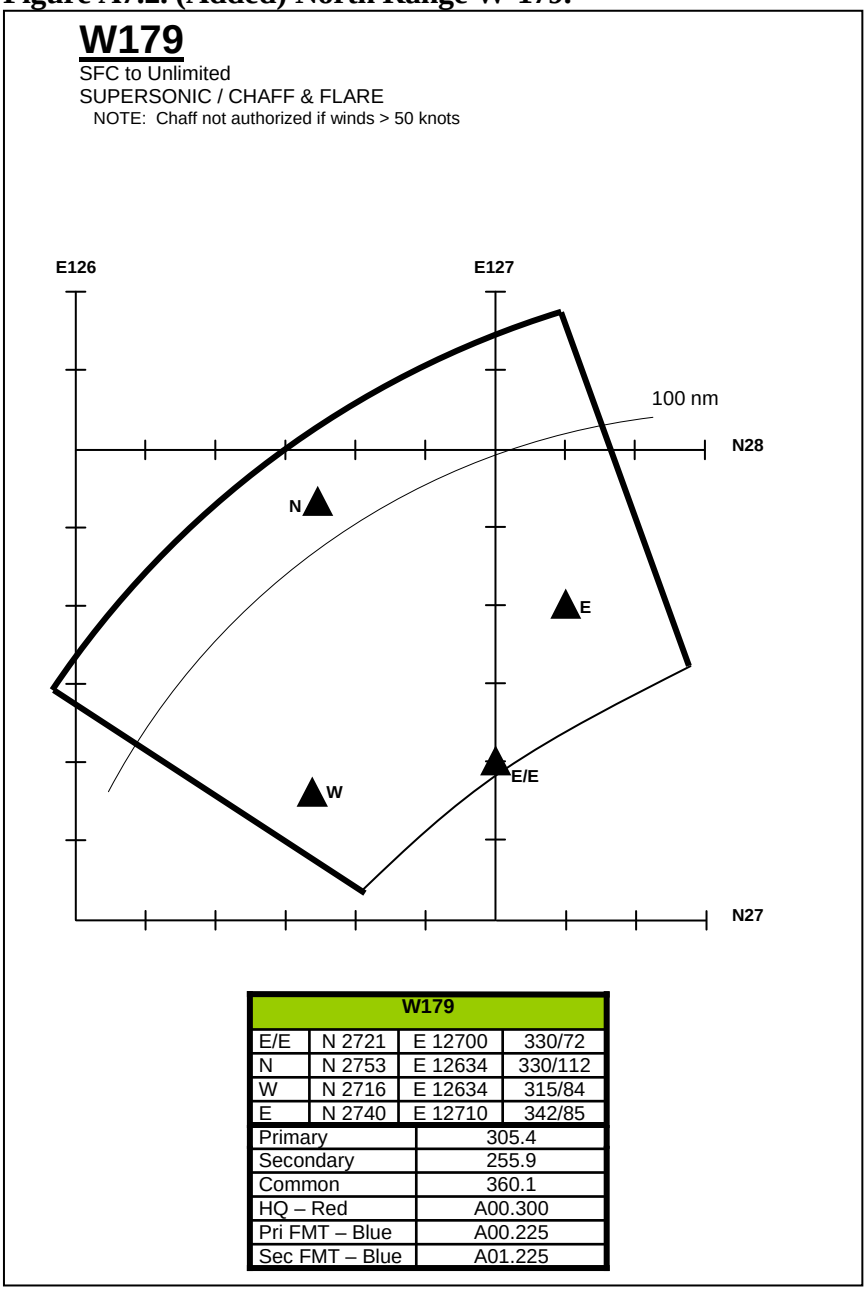
A7.8. (Added) Jettison Procedures. Reference **Attachment 3**.

A7.9. (Added) Entry/Exit Procedures.

A7.9.1**.** (Added) **Range Entry.** Area entry/exit point located at N 27° 21' E 127° 00' (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

A7.9.2. (Added) **Range Departures.** Area exit point located at N 27° 21' E 127° 00'.

Figure A7.2. (Added) North Range W-179.



W179			
E/E	N 2721	E 12700	330/72
N	N 2753	E 12634	330/112
W	N 2716	E 12634	315/84
E	N 2740	E 12710	342/85

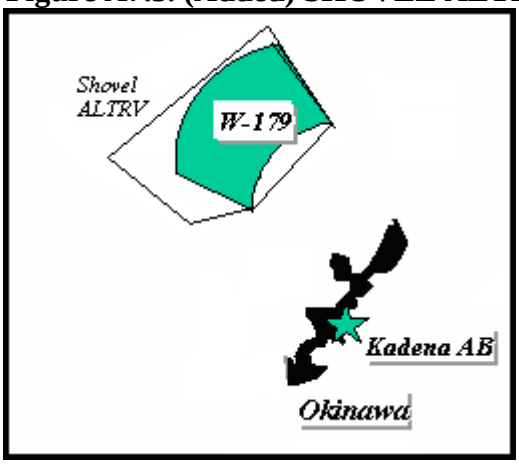
Primary	305.4
Secondary	255.9
Common	360.1
HQ – Red	A00.300
Pri FMT – Blue	A00.225
Sec FMT – Blue	A01.225

A7.10. (Added) SHOVEL ALTRV. SHOVEL is an ALTRV overlaying and extending W-179 airspace on all sides. It has a primary axis of Northeast to Southwest. Units desiring to utilize SHOVEL must specifically request it from 18 OSS/OSOS, since these requests must in-turn be submitted through PACOM channels. Unless otherwise notified, W-179 will be automatically scheduled during SHOVEL range periods.

