R-2508 Complex Users Handbook

R-2508 Central Coordinating Facility (CCF)
100 East Sparks Drive, Edwards AFB, CA
4 Sep 2016

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1.0 Introduction

This handbook prescribes policy and standard operating procedures for all users operating in the R-2508 Complex.

This handbook dated: 4 Sep 2016 is the current handbook.

Recommended changes should be forwarded to:

R-2508 Central Coordinating Facility
100 East Sparks Drive
Edwards AFB, CA 93524-8090

Telephone: **DSN 527-2508; (661) 277-2508**
E-mail: **2508CCF@us.af.mil**

Online Information Available:

Public assessable R-2508 Complex information and documentation is available to all users via the Edwards AFB public website at: **http://www.edwards.af.mil/Home/R-2508**

- **R-2508 Complex Users Handbook**
- **R-2508 Complex Users Briefing**
- **R-2508 Complex Airspace Request Form**
- **Situation Report (SITREP)**
- **Transient Pilot Briefing (for KNID arrivals & departures only)**
- **Edwards Air Forces Base PPR Brief**
- **R-2508 Refueling Areas**
- **Supersonic Areas**

CCF Daily Schedule and additional online information available via the R-2508 Complex AFNET SharePoint Site: https://cs3.eis.af.mil/sites/MC-OP-00-08 Access to this site requires an AFNet account in order to access the AFNet SharePoint site and a CAC login. Users must establish an account and keep it current. Information updated real time. To establish an AFNet account you will need a current Information Awareness training certificate, fill out a DD Form 2875 and contact the 412th OSS IAO at DSN: 525-4269 or (661) 525-4269.

2.0 R-2508 Complex Description and Use

This chapter provides general overview information for the R-2508 Complex, including:

- A description of the R-2508 Complex airspace
- A list of typical activities that occur within the Complex
- Descriptions of non-military activity within the Complex
- Descriptions of sensitive areas within the Complex
- Cautions in using the Complex

2.1 R-2508 Complex Airspace Description

The R-2508 Complex includes all the airspace and associated land presently used and managed by the three principal military activities in the Upper Mojave Desert region:

- 412 Test Wing (412TW), Edwards Air Force Base (AFB), CA.
- National Training Center (NTC), Fort Irwin, CA.
- Naval Air Warfare Center Weapons Division (NAWCWD), China Lake, CA

The R-2508 Complex is composed of internal restricted areas; Military Operations Areas (MOAs), Air Traffic Control Assigned Airspace (ATCAAs), and other special use airspace (see Figure 2-1).

2.1.1 Internal Restricted Areas

- **R-2502N and R-2502E** vertical dimensions of surface to unlimited.
    - **Controlling Agency**: Joshua Control Facility (Joshua Approach)
    - **Using Agency**: National Training Center (NTC)
    - **Scheduling Agency**: Desert Radio. See paragraph 4.3 for contact numbers and hours of operation.
- **R-2505** vertical dimension of surface to unlimited
- **R-2506** extends from surface to 6,000 feet MSL
- **R-2524** vertical dimension of surface to unlimited
    - **Controlling Agency**: Joshua Control Facility (Joshua Approach)
    - **Using Agency**: Naval Air Warfare Center Weapons Division (NAWCWD)
    - **Scheduling Agency**: China Lake Ranges Scheduling Office. See paragraph 4.3 for contact numbers and hours of operation.

- **R-2515** vertical dimension of surface to unlimited
    - **Controlling Agency**: Joshua Control Facility (Joshua Approach)
    - **Using Agency**: 412 Test Wing (412TW)
    - **Scheduling Agency**: 412 Current Ops Scheduling Office. Special operations should be coordinated through the R-2515 Airspace Management office prior to scheduling. See paragraph 4.3 for contact numbers and hours of operation.

Entry to these areas requires prior approval from the designated using agency.

Internal restricted area Using Agencies may release restricted areas, in their entirety or in part, by providing the Controlling Agency with altitudes activated for DoD use and releasing the remaining airspace to the Controlling Agency for FAA/DoD joint use.

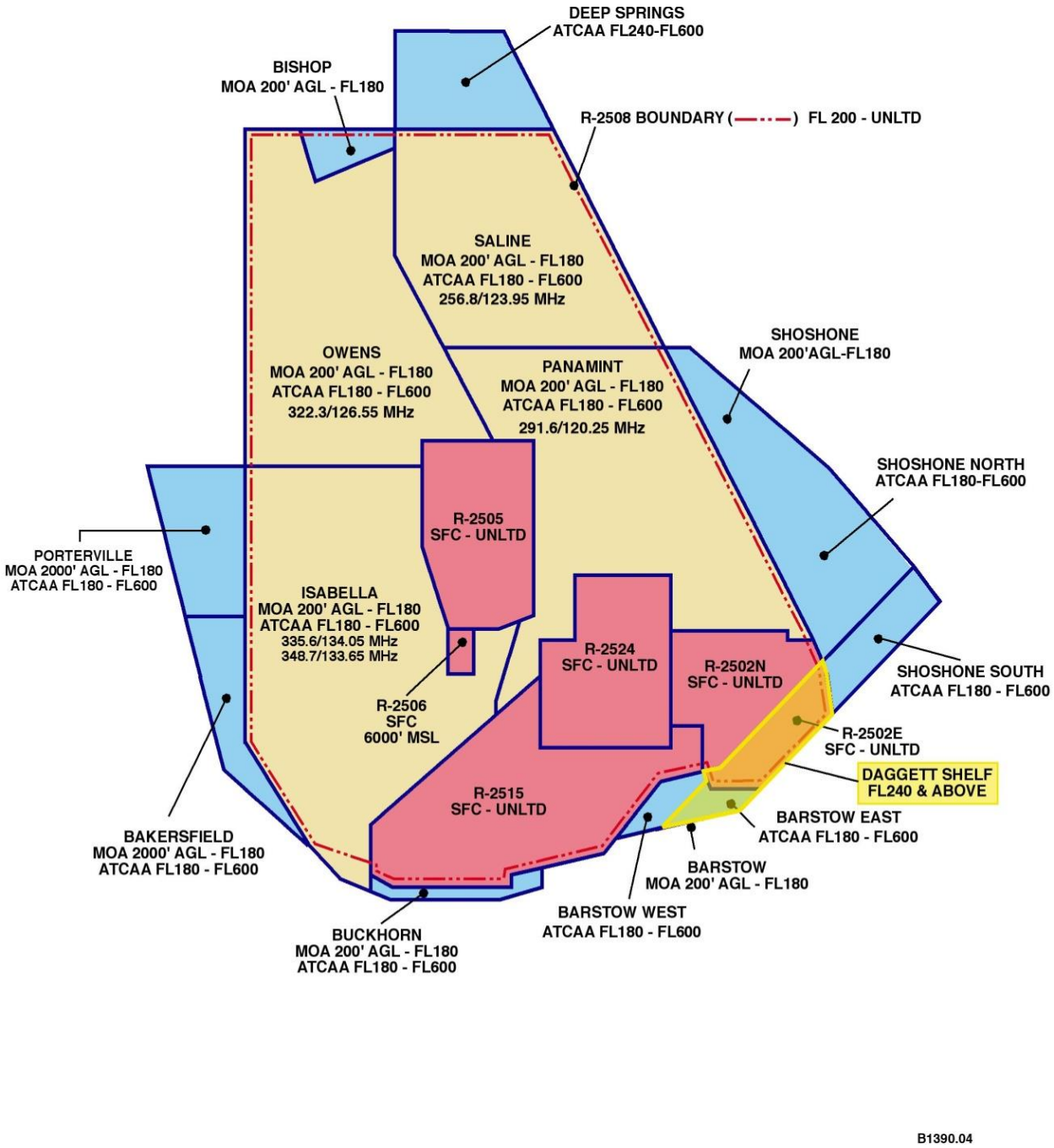


Figure 2-1 *R-2508 Complex Restricted Area, MOA & ATCAA Airspace.*

2.1.2 Military Operations Areas (MOAs) and Air Traffic Control Assigned Airspace (ATCAA)

The Military Operations Areas (MOA) and Air Traffic Control Assigned Airspace (ATCAA) areas combine with R-2508 to form the four major work areas (see Figure 2-1):

- Isabella
- Owens (contains the Bishop MOA which must be scheduled separately)
- Saline
- Panamint

This creates working airspace from 200 feet AGL and up, throughout the entire R-2508 Complex. Isabella, Saline, Panamint work areas and R-2515 have peripheral MOAs and/or ATCAAs that increase the size of the usable airspace. Additional peripheral areas are:

- Deep Springs ATCAA
- Shoshone MOA and Shoshone North and South ATCAAs
- Barstow MOA and Barstow East and West ATCAAs
- Buckhorn MOA and ATCAA
- Bakersfield MOA and ATCAA
- Porterville MOA and ATCAA

2.1.3 Other Airspace

Other airspace includes the Daggett Shelf, R-2515 Golden Triangle, Trona CFA, and Trona Corridor.

The **Daggett Shelf** (see yellow highlighted portion of Figure 2-1) consists of Barstow East ATCAA and R-2502 East airspace FL240 and above and **is not schedulable** as an airspace subdivision. The Daggett Shelf was established by a Letter of Agreement to provide the FAA relief control of IFR traffic through the Daggett/Hector corridor. The Daggett Shelf, along with Shoshone South ATCAA airspace, remains under LA ARTCC control until Joshua Approach requests and receives control.

The **Golden Triangle** is a portion of R-2515 that extends north of the westerly extension of the southern boundary of R-2524. Aircraft requesting East-West transitions of the Golden Triangle may be required to remain north of Cuddeback Lake. Coordinates for the Golden Triangle:

> Beginning at 35°27’40”N/117°26’03”W;
> thence direct 35°15’56”N/117°26’03”W;
> thence direct 35°15’56”N/117°43’41”W;
> thence to the point of beginning.

2.2 Type of Activity within Work Areas

Typical operations within the R-2508 Complex include:

- Aircraft research and development in all stages of flight
- Operational weapons test and evaluation flights
- Student pilot training
- Air combat maneuvering (ACM) and proficiency flights
- Civilian test aircraft in direct support of DoD and/or defense testing

Test operations must remain flexible and airspace requirements are not entirely predictable. Therefore, to best use the available airspace, participating aircraft operating in R-2508 Complex shared-use airspace are not given exclusive use of the airspace and are considered to be operating under concurrent operations. Participating aircraft must accept radar traffic advisories and use the "see-and-avoid" principle to avoid interfering with the missions of other aircraft.

2.3 Non-Military Activity within the Complex

Activity within the R-2508 Complex is not limited to scheduled aircraft. Private civilian operations also occur as follows:

2.3.1 General Aviation

General aviation aircraft fly unrestricted in accordance with Visual Flight Rules (VFR) within the R-2508 Complex MOAs below FL180. Figure 2-2 shows the most common and heavily flown routes.

2.3.2 Hang Gliding / Ultralight / Parachuting

Hang glider operations are conducted along the Sierra Nevada Mountain Range, along the west and northeastern shoreline of Owens Dry Lake, throughout the Owens Valley, and north along the Inyo Mountain Range to Bishop, California.

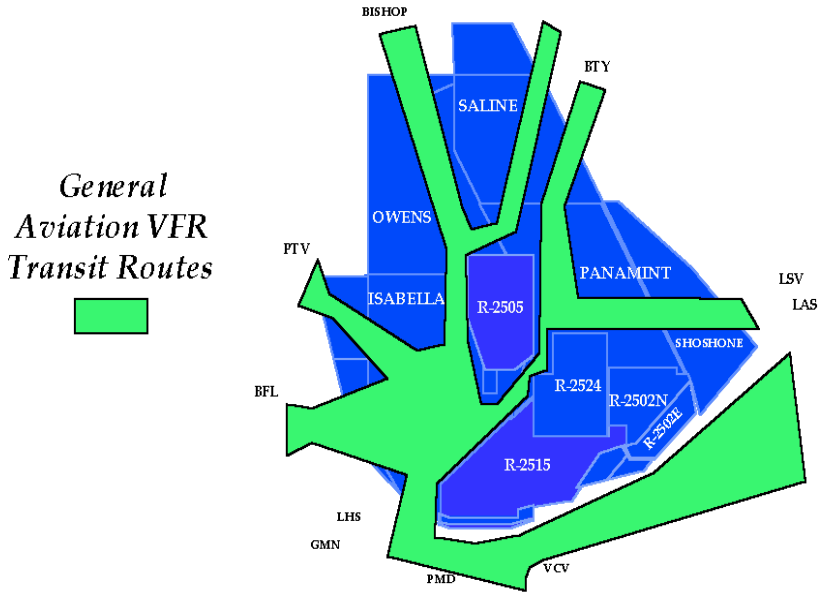


Figure 2-2 *General Aviation VFR Transit Routes*

Ultralight activity is also popular in many areas throughout the R-2508 Complex MOAs. This activity is primarily concentrated around towns and civil airports within the R-2508 Complex.

California City Airport is also used for parachute activities from surface to 17,500 feet MSL by private parachute clubs and occasionally DoD aircraft.

2.3.3 Sailplane

Sailplane activities are conducted daily from the Tehachapi Mountain Valley, Lone Pine, Independence, Rosamond, Mojave, California City, and Inyokern airports.

A sailplane Wave Camp area (see Figure 2-3) is charted in the Isabella MOA and can be scheduled for use whenever soaring conditions permit.

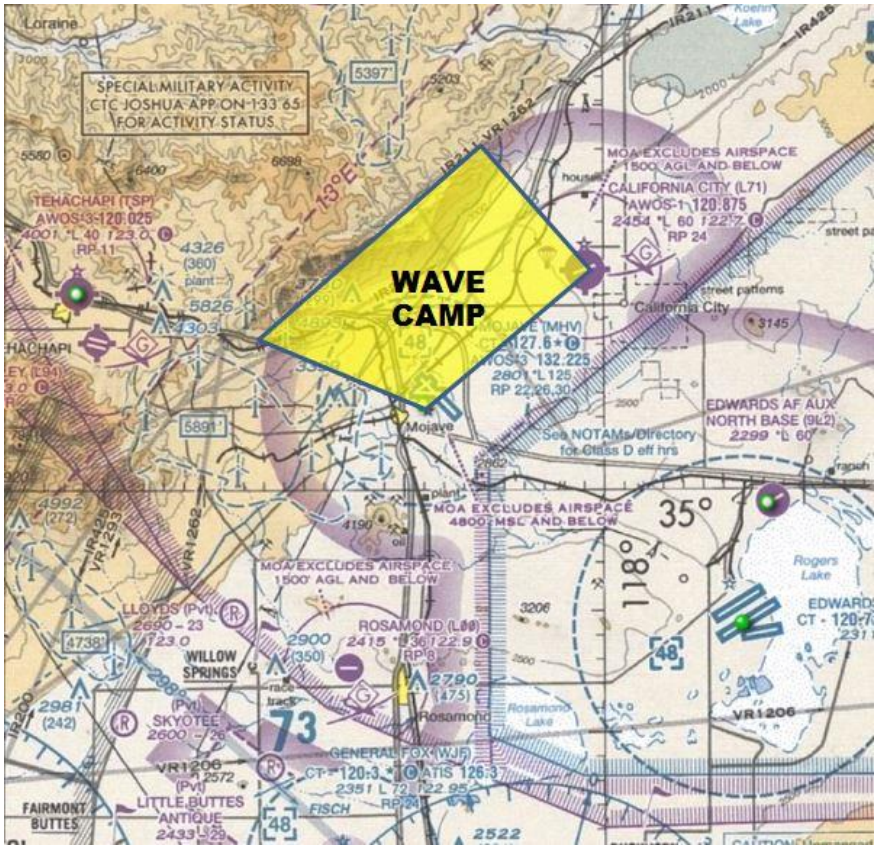


Figure 2-3 *Wave Camp area*

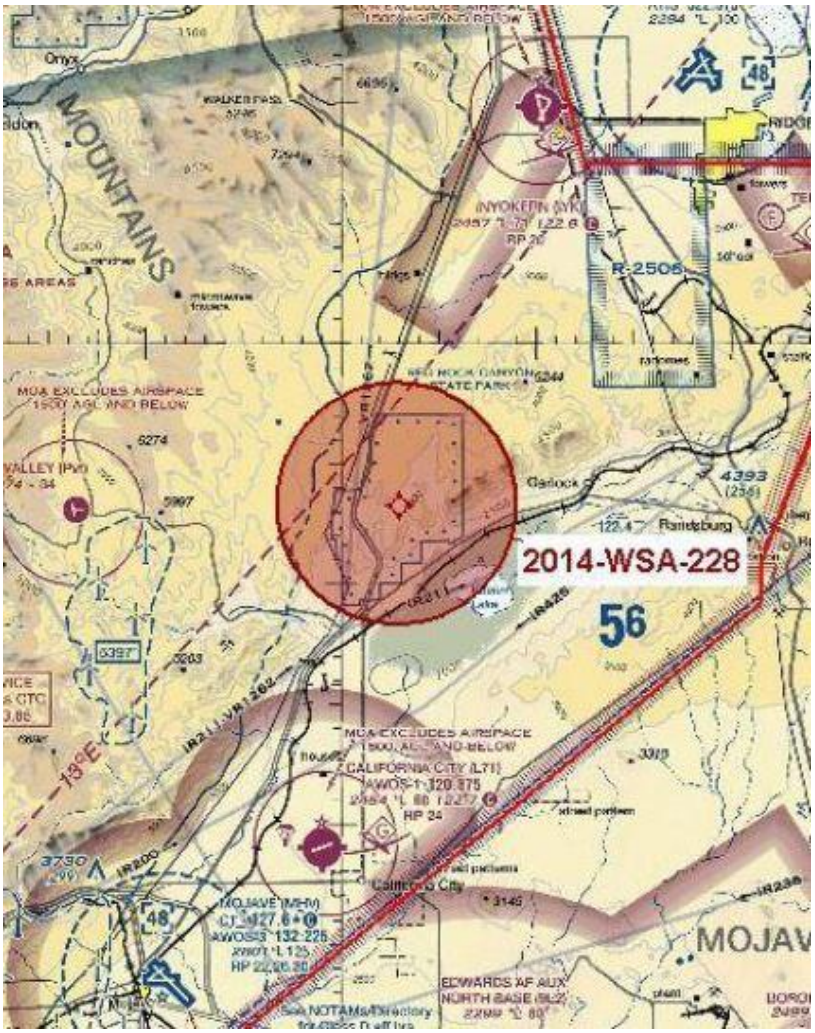
During times when Wave Camp is active, sailplane operations can be extremely heavy in the vicinity of Mojave and California City Airports due to the launch and recovery of flights to/from the airports transiting to/from the operating areas. Normally, the heaviest concentration of sailplane operations can be expected along and east of the Sierra Nevada Mountains from Tehachapi Pass to the mouth of Lone Tree Canyon (13 NM northeast of Tehachapi Pass).

- Sailplane operations below FL180 are concentrated, but not confined, in the Isabella MOA, and will remain clear of all internal restricted areas.
- Sailplane operations FL180-FL500 are required to have an operating Mode C transponder and maintain two-way radio contact with Joshua Approach.

Coordinates for the Wave Camp area: Beginning at: 35°09’N/118°01’W (California City Airport), thence direct 35°03’N/118°09’W (Mojave Airport), thence direct 35°06’N/118°18’W (Highway 58/Tehachapi Pass), thence direct 35°14’N/118°05’W (mouth of Lone Tree Canyon), thence direct to the point of beginning.

2.3.4 Small UAS Work Area

The Small UAS Work Area (2014-WSA-228 Operating Area) is located approximately half way between Ridgecrest and California City airports and defined as a 5.0 nm radius of N 35°23’18”, W 117°57’05”. Usable altitudes are from surface up to but not including 200 feet AGL. This UAS operating area underlies Isabella MOA, IR-211 and VR-1262 and is directly adjacent to IR200 and IR425. UAS operations within this area require the following prior notifications:



R-2508 Central Coordinating Facility (CCF), Edwards AFB at (661) 277-2508 48 hours prior to the start of UAS operations. Notification must include the following via email to: 2508ccf@us.af.mil.

- UAS call sign
- UAS type aircraft
- Start and Stop times (convert local to Zulu)
- UAS operating altitudes
- NOTAM number
- Departure/Arrival location – Within 5.0 nm of N 35°23’18”, W 117°57’05”

Commander, Strike Fighter Wing, U.S. Pacific Fleet at (559) 998-1034 of intent to operate in vicinity of VR-1262 between points I and J at least 24 hours prior to the start of UAS operations.

Commander, Naval Air Warfare Center, Weapons Division, at (805) 989-7358 of intent to operate in the vicinity of IR-200 between points J and K at least 24 hours prior to the start of UAS operations.

3rd Marine Aircraft Wing, MCAS Miramar, San Diego at (858) 577-5157/9517/9518 of intent to operate in the vicinity of IR-211 between points G and H at least 24 hours prior to the start of UAS operations.

Commander, 412th TW, 412 OSS/OSO R‑2515 Airspace Management, Edwards AFB at (661) ‑277 ‑2515 of intent to operate in the vicinity of IR 425(between Points AC and AD) at least 72 hrs prior to the start of UAS operations. R ‑2515Airspace Management hours of operation are M ‑F, 0800 ‑1600, excluding Federal Holidays.

2.4 Land Management Agency Operations

Land Management Agency helicopters and fixed-wing aircraft operate in the R-2508 Complex, primarily in the western portions of Isabella and Owens, and also in the Panamint and Death Valley areas. Administrative support aircraft operations are normally 1,500 feet AGL and below.

- Actual firefighting and associated support operations will normally be conducted within a Temporary Flight Restriction (TFR) (14CFR PART 91.137) NOTAM area within a defined area and altitude block.
- However, aircraft operations to/from staging bases may occur outside the NOTAM areas.

2.5 Sensitive Areas

The military mission within the R-2508 Complex has long enjoyed the support of the population that lives beneath the R-2508 Complex airspace. This support is essential to DoD's effort to preserve the R-2508 Complex for future military use.

Occasional sonic booms and noise complaints relating to flight over sensitive areas (small towns, airports, and recreation areas; see (Figure 2-7) **can have a negative effect on the DoD/civilian community relationship.**

NOTE: Aircrews must adhere to Code of Federal Regulations, Title 14 (14 CFR) and DoD rules pertaining to supersonic operations, endangerment of private property, and annoyance to civilians.

Areas of concern include:

- Overflight of National Parks and Wilderness Areas
- Overflight of populated areas and the Owens Valley, Kern River Valley, and Lake Isabella
- Overflight of private commercial activities

2.5.1 Overflight of National Parks/Wilderness Areas

Low-flying aircraft over National Parks and Wilderness areas is an extremely sensitive issue. Noise complaints in these areas gain National Attention. The Joint Policy Planning Board (JPPB) members are directly involved when violations occur.

Sequoia and Kings Canyon National Parks (SEKI). All participating aircrews operating within the Complex over the Sequoia and Kings Canyon National Parks, see (Figure 2-5), in the western Owens work area, shall maintain an altitude of 18,000 feet MSL or above unless that area is specifically scheduled lower in accordance with current established procedures through the Central Coordinating Facility (CCF). All participating units requesting the airspace below 18,000' over SEKI in the western Owens work area shall schedule that work area in advance with the CCF in accordance with current procedures. Unscheduled operations below 18,000' over SEKI are authorized for safety of flight considerations. At no time will any participating

aircraft descend below 3,000 ft AGL **within the boundaries of SEKI except in an emergency situation. Lateral separation from SEKI is 3000 feet.**

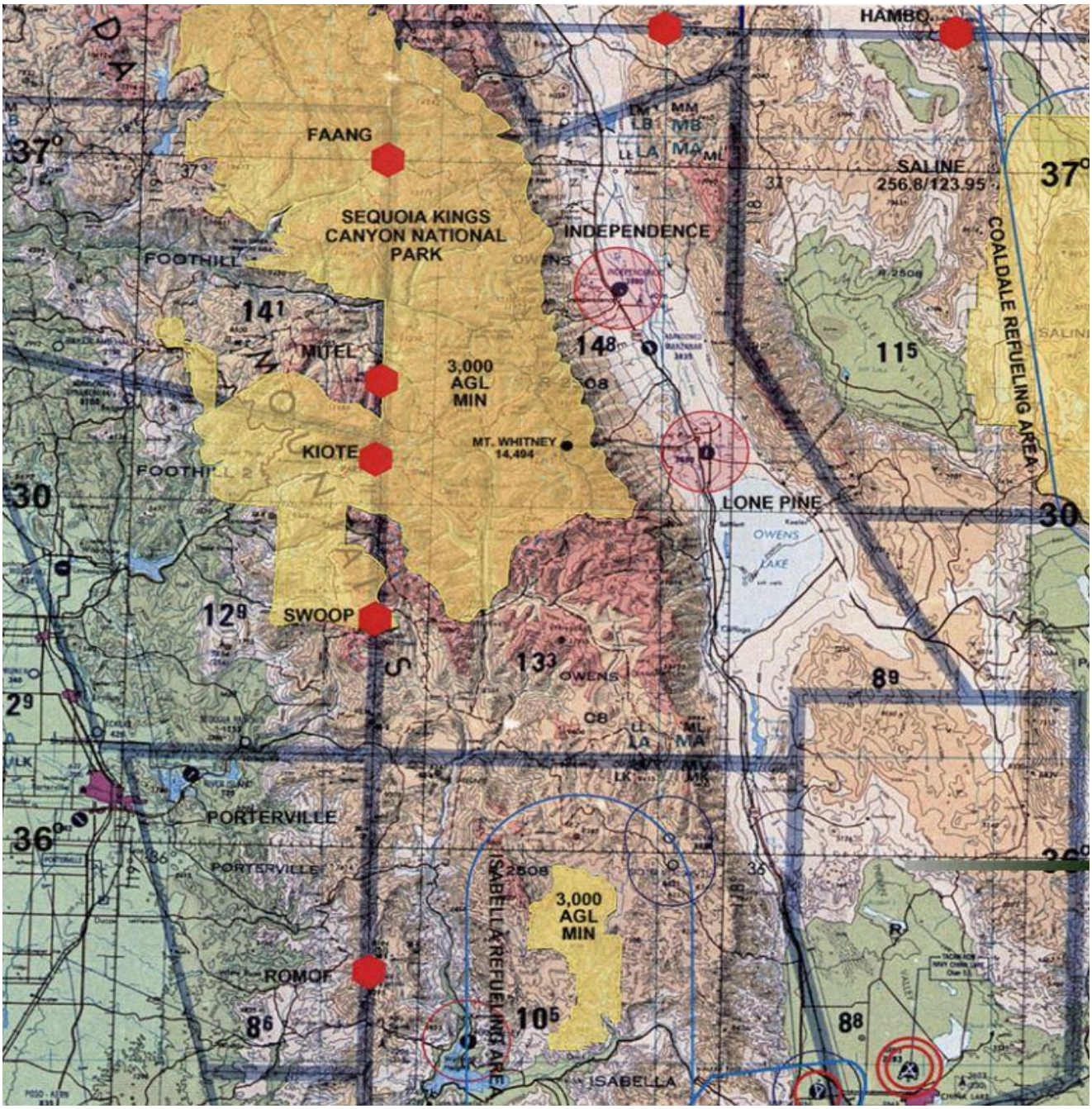


Figure 2-5 *Sequoia/Kings Canyon National Park, Domeland, and John Muir Wilderness areas*

Death Valley National Park, Domeland, and John Muir Wilderness Areas. All aircrews shall maintain a minimum altitude of **3,000 feet AGL and a lateral distance of 3,000 feet** (approximately ½ mile) from Death Valley National Park (1977 Park Boundaries), Domeland, and John Muir Wilderness Areas (see Figures 2-5 and 2-6).