A7.11. (Added) Airspace Boundaries: (SHOVEL). Begin at:
N 28^{o} 28’ 43” E 127^{o} 03’ 15” to
N 27^{o} 32’ 02” E 127^{o} 25’ 35” to
N 27^{o} 05’ 26” E 126^{o} 42’ 59” to

N 27° 04’ 45” E 126° 39’ 05” to
N 26° 59’ 00” E 126° 06’ 00” to
N 27° 24’ 30” E 125° 33’ 00” to
Point of origin.

Figure A7.3. (Added) SHOVEL ALTRV Depiction.



A7.12. (Added) Altitudes. Above 40,000’ MSL through special arrangement (units must specifically request).

A7.13. (Added) Authorized Ordnance. None, other than use of chaff and self-protection flares. Live-fire operations not authorized outside of W-179 airspace.

A7.14. (Added) Radio Frequencies and Procedures. Area common frequency of 360.1. Unless otherwise specified, aircraft may use frequency 255.9 when using SHOVEL.

A7.15. (Added) Chaff and Flare Operations. If winds aloft exceed 50kts, chaff is not authorized.

A7.16. (Added) Weapons Delivery Patterns and Restrictions. Not applicable to SHOVEL operations. See W-179 (North Range).

A7.17. (Added) Laser Operations. Not applicable to SHOVEL operations. See W-179 (North Range).

A7.18. (Added) Jettison Procedures. Reference **Attachment 3**.

A7.19. (Added) Entry/Exit Procedures.

A7.19.1. (Added) **Range Entry.** Area entry/exit point located at N 27° 21’ E 127° 00’ (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

A7.19.2. (Added) **Holding.** Avoid G581 airway.

A7.19.3. (Added) **Range Departures.** Area exit point located at N 27° 21’ E 127° 00’. In VMC and under VFR, G-581 airway must be avoided.

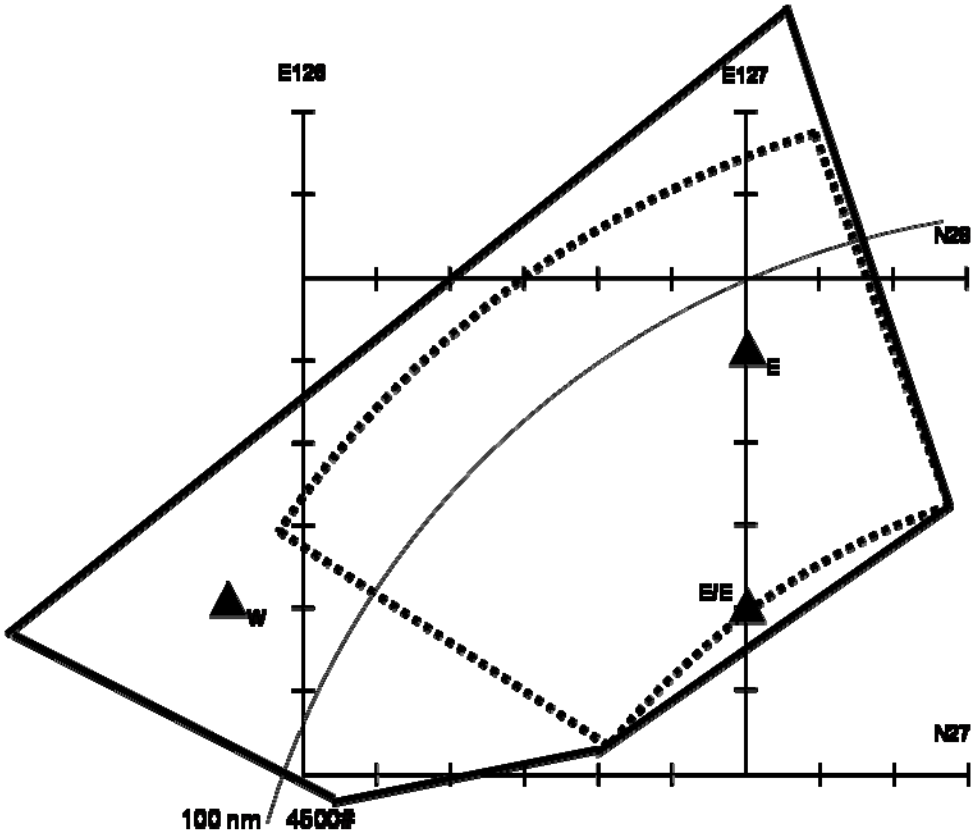
Figure A7.4. (Added) North Range SHOVEL ALTRV Layout.

SHOVEL

5500' to FL400 (Confirm on Schedule)

SFC to Unlimited w/i confines of W179
SUPERSONIC / CHAFF & FLARE

NOTE: Chaff not authorized if winds > 50 knots
Active only when scheduled



SHOVEL			
E/E	N 2721	E 12700	330/72
W	N 2720	E 12550	306/120
E	N 2760	E 12700	228/99
Primary	305.4		
Secondary	255.9		
Common	360.1		
HQ – Red	A00.300		
Pri FMT – Blue	A00.225		
Sec FMT – Blue	A01.225		

Attachment 8 (Added)

W-173 A/D/E/F (ALPHA/HOTEL-HOTEL)

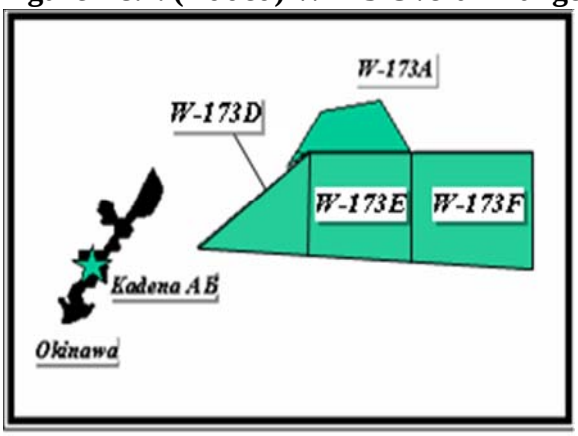
A8.1. (Added) W-173 Overall Range Description. (Reference **Attachment 3** and **Table A3.1.** for general information). W-173 is composed of four areas and is located NE of Kadena AB. The majority of this airspace is comprised of W-173D/E/F, which is a predominantly East - West, rectangular range space used for air-to-air, air-to-surface, and surface-to-surface weapons delivery and training. W-173A adjoins the northern border of W-173D/E.

A8.2. (Added) W-173A Range Description.

A8.2.1. (Added) **Range Type.** Air-to-Air training airspace.

A8.2.2. (Added) **Range Boundaries (W-173A).** Begin at:
N 26° 53’14” E 128° 54’53” to
N 27° 24’14” E 129° 14’52” to
N 27° 29’14” E 129° 34’52” to
N 27° 33’14” E 129° 59’52” to
N 27° 06’14” E 130° 14’52” to
N 27° 06’14” E 129° 09’52” to
Point of Origin.

Figure A8.1. (Added) W-173 Overall Range Depiction.



A8.3. (Added) Authorized Ordnance. None, other than use of chaff and self-protection flares. Live-fire operations are not applicable.

A8.4. (Added) Radio Frequencies and Procedures. 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.

A8.5. (Added) Weapons Delivery Patterns and Restrictions. Not applicable.

A8.5.1. (Added) **Range Sweeps.** Not applicable.

A8.6. (Added) Laser Operations. Laser operations will be conducted IAW paragraph **12.6.** of this instruction.

A8.7. (Added) Jettison Procedures. Reference **Attachment 3**.

A8.8. (Added) Range Entry/Exit.

A8.8.1. (Added) **Range Entry.** There is no designated entry/exit point for W-173A.

A8.8.2. (Added) **Holding.** Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to the range space.

A8.8.3. (Added) **Range Departures.** There is no designated exit point for W-173A.

A8.9. (Added) W-173D, E, F Range Description. W-173D/E/F are air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range. W-173D/E/F (AREA HOTEL HOTEL) are owned by CFAO. Reference COMNAVFORJAPANINST 3500.3T, *USN Training/Operating Areas Adjacent to Okinawa, Japan*, 5 August 2003, for additional guidance.

A8.9.1. (Added) **Range Boundaries (W-173D).** Begin at:
N26°23'14" E128°19'53" to
N27°06'14" E129°09'52" to
N26°19'30" E129°10'00" to
Point of Origin

A8.9.2. (Added) **Range Boundaries (W-173E).** Begin at:
N27°06'14" E129°09'52" to
N27°06'14" E130°15'00" to
N26°14'14" E130°15'00" to
N26°19'30" E129°10'00" to
Point of Origin

A8.9.3. (Added) **Range Boundaries (W-173F).** Begin at:
N27°06'14" E130°15'00" to
N27°06'14" E130°59'52" to
N26°10'15" E130°59'52" to
N26°14'14" E130°15'00" to
Point of Origin

A8.10. (Added) Target Description. Not applicable.

A8.11. (Added) Authorized Ordnance. 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 are authorized. Weapons delivery

and weapons effects must take place and remain within the confines of the airspace. Use of target-illumination flares, chaff and self-protection or target-illumination flares are authorized.

A8.12. (Added) Radio Frequencies and Procedures. 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.

A8.13. (Added) Weapons Delivery Restrictions. IAW paragraph **12.2.** of this instruction.

A8.14. (Added) Laser Operations. Laser operations will be conducted IAW paragraph **12.6.** of this instruction.

A8.15. (Added) Jettison Procedures. Reference **Attachment 3**.

A8.16. (Added) Range Entry/Exit.

A8.16.1. (Added) **Range Entry.** Area entry/exit point located at N 26° 30’ E 128° 29’ (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

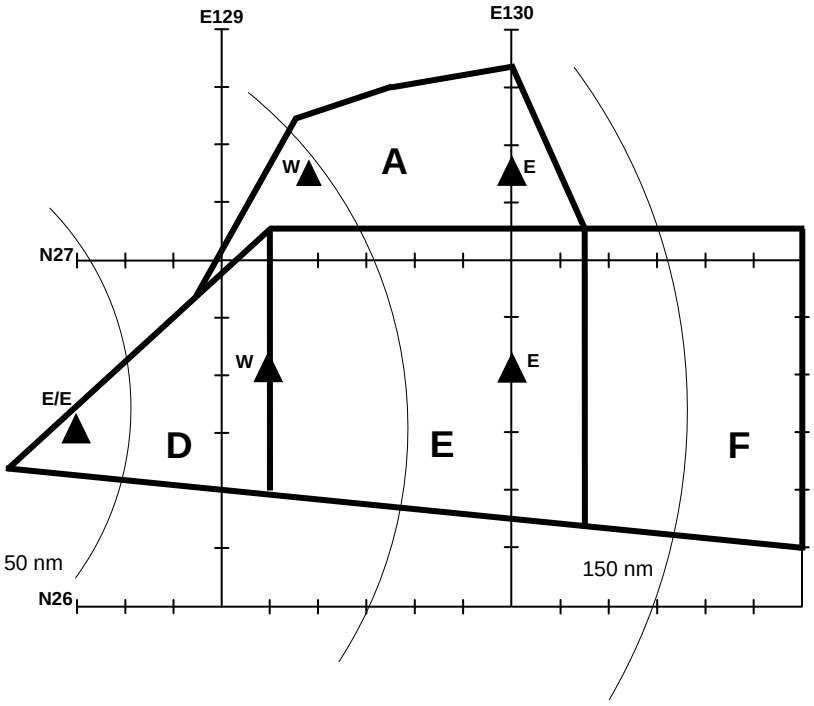
A8.16.2. (Added) **Holding.** Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to the range space.