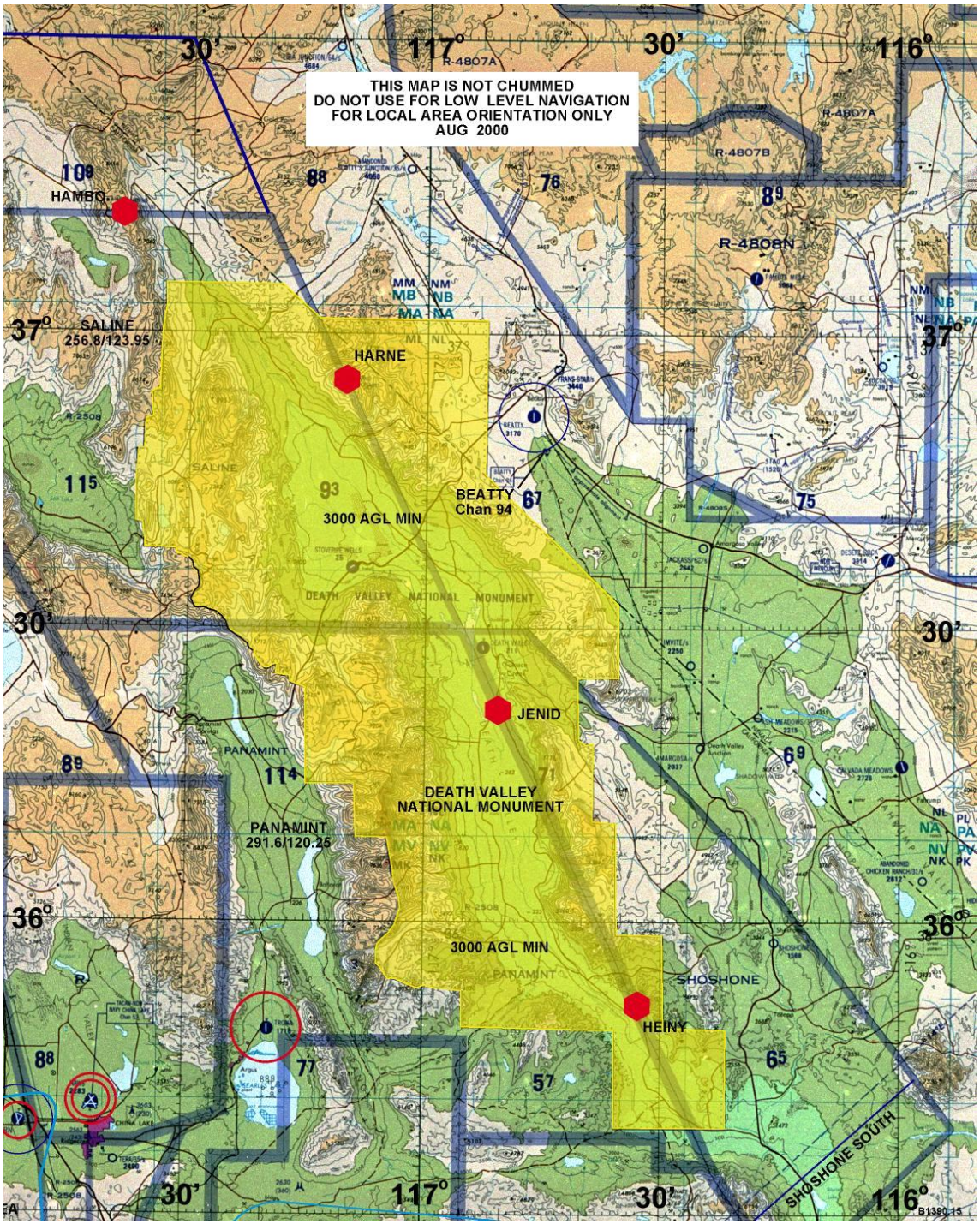


Figure 2-6 *Death Valley National Park.*

NOTE: Exclusion of the MOA airspace above Death Valley National Park and Domeland Wilderness Area applies to the 1977 contours of the former National Monument and

Wilderness Area. This difference in affected airspace may not be accurately reflected in sectional charts. Contact CCF if you have further questions.

2.5.2 Overflight of Populated Areas

R2508 flights shall be conducted so that a minimum of annoyance is experienced by persons on the ground. It is not enough for the pilot to be satisfied that no person is actually endangered. **Definite and particular effort shall be taken to fly in such a manner that the individuals do not believe they or their property are endangered.** All communities within the R-2508 Complex are considered **"noise sensitive areas"**. Noise sensitive areas **shall be avoided by 3000'.** The only exception to the 3000' restriction is while operating on an approved test plan. Noise sensitive areas (see Figure 2-7) include:

- Lone Pine
- Trona
- Kernville
- Inyokern
- Keeler
- Onyx
- Independence
- Olancha
- Randsburg
- Tehachapi
- Mojave
- Weldon
- Johannesburg
- Red Mountain
- Lake Isabella
- Ridgecrest
- Stovepipe Wells
- Cartago

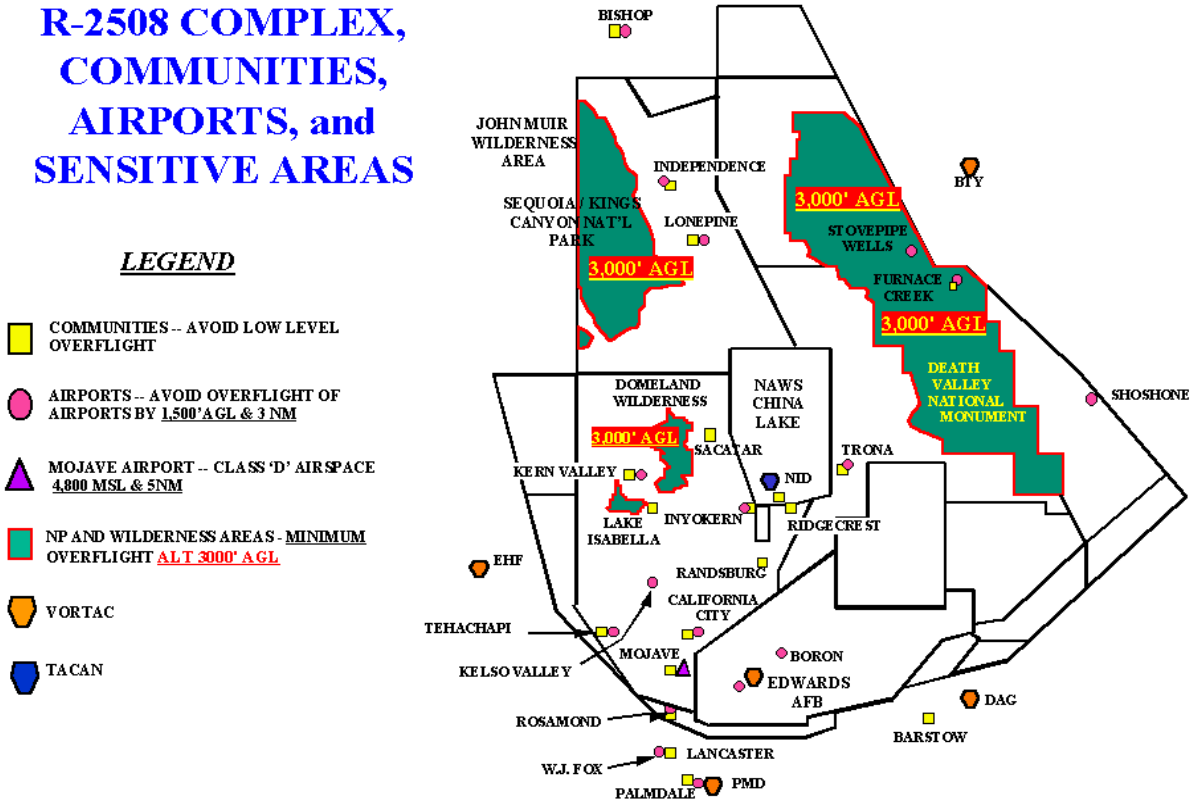


Figure 2-7 *- R-2508 Complex Communities, Airports, and Sensitive Areas*

Aircrews should avoid conducting ACM activities over towns, especially in the Owens Valley. Even though the ACM activity may be at legal altitudes, such activity over towns should be avoided. **Avoid low-level flight over any obviously inhabited area.** Recreational use near these communities and along the Kern River is highest during the summer months. Aircrews should anticipate increased sensitivity to operations near these areas.

2.5.3 Overflight of Private Commercial Activities

Aircrews should be aware of private commercial activities that occur within the R-2508 Complex. These include:

- **Private Hunting club:** The official duck hunting season runs between October and January during the birds' southern migration. A hunting club on Little Lake (35°57'N/117°54'W), a migratory stop, is a private hunting activity. Aircrews should be alert for dangers of bird strikes transiting low-level through this area during hunting season. In addition, beware of increased bird activity within 1 hour of sunrise and sunset from October to March.
- **Randsburg Gold Mine:** A gold mine operated at Randsburg (35°21'30"N/117°36'45"W) conducts blasting with a vertical hazard footprint up to 400 feet AGL. Blasting is scheduled daily between 1400L and 1700L.

- **CR Briggs Gold Mine:** The gold mine located in the Panamint Valley, approximately 7 miles south of Ballarat (35°36’17”N/117°11’09”W) conducts blasting twice daily from 1000–1230L and 1600-1730L. A flying rock hazard may exist to indeterminable altitudes. Avoid direct overflight during blasting periods.

2.6 Cautions in Using the Complex

Low observable platforms (i.e., F-22, F-35 and B-2) conduct flight tests throughout the R-2508 Complex. During these missions, it is critical these aircraft not be used as targets for any ground, airborne, or space-based sensors or emitters. If any device inadvertently tracks these aircraft, the resulting data is classified and must be properly safeguarded.

- After flight, immediately report the incident to the Edwards AFB Command Post (DSN 527-3040) for disposition of data and debriefing instructions.
- Any person that discusses information relating to sensor effectiveness in acquiring, tracking, and targeting these aircraft with anyone other than the person assigned to investigate the incident may violate Federal and DoD regulations and policy for the protection of classified information in Special Access Required (SAR) programs.

3.0 R-2508 Management and Control

This chapter discusses the responsibilities for the management of R-2508 airspace.

3.1 Airspace Management

Airspace management for the R-2508 Complex is organized into three groups:

- R-2508 Joint Policy and Planning Board
- R-2508 Complex Control Board
- R-2508 Central Coordinating Facility

3.1.1 R-2508 Joint Policy and Planning Board

Management of the R-2508 Complex falls under the R-2508 Joint Policy and Planning Board (JPPB). The JPPB was founded in 1975 under direction of the Joint Logistics Commanders and approved by the respective Service Chiefs and the Office of the Secretary of Defense.

JPPB members are the Commanders of:

- Naval Air Warfare Center, Weapons Division (NAWCWD), China Lake
- 412 Test Wing (412TW), Edwards AFB
- National Training Center (NTC), Fort Irwin

The mission of the JPPB is to:

- Enhance and preserve R-2508 Complex bases, ranges, and special-use airspace.
- Increase the Department of Defense (DoD) capability for research, development, test, and evaluation (RDT&E) of aircraft and weapons systems.

The JPPB preserves an area for operational training and readiness of DoD-sponsored activities, establishes broadband operational policy, and is the approval authority for all matters in the joint management and control of military activities within the Complex.

3.1.2 R-2508 Complex Control Board

The R-2508 Complex Control Board (CCB), established in 1975, is comprised of individuals directly representing their respective JPPB Commander. The mission of the CCB is to supervise management of the R-2508 Complex.

The CCB assists the JPPB Commanders by:

- Advising and assisting in the conduct of JPPB matters
- Establishing policies for Complex user operations—including areas and hours of operation, communication procedures, and mission profiles—designed to promote optimum safety for all users
- Formulating a unified position on R-2508 Complex airspace matters of mutual interest

3.1.3 R-2508 Central Coordinating Facility

The Central Coordinating Facility (CCF), under direction of the CCB, is the managing and scheduling authority for R-2508 Complex shared-use airspace. Within the policy, scope, and limitations set by the CCB, the CCF has autonomous authority for the R-2508 Complex shared-

use airspace when the Complex is scheduled and activated for military use.

CCF Responsibilities include:

- Acting as the single point for coordination of R-2508 Complex activities with FAA High Desert Combined Control Facility (E10) and other ATC/mission control facilities, and release and recall of R-2508 Complex airspace
- Managing, documenting, and reporting, on a scheduled and real-time basis, airspace utilization and mission requirements of all military and civilian users in the R-2508 Complex
- Conducting unit/user/pilot briefings to ensure compliance with existing policies, procedures, rules and regulations, and other written agreements
- Monitoring Complex user mission requirements and advise procedures to ensure compliance with existing policies, rules, regulations, and written agreements
- Managing R-2508 Complex administrative requirements, facilities, equipment, projects, Operations and Maintenance (O&M) budget
- Administration of the R-2508 Complex Website
- Managing the R-2508 Complex Noise Complaint and SITREP programs

3.2 Traffic & Boundary Advisories and ATC Services

Joshua Control Facility (E10) call sign "Joshua Approach," is a FAA Air Traffic Control Facility and provides traffic & boundary advisories and mission support services within R-2508 Complex shared use airspace.

Responsibilities include:

- Providing traffic advisory service and boundary calls to the extent possible to all aircraft operating within the R-2508 Complex, depending on higher priority duties of the controller.
- TRACON does not provide separation services to aircraft operating within the R-2508 Complex; operations in Complex airspace are on a "see-and-avoid" basis.
- Providing ATC services to non-participating IFR aircraft transiting the R-2508 Complex with respect to known activities on a non-interference basis

3.3 Using Agencies

Internal restricted areas within the R-2508 Complex (R-2502N, R-2502E, R-2505, R-2506, R-2515 and R-2524) are scheduled and controlled by their respective designated Using Agencies. See Chapter 7 for scheduling and operating procedures for internal restricted areas.

4.0 General Operating Procedures for R-2508 Complex

This chapter discusses general operating procedures relating to all work areas, including:

4.1 General Complex Information

4.2 The Scheduling Process

4.3 Complex Scheduling Agencies

4.4 Special Activities

4.5 Scheduling Special Operations

4.6 Scheduling Large-Scale Exercises

4.7 Unmanned Aerial System (UAS)/Remotely Piloted Aircraft (RPA)

4.8 Flight Planning Requirements

4.1 General Complex Information

The Joint Policy and Planning Board (JPPB) is chartered by DoD to act as the overarching and policy body for the R-2508 Complex. All JPPB sponsored units operating within the R-2508 Complex shall receive an annual R-2508 Complex briefing on Complex Operations and Procedures from the R-2508 Central Coordinating Facility (CCF) or their sponsoring JPPB Commander (e.g. Navy/Marine Corps units are sponsored by the Commander, NAWCWD). The R-2508 brief will address scheduling procedures; safety concerns, and overflight sensitivities. Annual briefings are normally conducted in March and April each year. Additionally, CCF provides airspace briefings for special/large scale operations on an as needed basis.

****Commanders of units flying in the R-2508 Complex are responsible for ensuring their aircrews are briefed annually on R-2508 Complex procedures****

- Users include participating aircraft transiting the airspace to installations located within the R-2508 Complex.
- Civilian aircrews operating under an R-2508 Complex Letter of Agreement (LOA) are required to comply with the briefing requirements and operating procedures defined herein, except as modified by the terms of the LOA.
- Any JPPB sponsored unit that hosts a transient unit will be responsible for that transient unit's compliance with R-2508 Complex Operations and Procedures.
- Only JPPB sponsored activities that have received the annual R-2508 Complex brief will be allowed to schedule missions in the Complex.

The R-2508 Complex is comprised of Restricted Areas, Military Operations Areas (**MOA**s) and Air Traffic Control Assigned Airspace (**ATCAA**s).

MOAs: The four main MOA work areas—Isabella, Owens (including Bishop MOA), Saline, and Panamint—have a minimum altitude boundary of 200 feet AGL (see Figure 4-3).

- MOAs **DO NOT** include airspace below 1,500 feet AGL within 3 miles of any charted airport, except for Mojave Airport's Class D airspace (4,800 feet MSL within a 5 NM radius, excluding the airspace east and parallel to a line ½ mile west of R-2515).

- Portions of these major work areas are located over **Sequoia/Kings Canyon National Parks, John Muir and Domeland Wilderness Areas, and Death Valley National Park**; (see Figures 2-4 & 2-5) **<u>where the lower limit of the MOA is 3,000 feet AGL</u>.**

NOTE: Exclusion of MOA airspace above Death Valley National Park and Domeland Wilderness Area applies to the 1977 contours of the former National Monument and Wilderness Area. This difference in affected airspace may not be accurately reflected in Sectional Charts. Refer to Figures 2-5 & 2-5, Section 2.0 of this handbook or contact CCF for more information.

<u>CAUTION:</u> The Owens MOA/ATCAA and Bishop MOAs make up the Owens work area. Bishop MOA is not included in the Sage 2 or Pancho 3 Clearance and must be scheduled separately through CCF. (Figures 4-1 and 4-2). **Aircrews must be aware of this boundary difference to prevent spillouts into Oakland Air Route Traffic Control Center (ARTCC) airspace.**

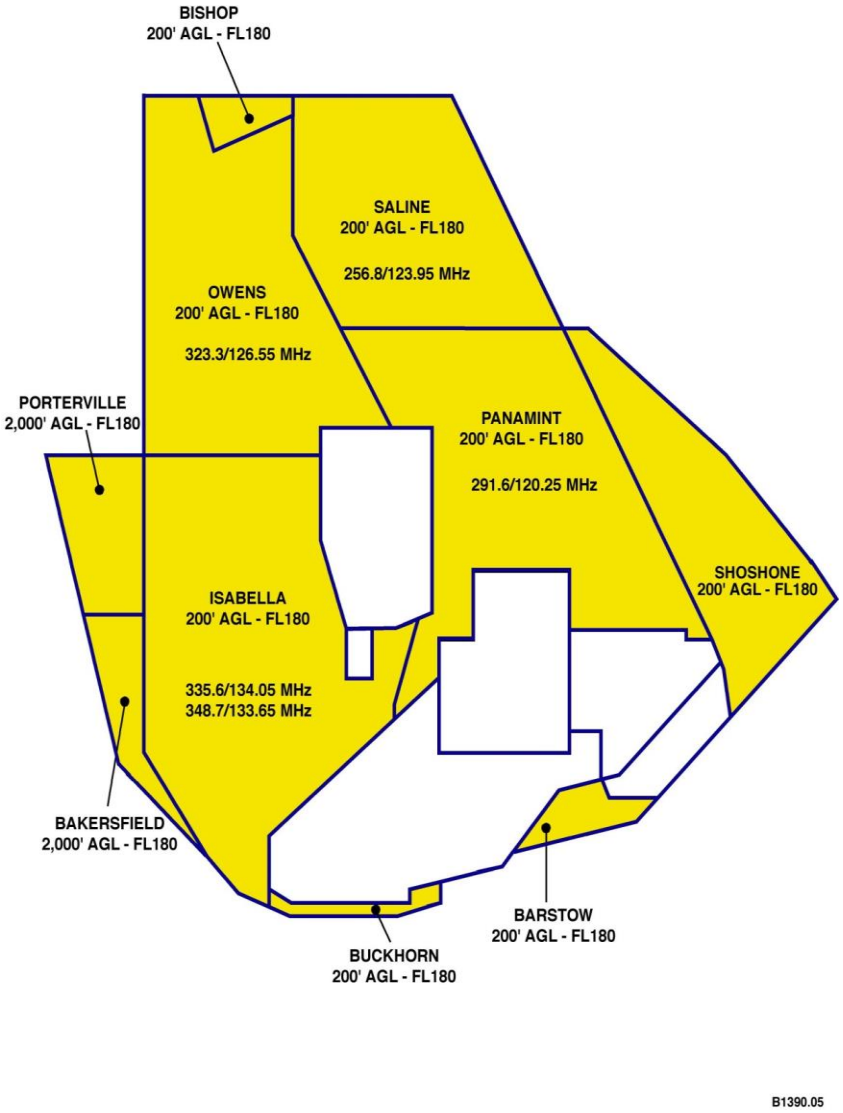


Figure 4-1. *Military Operations Areas (**MOAs**).*

ATCAAs: The ATCAAs (Figure 4-2) are used to fill the airspace gap between the top of the MOAs (FL180) and the base of R-2508 (FL200). When R-2508 is not activated, the ATCAAs may extend upward to FL600. ATCAAs are also located above the peripheral MOAs, outside the lateral boundaries of R-2508, to provide additional work areas up to FL600 for segregation of military operations from IFR traffic.

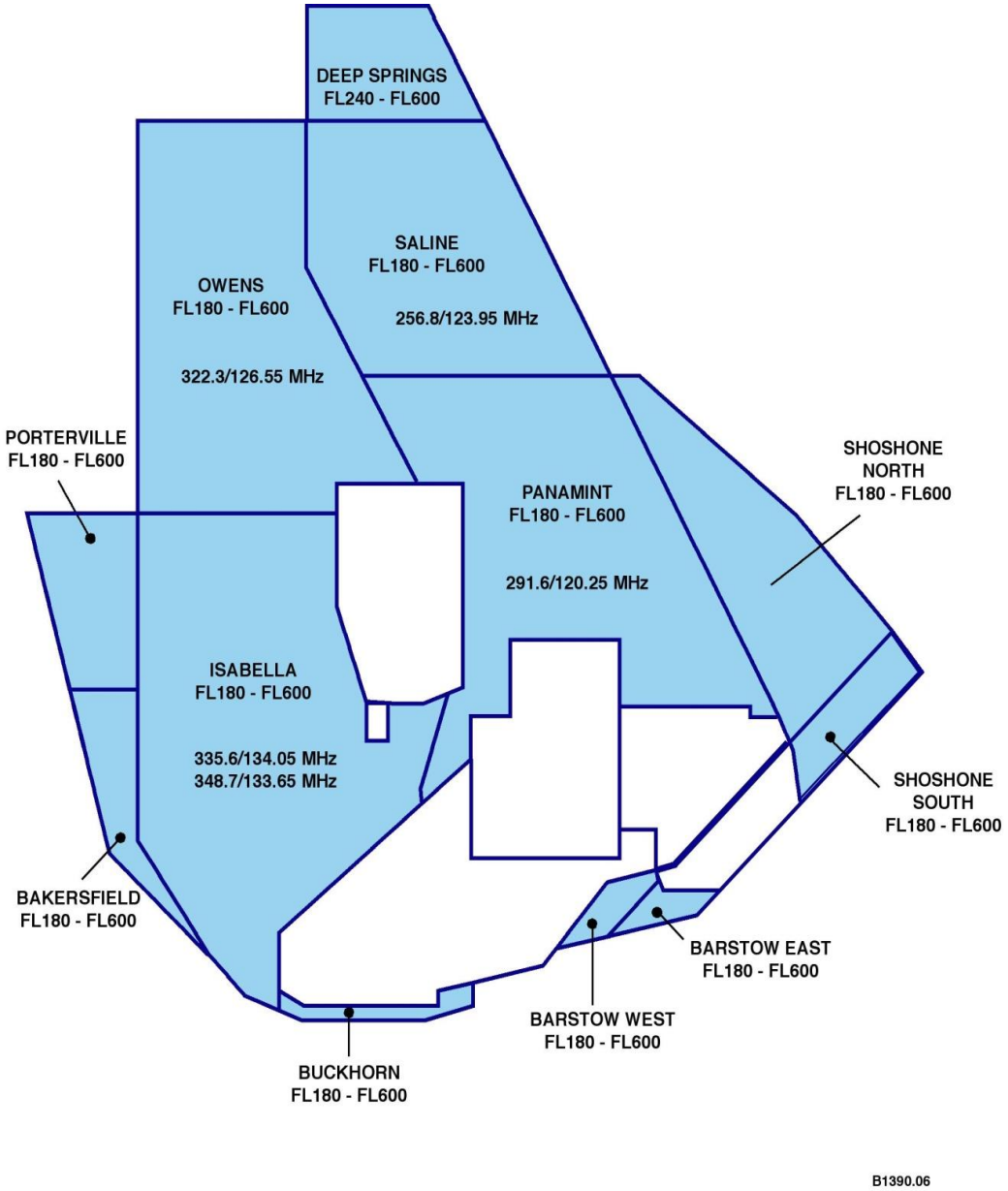


Figure 4-2. *Air Traffic Control Assigned Airspace (**ATCAAs**).*

4.1.1 R-2508 Core Hours of Operations

Core hours of operation for the R-2508 Complex are 0630 – 2230 (local times) Monday through Friday, and 0800 –1600 (local times) Saturday and Sunday. Core hours are defined as hours of operation that includes Air Traffic Advisories by Joshua Approach while operating within R-2508 on a Complex clearance. Aircrews are requested to schedule within the core hours.

4.2 The Scheduling Process

R-2508 Complex scheduling requirements apply to all Complex flight activities, including special operations and large-scale exercises.

CCF is the designated airspace management and scheduling authority for the R-2508 Restricted Area, Military Operations Areas (MOAs), and Air Traffic Control Assigned Airspace (ATCAAs). CCF coordinates mission requirements of all R-2508 Complex users to ensure optimum airspace utilization and safety.

NOTE: Military units requiring use of R-2508 Complex airspace must comply with scheduling requirements established in OPNAVINST 3710.7, AFI 13-201, U.S. Army AR 95-1, FLIP, and this User's Handbook.

4.2.1 Airspace Scheduling

Airspace is either activated for military use or released for joint use.

When R-2508 Complex airspace is activated for military use, it is reserved as scheduled. When Complex airspace is not scheduled, it is released to the Federal Aviation Administration (FAA) for Joint-Use.

When scheduling airspace:

- Request only those areas and altitudes necessary for mission completion. Additional areas and altitudes may be requested in flight, if required, contingent upon the status of the airspace (activated for military use or released for joint use).
  - CCF must have 2 hours notice to reactivate MOA airspace. Joshua Approach (FAA) will NOT issue a work area clearance when airspace is released for joint use.
  - Schedule any weekend and holiday operations through CCF during normal CCF operating hours, M-F 0600-1800 Local (excluding Federal holidays) at 661-277-2508 DSN 527-2508.
- Changes in area that require activation of additional MOA airspace must be made at least 2 hours in advance to activate the airspace.