A8.16.3. (Added) **Range Departures.** Area exit point located at N 26° 30’ E 128° 29’. Flights must use extreme caution upon exiting the area in avoiding dense commercial traffic using air routes adjacent to the range space.

Figure A8.2. (Added) East Range W-173A/D/E/F Layout.

W173

W173A 3000' to FL600
W173D/E/F SFC to Unlimited
SUPERSONIC / CHAFF & FLARE



W173 D/E/F			
E/E	N 2630	E 12829	082/39
W	N 2640	E 12910	080/78
E	N 2640	E 13000	085/120
Primary		292.2	
Secondary		343.4	
Common		339.0	
HQ – Red		A00.200	
Pri FMT – Blue		A00.125	
Sec FMT – Blue		A01.125	

W173 A			
E/E	N 2630	E 12829	082/39
W	N 2715	E 12920	062/100
E	N 2715	E 13000	070/131
Primary		321.0	
Secondary		270.2	
Common		227.4	
HQ			
Pri FMT – Blue		A00.625	
Sec FMT – Red		A01.525	

Attachment 9 (Added)

W-184, W-183, W-183A (INDIA-INDIA, OKINO DAITO JIMA)

A9.1. (Added) W-184 Overall Range Description. (Reference **Attachment 3** and **Table A3.1.** for general information). W-184 is located approximately 210 NM ESE of Kadena AB. 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 an uncontrolled (USN Class C) range.

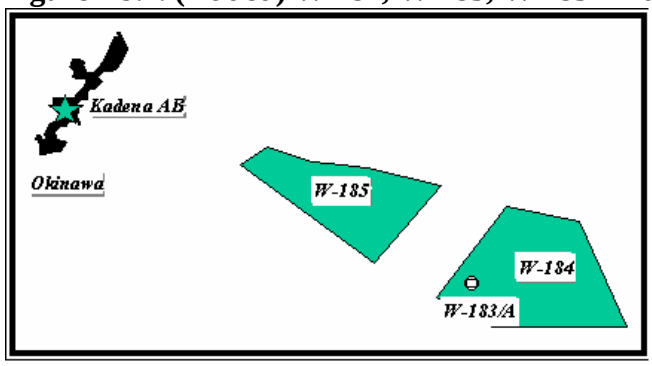
A9.2. (Added) W-184, W-183, W-183A Range Description.

A9.2.1. (Added) **Range Type.** Air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range.

A9.2.2. (Added) Range Boundaries.

A9.2.2.1. (Added) **W-184.** Begin at:
N 24° 23’15” E 130° 47’52” To
N 25° 26’15” E 131° 41’52” To
N 25° 13’15” E 132° 30’52” To
N 24° 00’16” E 132° 59’52” To
N 24° 00’15” E 131° 22’38” To
N 24° 07’33” E 131° 10’25” To
Point of Origin

Figure A9.1. (Added) W-184, W-183, W-183A Range Depiction.



A9.2.2.2. (Added) **W-183 and W-183A Range Boundaries.** W-183 range space encompasses a circular area of 3 NM radius centered at N 24° 28’15.3” E 131° 10’52.0. (Okino Daito Jima). W-183A encloses W-183 with an arc of 3 to 5 NM radius.

A9.3. (Added) 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° 28’15.3” E 131° 10’52.0. If W-183 is scheduled in conjunction with W-183A and W-184, weapons impact may occur anywhere within the confines of W-

184.

A9.4. (Added) Authorized Ordnance. 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 is authorized. Units are reminded that weapons delivery and weapons effects must take place (and remain) within the confines of the airspace. Use of target-illumination flares, chaff and self-protection or target-illumination flares are authorized.

A9.4.1. (Added) W-183 is divided between East and West sides using the longitudinal dividing line of E 131° 11'20". Live fire/strafing is permitted on the West side ONLY. Targets in place on the East side are for inert/dummy use only. ONLY inert ordnance drops are permitted on the East side. Submit requests for ordnance use via message traffic (to the maximum extent possible) to Commander, Fleet Activities (COMFLEACT) Okinawa JA/N33. In addition, units conducting live fire in W-183/W-183A must submit post usage report upon completion of all operations to COMFLEACT Okinawa JA/N33 (DSN 315-634-7075). Failure to do so may result in future range denial.

A9.5. (Added) Radio Procedures. The assigned area frequency for W-184 is 287.5. W-183, and W-183A do not have specifically assigned frequencies.

A9.6. (Added) Ground Operations. Ground parties may NOT enter W-183 (Okino Daito Jima) without a qualified EOD escort. Each service is responsible for providing its own EOD personnel. The Kadena AB EOD Flight (18 CES/CED) may support some requests for EOD escort on a limited basis. Personnel requiring ground access to target areas must prior coordinate with 18 OSS/OSOS.

A9.6.1. (Added) Any ground operations on W-183 must be prior coordinated with 18OSS/OSO, COMFLEACT Okinawa JA/N33 (DSN 315-634-7075) and the JOSC (DSN: 634-4597/4599/4797, FAX 634-4395).

A9.7. (Added) 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 **12.2.** of this instruction.

A9.7.1. (Added) **Clearing Passes.** Clearing passes are not required on W-183 if all the following conditions are met:

A9.7.1.1. (Added) A TACP is physically located in a position to effectively ensure the range is clear.