NOTE: Joshua Control Facility (Joshua Approach) is NOT authorized to schedule or activate any R-2508 Complex Airspace. Advanced scheduling is required through CCF.

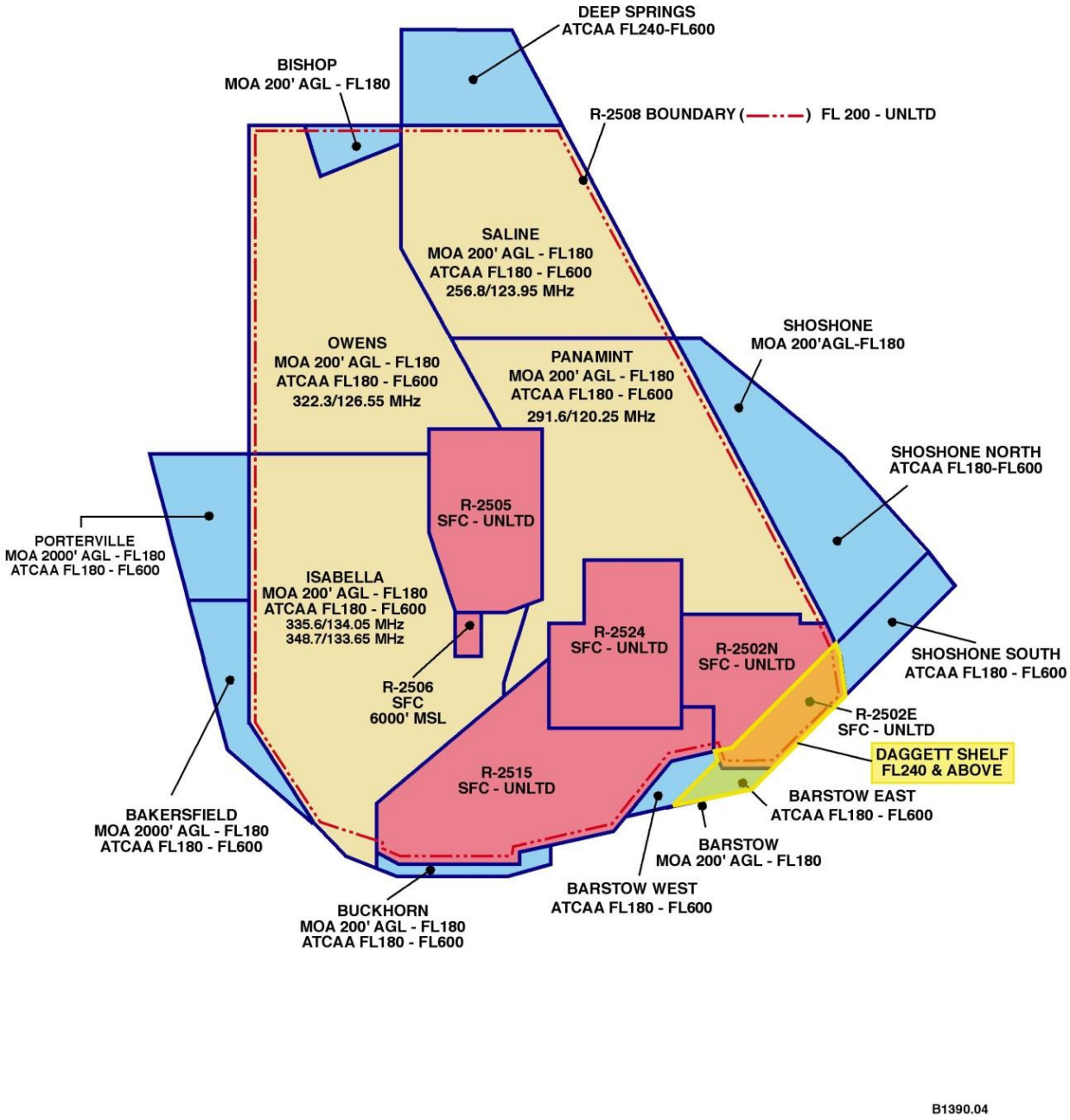


***Figure 4-3**. Overview of R-2508 Complex Airspace.*

4.2.2 Aircraft Scheduling

To schedule aircraft in the R-2508 Complex:

1. Submit the R-2508 Complex Airspace Request Form for normal weekday events to CCF by 1600 (local) one working day prior to the date of intended use.
2. Submit the R-2508 Complex Airspace Request Form for weekend or holiday period events to CCF by 1600 (local), the last CCF work day prior to the event.
   - CCF releases unscheduled airspace to the FAA for joint use at 1700 (local) daily.
   - Submitting airspace request forms after the 1600 (local) cutoff time may result in mission loss due to non-availability of airspace.

Information shall include:

- **Calendar** Date of Mission
- Aircraft Call Sign
- Number and Type aircraft
- Estimated time of entry (in ZULU) into Complex airspace
- Estimated delay within Complex airspace (1+00, 1+30 etc.)
- Altitudes (highest altitude required for mission or altitude block)
- Departure/Arrival airport
- Requested and/or approved airspace. Indicate work areas (MOAs/ATCAAs) **and** any internal restricted areas scheduled through appropriate using agencies.
  - Aircrews are responsible for scheduling any Internal Restricted areas with the appropriate "Using Agency".
- Remarks
  - Type mission/activity to be conducted
  - **SEKI** if mission requires flight between 3,000' and 18,000' over Sequoia or Kings Canyon National Parks
  - Mission frequency, if required
  - Any MTRs, low-level or navigation routes that affect R-2508 Complex airspace. (Aircrews are responsible to schedule any route of intended use with the appropriate route scheduling agency)
  - Any special activities (e.g., NVG/NVD, ECM, Tanking, "Lights out," etc.)

Call Signs

Call signs provided to CCF for activities in the R-2508 Complex shall not exceed seven (7) characters/numbers total and shall be the same as filed on a DD-175. Two-letter abbreviated call signs, such as BH-1 for "Bloodhound 01", will be interpreted and broadcast as "BRAVO HOTEL 01" by Air Traffic Control (ATC). Tactical call signs shall not exceed seven (7) characters/numbers total and shall be a pronounceable word, in accordance with *DoD FLIP, General Planning (GP), Flight Plans*.

Additions, Changes, and Cancellations

Add-ons, call sign changes, or time slips shall be coordinated with CCF. Any uncoordinated changes of more than 30 minutes before or 60 minutes after previously scheduled times are considered unscheduled events and may be denied entry.

- If changing previously scheduled events after CCFs normal working hours (0600-1800 M-F) contact CCF duty Airspace Manager at: (866) 805-2851.
- Changes that require activation of additional airspace must be made at least 2 hours prior to activate the airspace.
    - Notification of cancellations is required to ensure proper management and release of Complex airspace for joint use.

4.2.3 Policy for Unscheduled Aircraft

The following procedures are enforced for unscheduled aircraft:

- Fixed-wing units failing to comply with scheduling policies may be restricted from entry/operating within R-2508 Complex airspace.
- IFR aircraft may encounter extensive delays or may be denied access when requesting to transit the R-2508 Complex if they are not a participating aircraft.

4.2.4 Transitioning Participating Aircraft

Participating aircraft that have filed a flight plan to land at Naval Air Weapons Station (NAWS), China Lake or Edwards Air Force Base must schedule with CCF. Failure to do so will cause the aircraft to be considered as unscheduled.

4.3 Complex Scheduling Agencies

Units planning operations in R-2508 Complex airspace should be prepared to coordinate and schedule through one or more of the following agencies that have scheduling and operational control.

R-2508 Central Coordinating Facility - Complex Shared Use Airspace				
Area	**Agency**	**Hours of Operation**	**Function**	**Contact Numbers**
R-2508, MOAs and ATCAAs	R-2508 Central Coordinating Facility (CCF) Edwards AFB	0600–1800 M-F	Complex Management, Airspace Scheduling Mission Coordination Airspace & Procedures Briefings	DSN 527-2508 (661) 277-2508 After hours phone: 1-866-805-2851
			Email: 2508ccf@us.af.mil	
Desert Radio - National Training Center (NTC) Fort Irwin				
R-2502N **R2502E**	Desert Radio Fort Irwin	24 hours a day 0800–1600 M-F 0800–1600 M-F	Desert Radio ATC Range Scheduling Airspace Manager Facility Manager	DSN 470-4320 / 6816 (760) 380-4320 / 6816 Fax: DSN 470-6368 or (760) 380-6368 DSN: 470-3875 (760) 380-3875 DSN 470-5852 / 6156 (760) 380-5852 / 6156 DSN 470-6369 (760) 380-6368
Naval Air Warfare Center Weapons Division (NAWCWD) China Lake				
R-2505 **R-2506** **R-2524** **Superior Valley**	NAWCWD China Lake	0700–1700 M-TH 0700–1600 Civilian Non-Payday Fridays	China Lake Ranges Scheduling Office	DSN 437-6800 (760) 939-6800 Fax: DSN 437-6950 (760) 939-6950
412th Center Scheduling (412TW) Edwards AFB				
R-2515	412th Current Ops Scheduling Edwards AFB Airspace Manager	0600–1700 M-F 0730-1630 M-F	412th Current Ops Scheduling Next day Scheduling: Same Day Scheduling: (Current Ops) Airspace Management Office	DSN 527-4110 (661) 277-4110 Fax: DSN 527-9685/3005 (661) 277-9685/3005 DSN 527-3940 (661) 277-3940 DSN 527-2515 (661) 277-2515

4.4 Special Activities

This section discusses special activities that are carried out within the Complex that may affect where and how other missions are flown within the Complex and lead time required:

- "Lights Out" Operations
- Electronic Counter Measures
- Flares
- Refueling Areas
- Supersonic Operations
- Airborne Radar Unit (ARU)/Airborne Warning and Control Systems (AWACS) Operations
- Tow Operations
- Large Scale Exercises
- Remotely Piloted Aircraft (RPA)/Unmanned Aerial System (UAS)

CCF has the authority to designate refueling areas, ACM areas, entry/exit routes, etc., and will coordinate the proposed operation to minimize impact on other Complex users while retaining scenario realism.

4.5 Scheduling Special Activities

Unless otherwise coordinated, requests for special activities must be submitted IAW this section. Lead time is required to allow all necessary coordination/changes to be approved prior to the scheduled operation.

- Lead times and approval requirements are required to allow other units to be briefed on the operation (times, routes, altitudes, activities, etc.) and deconflict the proposed operation from other activities within the Complex.
- **Appendix C: Mission Planning Checklist**, is designed to be provided to CCF in order to simplify coordination of Special Activities for missions involving 10 or fewer aircraft.

4.5.1 "Lights Out" Operations

"Lights out" operations are allowed within the following restricted areas: R-2505, R-2515, R-2524, R-2502N, and R-2502E. "Lights out" operations within R-2508 require units to establish a Letter of Procedure (LOP) with the Complex Control Board (CCB).

Units requesting "Lights out" operations within R-2508 shall provide 2 working days prior notification or IAW CCB LOP. For any other internal restricted areas contact the appropriate scheduling agency for the internal restricted area listed in Section 2.3.

- Aircrews shall advise the controlling facility when commencing and terminating "lights out" operations.
- Aircrews shall leave aircraft position lights ON while transiting to and from the scheduled restricted area. Turn lights OFF only when authorized within the internal restricted area.

*A waiver to 14 CFR Part 91.209 is unnecessary if the aircraft is operating in a restricted area in compliance with the using/scheduling agency's rules of operation for that internal restricted area.

4.5.2 Electronic Counter Measures/Chaff

For activities using electronic counter measures (ECM) (jamming and/or chaff) in the R-2508 Complex, you must pre-coordinate with and obtain approval from appropriate Base Spectrum Managers. Users must inform CCF about these activities by indicating in the remarks section of the airspace request form.

Spectrum Managers	DSN	Commercial
WAFC, Pt. Mugu	**351-7983**	**(805) 989-7983**
412 TW, Edwards AFB	**527-2390**	**(661) 277-2390**
NAWCWD, China Lake	**437-6827**	**(760) 939-6827**
National Training Center, Fort Irwin	**470-3043**	**(760) 380-3043**

4.5.3 Flares

Flare use is limited to internal restricted areas only. Flare use must be coordinated with the appropriate restricted area's scheduling agency.

4.5.4 Refueling Areas

The R-2508 Complex has four ***unpublished*** refueling areas (see Figures 4-4 & 4-5). These areas are available for use and must be scheduled with the CCF or 412th Current Ops Scheduling NLT 1600L day prior to mission. **Refueling areas are within concurrent use airspace, are not protected and See and Avoid procedures apply.**

4.5.4.1. Refueling area defined:

Area	Entry	Outbound	Latitude	Longitude
ISABELLA (ARISB)	PMD 345°/ 35	PMD 345R, left turns	35°13'N	118°04'30"W
COALDALE (AROAL)	OAL 155°/ 60	OAL 155R, left turns	37°00'N	117°33'W
LINUS (ARLNS) GFW Only	N35°57.53 W117°02.81	Left Hand Turns Between	N35°57.53 N36°02.15 N36°19.88 N36°15.35	W117°02.81 W116°51.46 W117°03.45 W117°14.59
SHOSHONE (ARSHN)	BTY 150°/ 60	BTY 150R, left turns	35°50'N	116°26'W

Note: Tankers flying in support of Green Flag West operations should schedule directly with the **549th CTS** scheduling office at Nellis AFB, NV. DSN 682-8570, Fax DSN 682-4274.

No radar coverage is available below 10,000 feet mean sea level (MSL) for the Shoshone and Coaldale refueling areas.

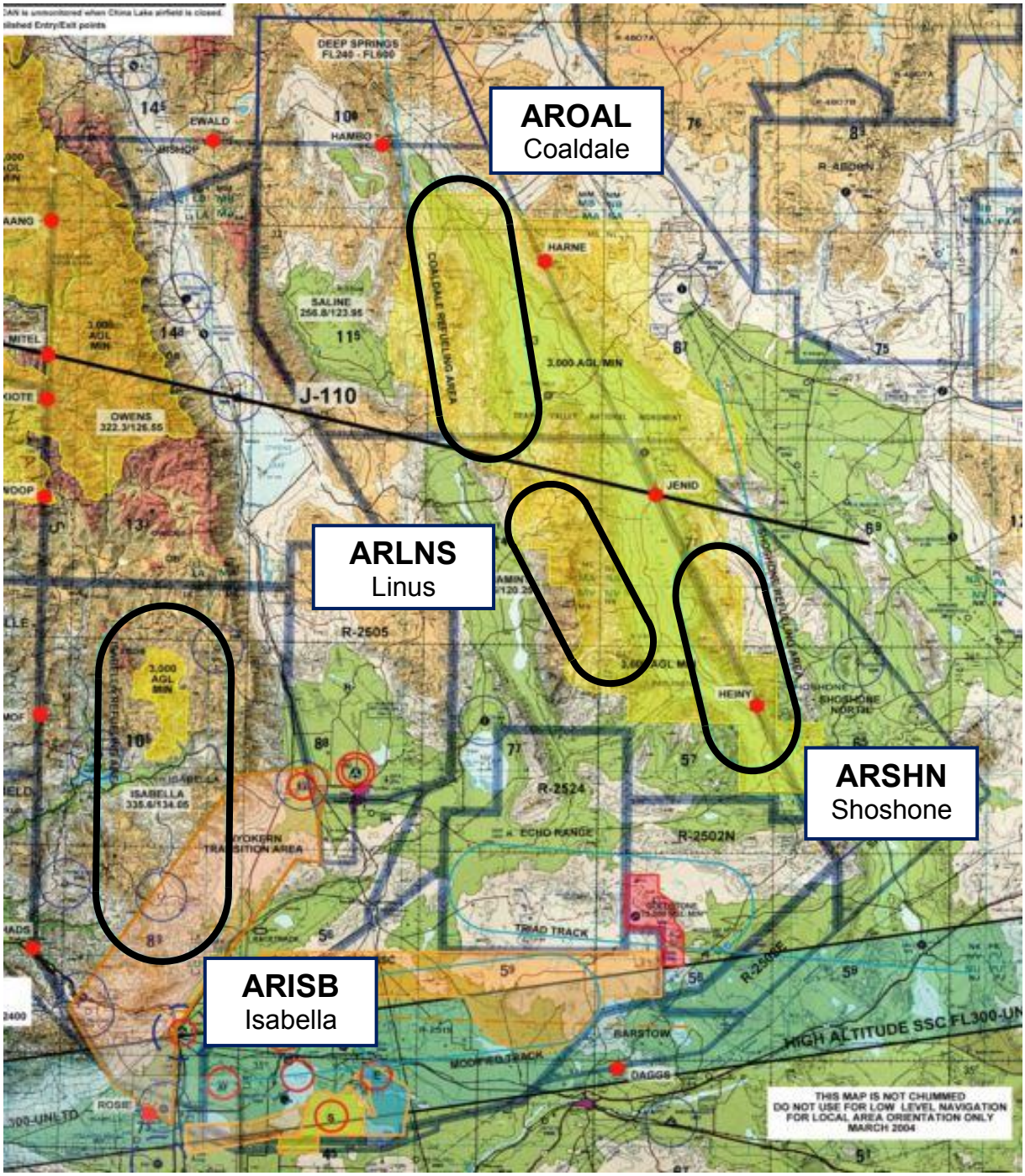
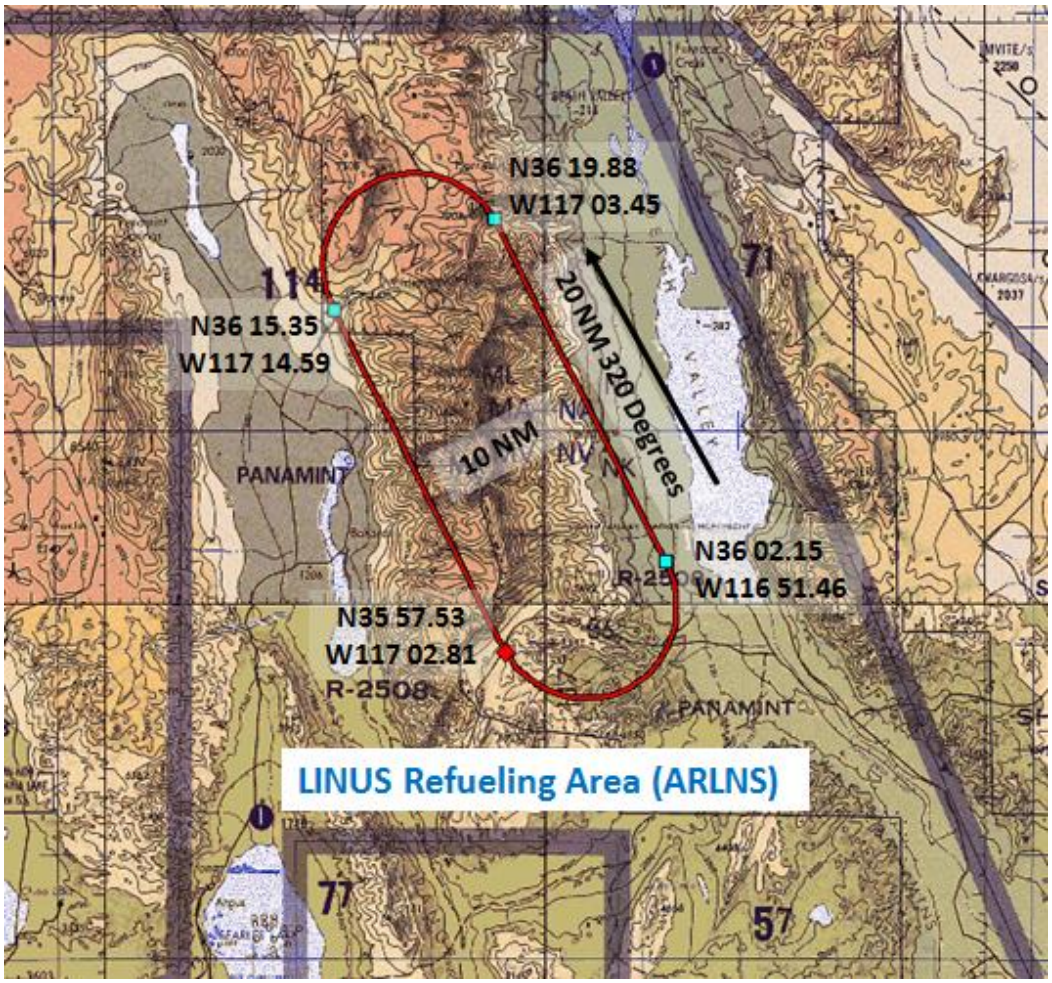


Figure 4-4. *R-2508 Complex Refueling Areas.*



4-5. *Linus Refueling Area – Green Flag West Only.*

Cautions and Warnings!

For pilots operating in the vicinity of R-2508 Complex Refueling areas:

1. Always use the **"See-and-Avoid"** principle throughout your refueling operations.
2. Refueling areas are **NOT exclusive-use airspace** and are **NOT protected** from other Complex aircraft operating in the area.
3. **If you see a tanker formation that is not part of your operation, avoid the formation by at least 2,000 feet vertically and 5 miles laterally.** This distance is used to reduce the risk of incident due to emergency breakaways or maneuvers by the tanker formation.
4. Conduct refueling operations within **ARISB at and above 21,000' MSL** unless precluded by receiver aircraft operations or test requirements/limits. When conducting refueling operations at altitudes lower than 21,000' MSL, aircrews should be cognizant of high speed fighter cross traffic from ROMOF to Superior Valley at or below FL190.

4.5.4.2. Discrete Tanker Beacon Codes: Tanker aircraft on active AAR missions will be issued discrete beacon codes to provide enhanced situational awareness to other R-2508 participants. The goal of this procedure is to afford those users not involved in AAR operations an increased opportunity to self-impose the 2,000' vertical and 5 mile lateral buffer between themselves and active tanking formations.

Procedures:

- Tanker aircraft departing EAFB to conduct AAR within the R-2508 complex will be issued a code from the 0051-0057 series by SPORT MRU. Tanker aircraft will squawk the assigned discrete code throughout their mission in R-2508 Complex unless instructed otherwise by ATC.

- Tanker aircraft originating from outside the R-2508 Complex to conduct AAR within the R-2508 Complex will be issued a discrete beacon code from the 5253-5257 series by JOSHUA Approach upon entry. This procedure specifically addresses tanker aircraft deploying to EAFB (Business Effort, JOTT Support, etc.) that will conduct an AAR mission prior to landing. Tanker aircraft will squawk the assigned discrete code throughout the remainder of their mission in R-2508 Complex unless instructed otherwise by ATC.

- In addition to above, 412 TW assigned and/or sponsored tankers will utilize Mode 1, Squawk: 01 and Mode 2, Squawk: 7210.

NOTE: The above discrete beacon codes do not signify particular Refueling Areas or altitude blocks.

4.5.5 Supersonic Operations

Supersonic flight is authorized in the High-Altitude and Black Mountain supersonic corridors (see Figure 4-6) when properly scheduled.

Supersonic flight is not normally authorized in R-2508, MOAs, or ATCAAs unless approved by the CCB in advance. Supersonic operations may be conducted in other internal restricted areas after receiving specific approval from the appropriate scheduling agency.

Supersonic operations outside R-2515 require prior coordination with the appropriate scheduling agencies (R-2524/2502), and if required, file DD-175.

High Altitude Supersonic Corridor Entry/Exit Point one (1), (East-West, West-East) runs shall remain with R-2515.

To schedule the supersonic corridors, contact the 412th Center Scheduling for same day operations at DSN: 527-3940, next day or future operations at DSN: 527-4110.

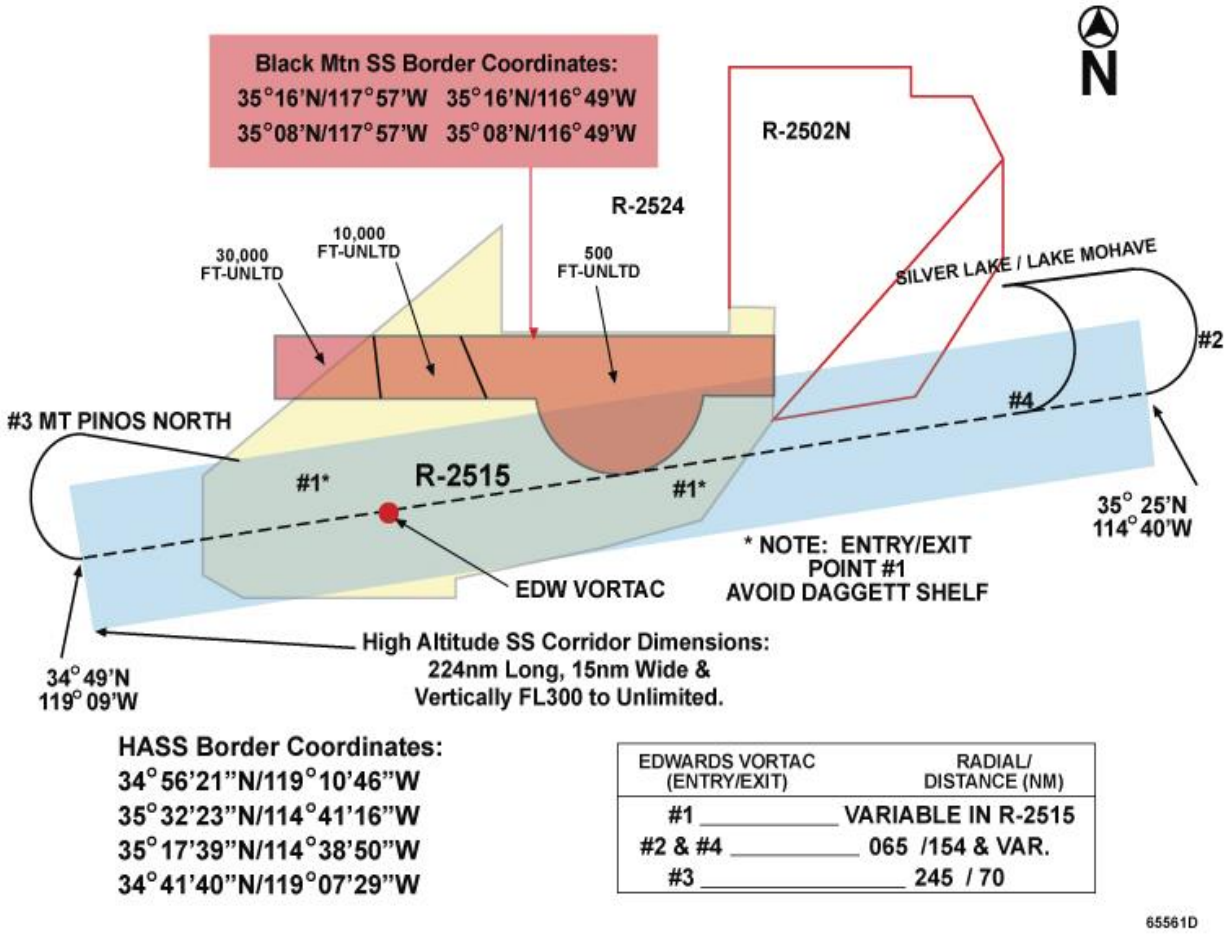


Figure 4-6. *Supersonic Corridors*

4.5.6 Tow Operations

Three categories of towed items are allowed within the R-2508 Complex:

(a) Items towed within 500 feet of tow aircraft

(b) Items towed between 500 feet and 1 statute mile from tow aircraft

(c) Items towed more than 1 statute mile from tow aircraft

Regardless of the category, all tow operations will be scheduled with CCF NLT 1600 day prior (coordination not needed if within 100 feet behind the aircraft). In addition, the pilot will notify the ATC facility or MRU on initial contact of intent to conduct tow operations.