A9.7.1.2. (Added) Positive two-way radio communication exists between the TACP and the aircraft using the range.

A9.7.1.3. (Added) The TACP positively clears the aircraft on to the target.

A9.7.1.4. (Added) Release of ordnance on the first pass is necessary to meet a valid training objective, as determined by the mission commander.

A9.7.1.5. (Added) 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.

A9.7.1.6. (Added) Clearing passes performed for other units by 18 WG F-15s will be executed by low altitude qualified flight leads at 300 KCAS.

A9.8. (Added) Laser Operations. Laser operations will be conducted IAW paragraph **12.6.** of this instruction.

A9.9. (Added) Jettison Procedures. Reference **Attachment 3**.

A9.9.1. (Added) **Controlled Jettison.** Jettison stores so as to impact Okino Daito Jima Island.

A9.9.1.1. (Added) If unable to return to Okino Daito Jima Island weapons delivery range, jettison ordinance beyond 12 NM from land and visually clear the area of surface vessels.

A9.10. (Added) Entry/Exit. Flights must use extreme caution upon entering/exiting the area to avoid 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 on a local tactical departure clearance flying beyond 100 NM of Kadena and not in a designated warning area must be in radio contact with JASDF, USAF, USMC GCI site, or AWACS. The JASDF sector operations center, call sign RODERICK, continuously monitors UHF frequency 276.3 and is available for flight following to and from the areas. In addition, maintain all squawks on until within the confines of the area.

A9.10.1. (Added) Flights must use extreme caution in avoiding dense commercial traffic using air routes adjacent to (especially immediately to the west of) the range space.

Attachment 10 (Added)

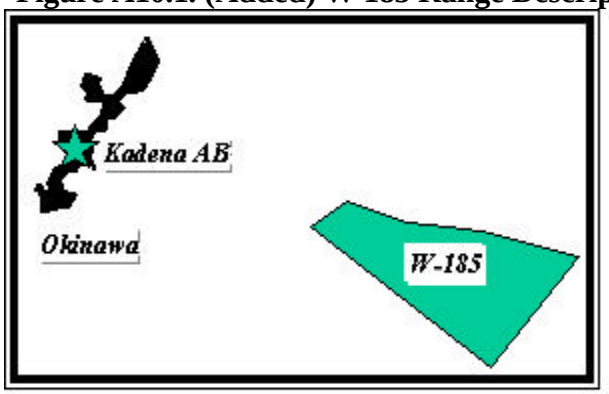
W-185 (MIKE-MIKE)

A10.1. (Added) W-185 Range Description. (Reference **Attachment 3** and **Table A3.1.** for general information).

A10.1.1. (Added) **Range Type.** Air-to-air, air-to-surface, and surface-to-surface training and weapons delivery range.

A10.1.2. (Added) **Range Boundaries (W-185).** Begin at:
N 25° 41'15" E 128° 51'53" To
N 25° 48'37" E 129° 02'19" To
N 25° 44'15" E 129° 25'52" To
N 25° 44'15" E 130° 10'52" To
N 25° 43'24" E 130° 35'52" To
N 25° 41'15" E 130° 44'52" To
N 24° 53'15" E 130° 03'52" To
Point of Origin

Figure A10.1. (Added) W-185 Range Description.



A10.2. (Added) Target Description. Not applicable.

A10.3. (Added) Authorized Ordnance. 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 are authorized. 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.

A10.4. (Added) Radio Procedures. 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.

A10.5. (Added) Weapons Delivery Patterns and Restrictions. IAW paragraph **12.2.** of this

instruction.

A10.6. (Added) Laser Operations. Laser operations will be conducted IAW paragraph **12.6.** of this instruction.

A10.7. (Added) Jettison Procedures. Reference **Attachment 3**.

A10.8. (Added) Range Entry/Exit.

A10.8.1. (Added) **Range Entry.** Area entry/exit point located at N 25° 47' E 129° 00' (or reference the appropriate 18 WG approved IFG for the type aircraft you are flying).

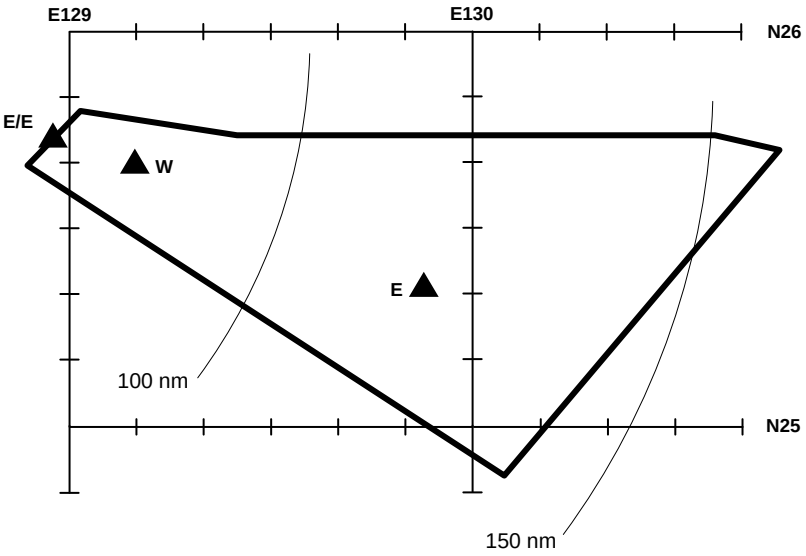
A10.8.2. (Added) **Holding.** Flights must use extreme caution in avoiding commercial traffic using air routes adjacent to the range space.