The following rules apply to tow operations:

1. Tow operations are only authorized in VMC conditions. Operations involving categories (a) and (b) require advance notice to the CCF IAW Special Activities scheduling procedures. Night tow operations are limited to **category (a) only**.
2. Category (b) tow operations are considered an additional hazard in the MOAs/ATCAAs and must use a chase aircraft. The chase aircraft must remain close enough to the towed item to provide a visual cue for non-participating aircraft that the towed object is between the chase and towing aircraft.
3. Category (c) tow operations (or category (b) operations where it is not feasible to use a chase aircraft) **must** be approved by a Complex Control Board-recognized Safety Review Board (SRB) or Executive Review Board (ERB) (i.e., 412TW, NAWCWD, or NASA). Following the SRB/ERB assessment, the project must obtain CCB approval prior to flight. These operations also require coordination with CCF at least 5 days prior to the mission being flown.

WARNING: If the towed object is inadvertently released, the towing aircraft shall notify the ATC facility or MRU immediately. User should consider avoiding populated areas within the Complex while conducting tow operations.

4.5.7 Airborne Radar Unit (ARU) and Airborne Warning and Control Systems (AWACS) Operations

Air Force AWACS will coordinate procedures and contingency plans with participating military units to ensure compliance by mission aircraft. Navy ARUs will coordinate their procedures and contingency plans with the Carrier Air Wing Strike Leader. ARU/AWACS must Schedule with CCF NLT 1600L day prior.

Responsibilities for both ARUs and AWACS include:

1. Provide mission frequency to Joshua that enables direct contact between Joshua and mission aircraft.
2. Obtain orbit airspace to provide service to an exercise taking place within the R-2508 Complex. Aircrews shall:
   - Coordinate with CCF for orbits within R-2508
   - Receive a Work Area Clearance from Joshua for orbits inside the R-2508 Complex
   - Coordinate with CCF and appropriate ARTCC for orbits outside the R-2508 Complex
3. Advise Joshua as soon as possible when an aircraft declares an emergency or encounters any unusual situation that requires any form of special handling. Follow these procedures:
   - Initiate a radar correlation check.
   - Maintain communications with Joshua on the appropriate ATC frequency or a pre-coordinated mission/tactical frequency (AWACS/ARU).
   - Do not provide air traffic control services to mission aircraft (e.g., IFR services, ATC clearances, etc.

- Provide coordination for squawks and call signs for inbound/outbound mission aircraft (AWACS/ARU). However, do not change the Mode 3 discrete beacon code assignment for mission aircraft working inside the R-2508 Complex. Flight split-off aircraft not assigned a Mode 3 discrete beacon code by Joshua may be instructed to squawk a non-discrete beacon code while in assigned mission airspace.
- Provide mission aircraft mission support.
- Provide Joshua with:
  - A 5-minute advance notice of mission completion
  - Call sign of the first element that has completed mission operations in the R-2508 Complex
  - Position of the last mission element that will exit the R-2508 Complex
- When mission(s) is/are completed, advise mission aircrew(s) to remain within assigned airspace and contact Joshua on the ATC frequency.

NOTE: All aircraft are operating within concurrent use airspace see and avoid procedures apply.

Responsibilities for Joshua are to:

1. Perform all coordination with the appropriate ARTCC for inbound/outbound mission aircraft.
2. Issue a Work Area Clearance and assign a Mode 3 discrete beacon code to mission aircraft.
3. Forward mission aircraft radar data information to the AWACS/ARU to include:

- Aircraft identification
- Assigned discrete beacon code

4. Inactively monitor the AWACS/ARU mission/tactical frequency.
5. Provide traffic advisories, traffic alerts on non-mission aircraft operating in the R-2508 Complex, and boundary advisories on the mission/tactical frequency.
6. Issue departure clearances and perform all associated ATC coordination with the appropriate ARTCC.

NOTE: Joshua will not provide advisories between mission aircraft.

4.6 Large-Scale Exercises

Large-scale exercises are those involving multiple-day/multiple-range activities, more than 10 participating aircraft utilizing the airspace simultaneously, and/or are very complex. All large-scale exercises using the R-2508 Complex must coordinate with CCF **at least 15 days in advance** of intended operations.

Depending on the complexity, duration, and size of the exercise area, exercise planners should expect to meet one or more of the following conditions, as determined by the CCF:

1. Provide scenario of exercise plan and airspace requirements to CCF via email and Joshua by e-mail or fax.

2. Coordinate in advance with FAA (ARTCCs, Joshua), Military Representatives to FAA, CCF, and/or other special-use airspace agencies.
3. Set up a mission briefing for all participating aircrews.
4. Generate an operations plan covering detailed operating procedures to which the range agency and CCF will have direct input.
5. Serve as special frequency management liaison.

NOTE: Mission planners are *strongly encouraged* to take advantage of CCFs extensive knowledge and experience in coordinating complex, large-scale exercises. CCF can provide users with coordination requirements, FAA ATC and flight planning requirements and recommendations to achieve overall mission success. Early contact with CCF can prevent major changes to exercise plans.

Most large-scale exercises require the use of airspace/land ranges managed by various members of the Joint Policy and Planning Board (JPPB). Planners must formulate the desired exercise plan along with alternative options as early as possible in order to coordinate mission requirements and negotiate exercise approval.

Most airspace coordination may be handled through the agencies listed in Section 4.3. The following list of organizations that may require separate or additional coordination:

Agency	DSN	Commercial
Air Force Representative to FAA Western-Service Area	**382-5204**	**(425) 227-2947**
Navy Representative to FAA Western- Service Area	**N/A**	**(425) 227-2740 (425) 227-1384**
Army Representative to FAA Western- Service Area	**N/A**	**(425) 227-2953 (425) 227-2955**
Los Angeles ARTCC Military Liaison	**640-1290**	**(661) 265-8287**
Oakland ARTCC Military Liaison	**730-1595**	**(510) 745-3334**
High Desert TRACON	**527-2023**	**(661) 277-2023**

4.7 Remotely Piloted Aircraft (RPA) / Unmanned Aerial System (UAS)

The CCF is directly responsible to the CCB to ensure safe and effective procedures are utilized. The CCF has the final authority pertaining to R-2508 Complex airspace utilization. However, this authority is governed by the scope and limitations set forth by the CCB and published as "Central Coordinating Facility Procedures Manual". CCB Guidelines to RPA/UAS operations are as follows:

- "Operations" within shared use airspace shall be conducted at or above 40,000 feet MSL.

- "Transitions" shall be conducted IAW CCB approved transition routes and altitudes.
- CCF is authorized to make exceptions to this policy after core hours and on weekends dependant on other mission requirements.

4.7.1. Proposal Submission Timelines

Programs shall submit a detailed proposal to the CCB via the CCF and the appropriate Safety Review Board (SRB) listed in subsection 4.7.2.

Minimum Timelines:

System Maturity	Minimum Coordination Required	Approval Authority
• New System • Immature	**At least 90 Days**	• CCB • SRB required
• Semi Mature • Previously coordinated program • Inactive for over 6 months	**At least 5 days**	• Coordination with CCF
• Mature System	**NLT 1600 Day Prior**	• CCF will evaluate • May require schedule changes to minimize impact on other missions (see scheduling process below).
• Profile changes	**NLT 1600 Day Prior**	• Time to brief affected agencies. • Changes not received in this time may affect airspace availability.

*LOA coordination takes at least 90 days from the original written request. The LOA depends on CCB agreement with the proposed operating procedures and the results of the Safety Review (discussed below). The LOA is usually worked concurrently with other coordination.

4.7.2. Safety Review

The CCB will review proposals to ensure safety concerns are addressed. CCB shall refer all new programs to the appropriate authority (SRB) for a safety review. The reviewing organization will, at a minimum, consider the procedures identified in this handbook in conjunction with their safety review.

4.7.3 Scheduling and Coordination

Once you receive CCB approval for your RPA/UAS operations, and a Letter of Agreement (if required) and all procedures have been finalized between the project, Joshua, and the CCB, **you must still coordinate and schedule individual operations in the appropriate airspace with the CCF and/or appropriate internal range scheduling activity.**

4.7.4. Real time UAS Transitions between R-2505 and R-2524

UAS transitions between R-2505 and R-2524 are authorized directly across the Trona Corridor portion of R-2508. These transitions shall be coordinated between Joshua and ASC in real time and in accordance with procedures contained in the Joshua/ASC letter of agreement. In no case shall these transitions be conducted below FL180. The UAS shall comply with all other provisions of this handbook including the requirement to be mode 3 transponder equipped and in direct communication with, and under the control of, ASC/Joshua. The UAS shall not loiter in the Trona Corridor, or transition through any other portion of R-2508 without separate coordination and approval.

4.8 Flight Planning

Refer to **DoD FLIP** for flight plan filing requirements. All aircrews filing to land or planning to operate in the Complex must understand and operate in accordance with the R-2508 Complex concept explained in Section 5.1.1 of this Handbook.

- All scheduled operations originating outside the R-2508 Complex shall file in accordance with the following procedures unless the flight will terminate at an installation within the R-2508 Complex.
- These procedures shall be followed to ensure availability of an IFR clearance when flights are ready to RTB. Failure to comply may result in a delay in the Complex while Joshua Approach attempts to obtain an IFR clearance.

To file IFR to/from R-2508 Complex:

1. File **Two** IFR flight plans or legs, one to enter and one to depart the R-2508 Complex.

   To ensure proper flight plan processing for Joshua Approach, **flights not intending to land at an airport within the R-2508 Complex should file "R-2508" as the destination and point of departure for the return flight plan/leg.**

Sample DD Form 175 Military Flight Plan				DATE 01/01/02	AIRCRAFT CALL SIGN TEST 01		AIRCRAFT DESIGNATION F-22/R
TYPE FLT PLAN	TRUE AIRSPEED	POINT OF DEPARTURE	PROPOSED DEPARTURE TIME (Z)	ALTITUDE	ROUTE OF FLIGHT	TO	ETE
I	450	NFL	1900	290	OAL..EWALD	R-2508	0+15
I	450	R-2508	2000	290	EWALD..OAL	NFL	0+15

2. Aircraft landing or departing from an airport within the R-2508 Complex should file that airport as the destination and/or departure point of the flight plan.
3. The point of entry/exit into R-2508 airspace should be an R-2508 Entry/Exit fix (see Figure 4-7) as listed in this section. This does not preclude ATC from clearing aircraft to enter/exit other R-2508 Complex boundary locations.

NOTE: Filing a flight plan does not relieve the aircrew of the responsibility for scheduling the appropriate airspace with CCF.

For VFR flights:

1. Obtain a Work Area Clearance from Joshua Approach/SPORT before conducting operations in the R-2508 Complex.
2. All Complex aircraft shall advise Joshua Approach/SPORT before departing R-2508 Complex airspace.

R-2508 Complex Entry / Exit Points

Name	Radial / DME	Latitude	Longitude
FAANG	NLC 043º/77	37º00'00"N	118º35'03"W
EWALD	BTY 274º/71	37º12'00"N	118º07'48"W
HAMBO	BTY 283º/50	37º12'00"N	117º38'33"W
HARNE	BTY 274º/22	36º55'25"N	117º11'15"W
JENID	BTY 175º/27	36º21'15"N	116º51'30"W
HEINY	BTY 154º/58	35º51'30"N	116º32'33"W
DAGGS	EDW 076º/38	34º59'00"N	116º57'00"W
ROSIE	PMD 317º/15	34º51'08"N	118º12'23"W
CHADS	*NID 226º/51	35º15'00"N	118º35'00"W
ROMOF	*NID 267º/44	35º49'00"N	118º35'03"W
SWOOP	NLC 075º/67	36º19'00"N	118º35'05"W
KIOTE	NLC 062º/68	36º34'20"N	118º35'24"W
MITEL	CZQ 086º/61	36º41'03"N	118º35'03"W

***NID TACAN is unmonitored when China Lake airfield is closed.**

FAA published Entry/Exit points.