A10.8.3. (Added) **Range Departures.** Area exit point located at N 25° 47' E 129° 00'. Flights must use extreme caution upon exiting the area in avoiding commercial traffic using air routes adjacent to the range space.

Figure A10.2. (Added) W-185 Layout.

W185

SFC to Unlimited
SUPERSONIC / CHAFF & FLARE



W185			
E/E	N 2547	E 12900	121/75
W	N 2542	E 12912	121/87
E	N 2521	E 12952	122/128
Primary		225.6	
Secondary		240.6	
Common		291.6	
HQ – Red		A00.400	
Pri FMT – Blue		A00.425	
Sec FMT – Blue		A01.425	

Attachment 11 (Added)

OTHER ALTRVS

Figure A11.1. (Added) ALTRV Layout.

A11.1. (Added) This attachment contains the standard ALTRV airspaces. Direct all questions concerning this airspace to the JOSC at DSN: 634-4597/4599/4797, FAX 634-4593. (Reference **Attachment 3** and **Table A3.1.** for general information).

A11.2. (Added) Hours of Operation. Variable. Dependent upon special arrangement between PACOM Airspace Manager and Naha Air Control Center.

A11.3. (Added) Coordination: All require 6 days notice at a minimum.

A11.4. (Added) Authorized Ordnance. None, other than use of chaff and self-protection flares. Live-fire operations are not Authorized.

A11.5. (Added) Radio Frequencies and Procedures. Reference **Attachment 3**.

A11.6. (Added) Chaff and Flare Operations. Use of chaff, self- protection and target-illumination flares are authorized.

A11.7. (Added) Laser Operations. Not applicable to ALTRV operations.

A11.8. (Added) Jettison Procedures. Reference **Attachment 3**.

A11.9. (Added) ALTRV.

A11.9.1. (Added) **BUBBA.** BUBBA ALTRV is primarily used as an air refueling track and may be scheduled separately from the SHOVEL ALTRV.

A11.9.1.1. (Added) **ALTRV Boundaries.** Begin at:
N 27° 24’30” E 125° 33’00” To
N 26° 59’00” E 126° 06’00” To
N 26° 23’00” E 124° 40’00” To
N 26° 50’40” E 124° 26’30” To
Point of Origin

A11.9.1.2. (Added) **Altitudes.** FL200 - FL250

A11.9.1.3. (Added) **Entry/Exit Point:** N 26° 55’30” E 125° 57’30”

A11.9.2. (Added) **BARNEY.** BARNEY ALTRV is used to connect MOB9 ALTRV and W-185 for receiver traffic flow.

A11.9.2.1. (Added) **ALTRV Boundaries.** 20 NM either side of a line from:
N 24° 50’00” E 128° 56’00” To
N 25° 09’00” E 129° 40’00” To
N 24° 55’00” E 130° 02’00” To
N 24° 35’00” E 129° 15’00” To

A11.9.2.2. (Added) **Altitudes.** FL220 - FL240

A11.9.3. (Added) **CONEY.** CONEY ALTRV extends W-184 and is primarily used by USN.

A11.9.3.1. (Added) **ALTRV Boundaries.** Begin at:
N 25° 26’00” E 131° 42’00” To
N 25° 15’00” E 133° 45’00” To
N 23° 37’00” E 133° 45’00” To
N 23° 35’00” E 131° 40’00” To
N 24° 23’00” E 130° 48’00” To
Point of Origin

A11.9.3.2. (Added) **Altitudes.** 5,500’ - FL400

A11.9.4. (Added) **DOWNUNDER.** DOWNUNDER ALTRV is used primarily by the 961 AACS.

A11.9.4.1. (Added) **ALTRV Boundaries.** Begin at:
N 25° 28’00” E 128° 16’00” To
N 24° 45’00” E 129° 02’00” To
N 25° 09’00” E 129° 28’00” To
N 25° 50’00” E 128° 41’00” To

Point of Origin

A11.9.4.2. (Added) **Altitudes.** FL280 - FL290.

A11.9.5. (Added) **GECKO.** GECKO ALTRV is used to connect W-173E/F and W-185 for receiver traffic flow.

A11.9.5.1. (Added) **ALTRV Boundaries.** Begin at:
N 25° 42'00" E 130° 09'00" To
N 26° 15'00" E 130° 00'00" To
N 26° 13'00" E 130° 25'00" To
N 25° 42'00" E 130° 35'00" To
Point of Origin

A11.9.5.2. (Added) **Altitudes.** FL210 - FL240

A11.9.6. (Added) **IDAMAS.** IDAMAS ALTRV is used primarily by MC-130 and KC-135 for low altitude air refueling tracks.

A11.9.6.1. (Added) **ALTRV Boundaries.** Begin at:
N 30° 15'00" E 129° 05'00" To
N 30° 05'00" E 129° 25'00" To
N 28° 37'00" E 128° 26'00" To
N 28° 47'00" E 128° 06'00" To
Point of Origin

A11.9.6.2. (Added) **Altitudes.** 9,000' – 11,000'

A11.9.7. (Added) **SHOOTER.** SHOOTER ALTRV is used to connect W-185 and W-184. Use caution to maintain the vertical limits of the SHOOTER ALTRV and avoid the overlying Oceanic Air Route A-590.

A11.9.7.1. (Added) **ALTRV Boundaries.** Begin at:
N 25° 41'00" E 130° 45'00" To
N 25° 26'00" E 131° 42'00" To
N 24° 23'00" E 130° 48'00" To
N 24° 53'00" E 130° 04'00" To
Point of Origin

A11.9.7.2. (Added) **Altitudes.** 5,500' - FL200

Attachment 12 (Added)

LOCAL TANKER TRACKS

A12.1. (Added) General. This attachment is to provide a common reference for air refueling operations to simplify air refueling planning and coordination. Use of tanker tracks in range airspace require scheduling respective airspace IAW **Chapter 11** of this instruction.

A12.2. **(Added) Tanker Tracks.** In the absence of coordination with tanker mission schedulers, the standard tracks for air refueling are as follows:

A12.2.1. (Added) W-172 Air Refueling.

A12.2.1.1. (Added) Cotton Tail.

A12.2.1.1.1. (Added) **Entry/RVIP:** N25°14’ E127°46’ (KAD 184/67)

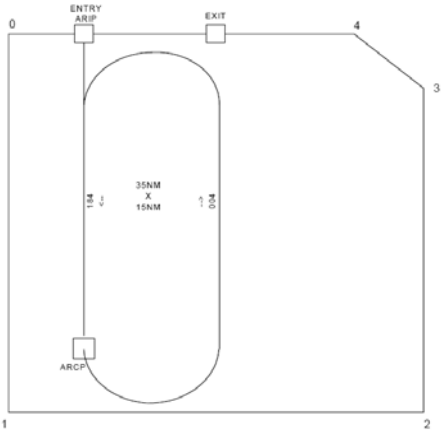
A12.2.1.1.2. (Added) **RVCP:** N24°27’ E127°46’ (KAD 184/114)

A12.2.1.1.3. (Added) **Exit:** N25°14’ E128°00’ (KAD 174/069)

A12.2.1.1.4. (Added) **Racetrack.** Inbound Course: 180°T; Length: 30 NM; Width: 15NM; left turns @ RVCP.

A12.2.1.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Foxtrot.

Figure A12.1. (Added) Cotton Tail Depiction.



A12.2.2. (Added) MOB Air Refueling.

A12.2.2.1. (Added) Mobile 9 East.

A12.2.2.1.1. (Added) **Entry/Exit/RVIP:** N25°00’ E128°45’ (KAD 151/97)

A12.2.2.1.2. (Added) **RVCP:** N24°15’ E128°45’ (KAD 161/137)

A12.2.2.1.3. (Added) **Racetrack.** Inbound Course: 180T; Length: 27 NM; Width: 12 NM; left turns @ RVCP.

A12.2.2.1.4. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Echo.

A12.2.2.2. (Added) Mobile 9 West.

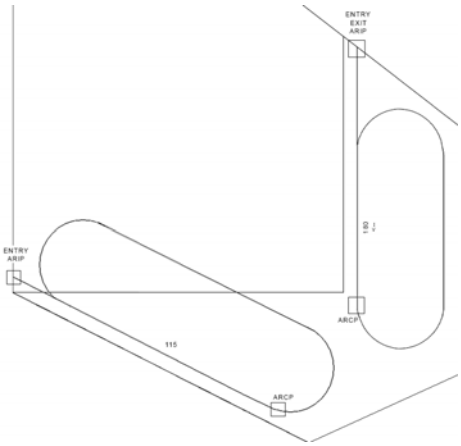
A12.2.2.2.1. (Added) **Entry/RVIP:** N24°24’ E127°35’ (KAD 189/117)

A12.2.2.2.2. (Added) **RVCP:** N24°00’ E128°30’ (KAD 168.146)

A12.2.2.2.3. (Added) **Racetrack.** Inbound Course: 115°T; Length: 35 NM; Width: 12 NM; left turns @ RVCP.

A12.2.2.2.4. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Echo.

Figure A12.2. (Added) Mobile 9 East & West Depiction.



A12.2.3. (Added) W-179 Air Refueling.

A12.2.3.1. (Added) Grey Rabbit.

A12.2.3.1.1. (Added) **Entry/RVIP:** N27°34’ E127°25’ (KAD 350/75)

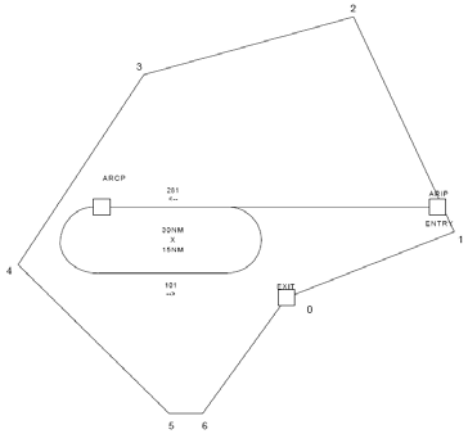
A12.2.3.1.2. (Added) **RVCP:** N27°40’ E126°18’ (KAD319/111)

A12.2.3.1.3. (Added) **Exit:** N27°21 E127°00’ (KAD 330/72)

A12.2.3.1.4. (Added) **Racetrack.** Inbound Course: 276°T; Length: 30 NM; Width: 15 NM; left turns @ RVCP.

A12.2.3.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Delta.

Figure A12.3. (Added) Grey Rabbit Depiction.



A12.2.4. (Added) W-173A Air Refueling.

A12.2.4.1. (Added) Katana.

A12.2.4.1.1. (Added) **Entry/Exit:** N27°09’ E129°06’ (ONC133/27)

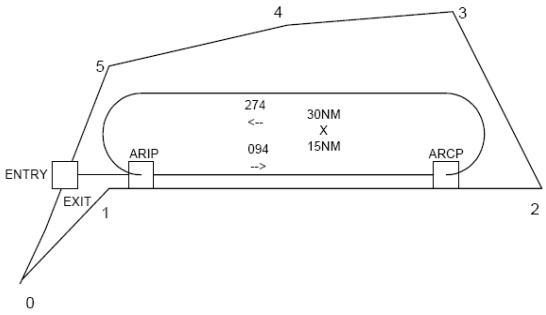
A12.2.4.1.2. (Added) **RVIP:** N27°09 E129°21’ (ONC121/39)

A12.2.4.1.3. (Added) **RVCP:** N27°09’ E129°55’ (ONC109/067)

A12.2.4.1.4. (Added) **Racetrack.** Inbound Course: 090°T; Length: 30 NM; Width: 15 NM; left turns at RVCP.

A12.2.4.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Alpha.

Figure A12.4. (Added) Katana Depiction.



A12.2.5. (Added) W-173D/E/F Air Refueling.

A12.2.5.1. (Added) Hotel East.

A12.2.5.1.1. (Added) **Entry/Exit:** N26°12’ E130°35’ (KAD097/152)

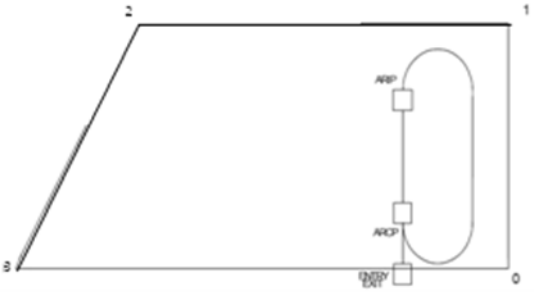
A12.2.5.1.2. (Added) **RVIP:** N26°55’ E130°35’ (KAD 081/155)

A12.2.5.1.3. (Added) **RVCP:** N26°25’ E130°35’ (KAD 092/151)

A12.2.5.1.4. (Added) **Racetrack.** Inbound Course: 180T; Length: 30 NM; Width: 15 NM; left turns at RVCP.

A12.2.5.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Bravo.

Figure A12.5. (Added) Hotel East Depiction.



A12.2.5.2. (Added) Hotel South.

A12.2.5.2.1. (Added) **Entry/Exit:** N26°23’ E128°20’ (KAD 091/30)

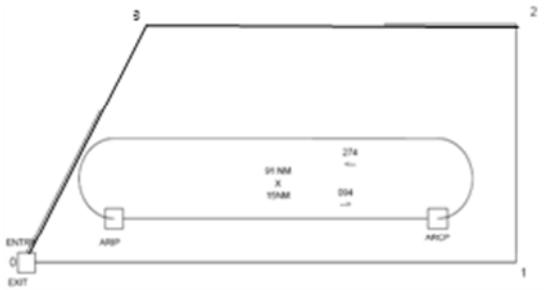
A12.2.5.2.2. (Added) **RVIP:** N26°30’ E129°00’ (KAD 086/67)

A12.2.5.2.3. (Added) **RVCP:** N26°30’ E130°42’ (KAD 090/158)

A12.2.5.2.4. (Added) **Racetrack.** Inbound Course: 090T; Length: 91 NM; Width: 15 NM; left turns at RVCP.

A12.2.5.2.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Charlie.

Figure A12.6. (Added) Hotel South Depiction.



A12.2.6. (Added) W-185 Air Refueling.

A12.2.6.1. (Added) Samurai.

A12.2.6.1.1. (Added) **Entry/Exit:** N25°43’ E128°55’ (KAD 126/73)

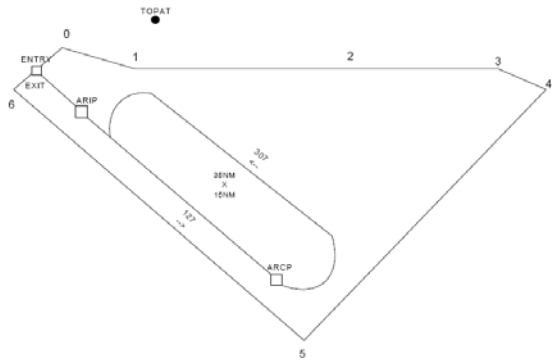
A12.2.6.1.2. (Added) **RVIP:** N25°35’ E129°09’ (KAD 126/88)

A12.2.6.1.3. (Added) **RVCP:** N25°08’ E129°55’ (KAD 126/137)

A12.2.6.1.4. (Added) **Racetrack.** Inbound Course: 123°T; Length: 35 NM; Width: 15 NM; left turns at RVCP.

A12.2.6.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan Hotel.

Figure A12.7. (Added) Samurai Depiction.



A12.2.7. (Added) BUBBA Air Refueling.

A12.2.7.1. (Added) BUBBA.

A12.2.7.1.1. (Added) **Entry:** N26°55’30” E125°57’30” (KAD 294/103)

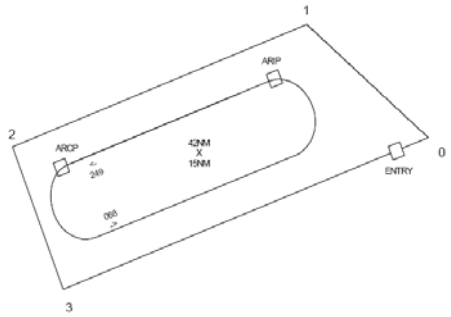
A12.2.7.1.2. (Added) **RVIP:** N27°10’ E125°25’ (KAD 300/115)

A12.2.7.1.3. (Added) **RVCP:** N26°52’ E124°43’ (KAD 285/167)

A12.2.7.1.4. (Added) **Racetrack.** Inbound Course: 244°T ; Length: 42 NM; Width: 15 NM; left turns at RVCP.

A12.2.7.1.5. (Added) ***Notes.*** Tanker base altitude will be FL240 using communications plan India.

Figure A12.8. (Added) Bubba Depiction.



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