R-2508 Complex Entry / Exit Points

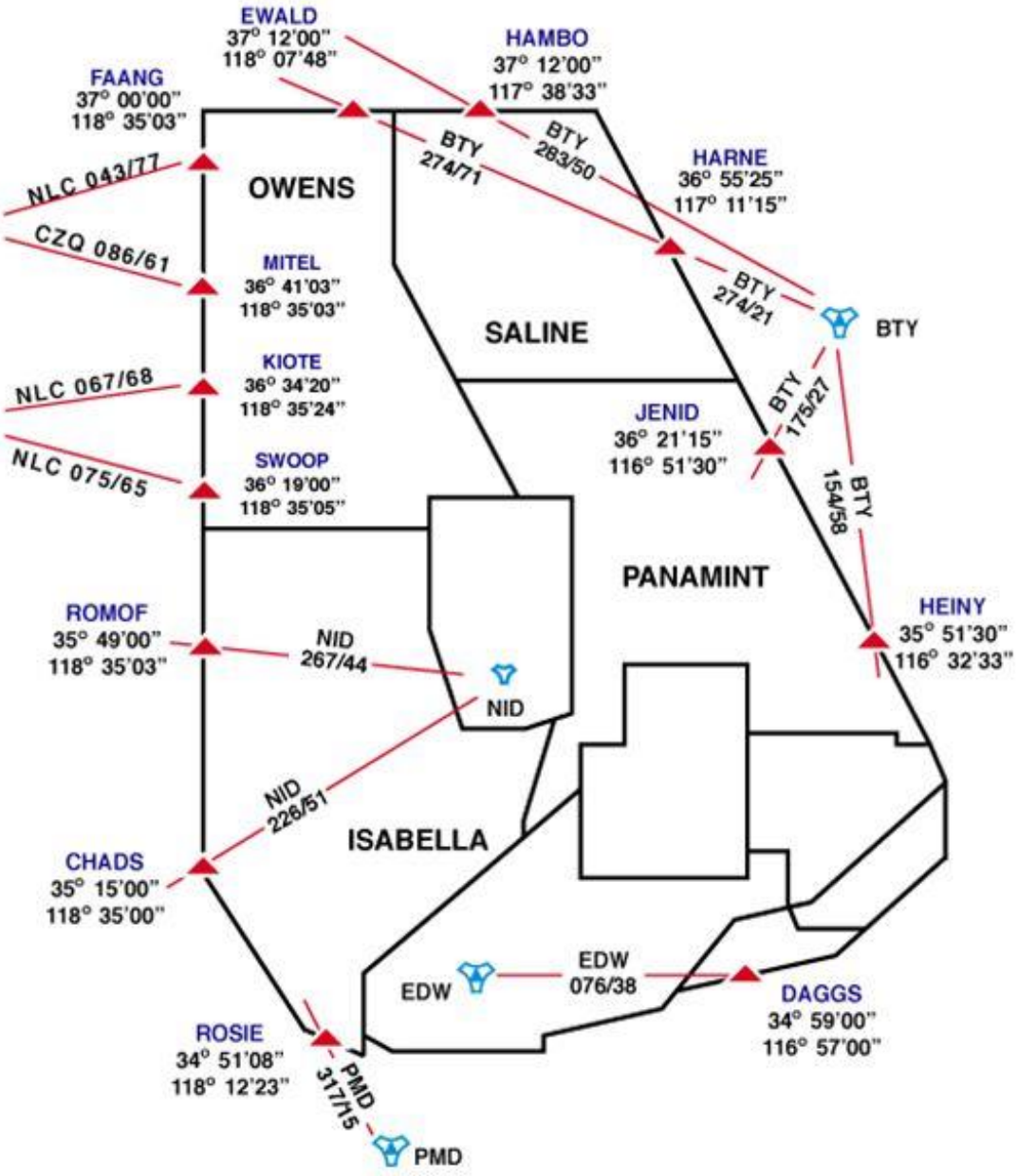


Figure 4-7. *R-2508 Complex Entry/Exit Points.*

5.0 R-2508 Flying Procedures

This section discusses the following:

5.1 Flying Procedures

5.2 Low Level Flying

5.3 Special Considerations

5.1 Flying Procedures

All Complex users must understand and comply with the R-2508 Complex procedures.

1. Participating Aircraft: "Participating aircraft" are aircraft under the command of, or sponsored by, the Navy, Air Force, or Army members of the R-2508 Joint Policy and Planning Board (JPPB), and civilian aircraft under Letter of Agreement with the R-2508 Complex Control Board (CCB), whose flights require operations above FL180.

NOTE: Civilian flights in the R-2508 Complex that will remain below FL180 (18,000 MSL) for the entire mission are not considered participating aircraft.

2. Contract Civil Aircraft MOA Operations. In order to schedule a contract civil aircraft to operate in the R2508 Joint Use Airspace below FL180, the aircraft must be sponsored by a JPPB command, must be briefed to operate in the R2508 Complex, and must be scheduled with the R2508 Central Coordinating Facility (CCF). It is the sponsoring commands responsibility to ensure the aircraft is in accordance with all legal contractual rules and regulations. If the contract aircraft requires flight above FL180, R2508 policy requires a Letter of Agreement with the R2508 Complex Control Board.

3. Non-Participating Aircraft. "Non-participating aircraft" are defined as aircraft that cannot comply with the terms of the R-2508 Complex procedures. These aircraft shall be provided IFR services, as specified in FAA Order 7110.65, on a non-interference basis, and can expect to encounter delays.

5.1.1 Specific Procedures

These procedures apply to participating aircraft operating within R-2508 Complex. **All aircraft within R-2508, MOAs, or ATCAAs shall operate in VMC**.

Cloud Clearance Requirements. IAW 14 CFR, Part 91.155, "Category E Cloud Clearance".

Altitude	Visibility	Distance from clouds
Less than 10,000 feet MSL	3 Statute Miles	500 feet below, 1,000 feet above. 2,000 feet horizontal
At or above 10,000 feet MSL	5 Statute Miles	1,000 feet below, 1,000 feet above, 1 statute mile horizontal

- If unable to maintain VMC, aircraft shall notify Joshua Approach and request an IFR clearance.
- The purpose of an IFR clearance is to position the aircraft in weather conditions that permit VFR flight, to exit the area, or to return to base if unable to locate VMC conditions.

- After re-encountering VMC conditions, the aircrew shall be responsible for canceling IFR clearance.

"See and Avoid" Concept. Scheduling or receiving a clearance to operate within the R-2508 Complex does not constitute exclusive use of the area. Those operations requiring exclusive use will normally be conducted within internal restricted areas. On rare occasions, exclusive use of R-2508 Complex airspace may be granted by the CCB within well-defined boundaries.

All participating aircraft operating in the R-2508 Complex are required to have an operational transponder and Mode C, unless otherwise pre-coordinated.

- All aircraft shall remain on the assigned transponder code while operating in the R-2508 Complex unless otherwise directed.
- The flight lead for standard formation flights shall squawk normal and wingman should squawk standby.
- Upon breakaway into elements or individual flights, the element lead or individual aircrew shall set the transponder in accordance with the following:
- Advise ATC/MRU of the breakaway elements' call sign(s), number and type of aircraft, and request beacon code assignment.
- Advise ATC/MRU if traffic calls are required between elements.

Aircrew(s) shall accept traffic advisories from Joshua Approach, China Control, or SPORT unless otherwise coordinated. Controllers shall issue traffic advisories, safety alerts, and boundary calls.

- Aircraft operating in support of **R-2505, R-2506 or R-2524** operations will normally be provided radar advisory services by **China Control**.
- Aircraft operating in support of **R-2515** operations will normally be provided radar advisory service by **SPORT**.
- Aircraft operating in support of **R-2502** operations will normally be provided traffic advisory service by **Desert Radio**. Aircraft operating in support of Green Flag Operations within **R-2502** will normally be provided traffic advisory service by **Sundance** when operational.

Flights shall maintain two-way radio communications with the Controlling ATC Facility/MRU on the appropriate frequency unless otherwise coordinated. Carry out intra-flight communications on a secondary frequency.

Area Transitions – Aircraft transiting across working areas shall:

- Avoid aircraft actively conducting test or training whenever possible.
- Once inside R-2508, transiting aircraft should plan on traveling around or over active flights by flying near area boarders and/or near the top of the area at VFR hemispheric altitudes when practical

5.1.2 Operating Procedures

These operating procedures apply to all aircraft within R-2508 Complex.

1. **All aircraft shall obtain a Complex Clearance, prior to operating.**
   - **Pilot check in procedures:** All flights shall contact Joshua Approach prior to Complex entry and exit. Initial contact shall include a request for a Complex Clearance and altitudes. During check-in, pilots should state their intentions and planned work area using plain language. Work load permitting, Joshua Approach should respond with relevant traffic information for the flight. Avoid stepping on other transmissions during high workload time periods.

- Joshua will issue appropriate Complex Clearance to allow flights to operate VFR in the R-2508 Complex and will normally be given in an abbreviated format as follows:

Work Area	Frequencies
JOSHUA APPROACH **Primary Frequency**	**348.7 / 133.65**
ISABELLA	**335.6 / 134.05**
OWENS	**322.3 / 126.55**
SALINE	**256.8 / 123.95**
PANAMINT	**291.6 / 120.25**

SAGE 2 Clearance: Specifies a clearance to operate within the Isabella**,** Owens, Saline, and Panamint Work Areas at and below FL290. Aircraft shall schedule higher altitudes when required and request real time with Joshua Approach.

PANCHO 3 Clearance: Specifies a clearance to operate within the Isabella and Panamint Work Area at and below FL500, the Owens and Saline Work Areas at and below FL290. Aircraft shall schedule higher altitudes when required and request real time with Joshua Approach. The following restrictions apply:

- **Only locally based aircraft** (Edwards AFB, China Lake, Palmdale [Plant 42], and NAS Lemoore) are authorized to use a PANCHO 3 Clearance.
- All participating units operating within the Complex over the **Sequoia and Kings Canyon National Parks (SEKI) in the Western Owens work area shall maintain an altitude of 18,000 feet MSL or above unless that area is specifically scheduled in accordance with established procedures through the R-2508 Central Coordinating Facility (CCF).** All participating unit activities requesting the airspace below FL180 over SEKI in the Western Owens work area shall schedule that work area in advance with the CCF in accordance with current procedures and list **"SEKI" in the remarks section of the R-2508 Complex Airspace Request Form**. Unscheduled operations below 18,000 feet MSL over SEKI are authorized only for safety of flight considerations. At no time will any participating aircraft descend below 3,000 ft AGL within the boundaries of SEKI except in an emergency situation.

WAR 2 Clearance: Specifies a clearance to operate in the Saline and Panamint Work Areas at and below FL290, Shoshone MOA, and the Shoshone North and South ATCAAs at and below FL230. If requested, and scheduled for higher altitudes in the Shoshone North and South ATCAAs, pilots may expect clearance to those altitudes on a real-time basis. The following restrictions apply:

- ONLY aircraft scheduled through Green Flag West and operating in support of NTC Fort Irwin rotational exercises are authorized a **WAR 2 Clearance.**
- It is the responsibility of the pilot in command to ensure proper scheduling and know the appropriate procedures for entry into R-2502N/E, R-2505, R-2515, and R-2524.

Aircrews are responsible for remaining within the vertical and lateral confines defined by the clearance. If the aircraft leaves the vertical or lateral confines of the clearance, a flight violation may be filed.

NOTE: Aircrew(s) issued clearance altitudes lower than mission requirements must request higher altitudes from Joshua Approach.

2. Aircraft shall remain on the assigned local altimeter while operating in the R-2508 Complex, regardless of altitude**.** The facility altimeter to use in specific areas is included with the information about each area (see Chapters 6, 7, and 8).
3. Participating aircraft departing the R-2508 Complex shall maintain VFR until crossing the R-2508 Complex boundary.
4. Flight crews are responsible for obtaining an en-route clearance prior to departing Complex boundaries IFR. If departing VFR, advise Joshua Approach.
5. Joshua Approach is not responsible for providing IFR separation between participating IFR and VFR traffic operating in the R-2508 Complex. Joshua Approach shall provide IFR separation between all IFR participants and those non-participating aircraft operating on an IFR clearance.
6. Active and inactive monitoring of mission frequencies depends on availability of radio resources at Joshua Approach.
   - **Active Monitoring.** Joshua Approach tunes the transceiver to the mission frequency requested, listens on the frequency, and makes traffic/boundary calls on mission frequency.
   - **Inactive Monitoring.** Joshua Approach tunes transceiver to mission frequency requested, but does NOT listen on frequency. Traffic and boundary calls will be made on mission frequency as needed. Direct pilot-to-controller communications requires the pilot to switch to an ATC frequency.

- When using maneuvering areas for ACM or any other mission requiring extensive maneuvering, advise Joshua Approach of the area.
- When conducting ACM, aircrews should be aware of noise-sensitive areas that must be avoided to the maximum extent possible.

7. When transiting to work areas or RTB, make every effort to use ridgeline transit routes and/or fly below 5,000 feet AGL to de-conflict with possible maneuvering activities.
8. Beware that low-level flying activities are conducted at altitudes below the radar horizon and in areas with marginal communications coverage. This reduces the ability of Joshua Approach to provide traffic advisories.

5.2 Low-Level Flying

Aircraft operating below 1,500 feet AGL (including MTR's) within or transitioning the R-2508 Complex work area airspace **shall monitor and provide position reports on frequency 315.9 MHz**. This frequency assists aircrews in avoiding conflicts with other aircraft operating low-level below radar coverage. Pilots are required to check in on the appropriate ATC frequency with Joshua Approach and request change to the low-level frequency. This frequency is used in the same manner as a UNICOM with pilots broadcasting their position and intentions as they progress through the area. Aircrews shall also check out on an ATC frequency with Joshua Approach when exiting the low level environment. Dual radio aircraft shall continue to monitor appropriate ATC or mission frequency. **NOTE: Frequency 315.9 <u>IS NOT</u> monitored by Joshua Approach**

5.2.1 GEO Reference Points

The following GEO reference points apply to aircraft operating low level in the R-2508 Complex and are used to communicate aircraft position on frequency 315.9.

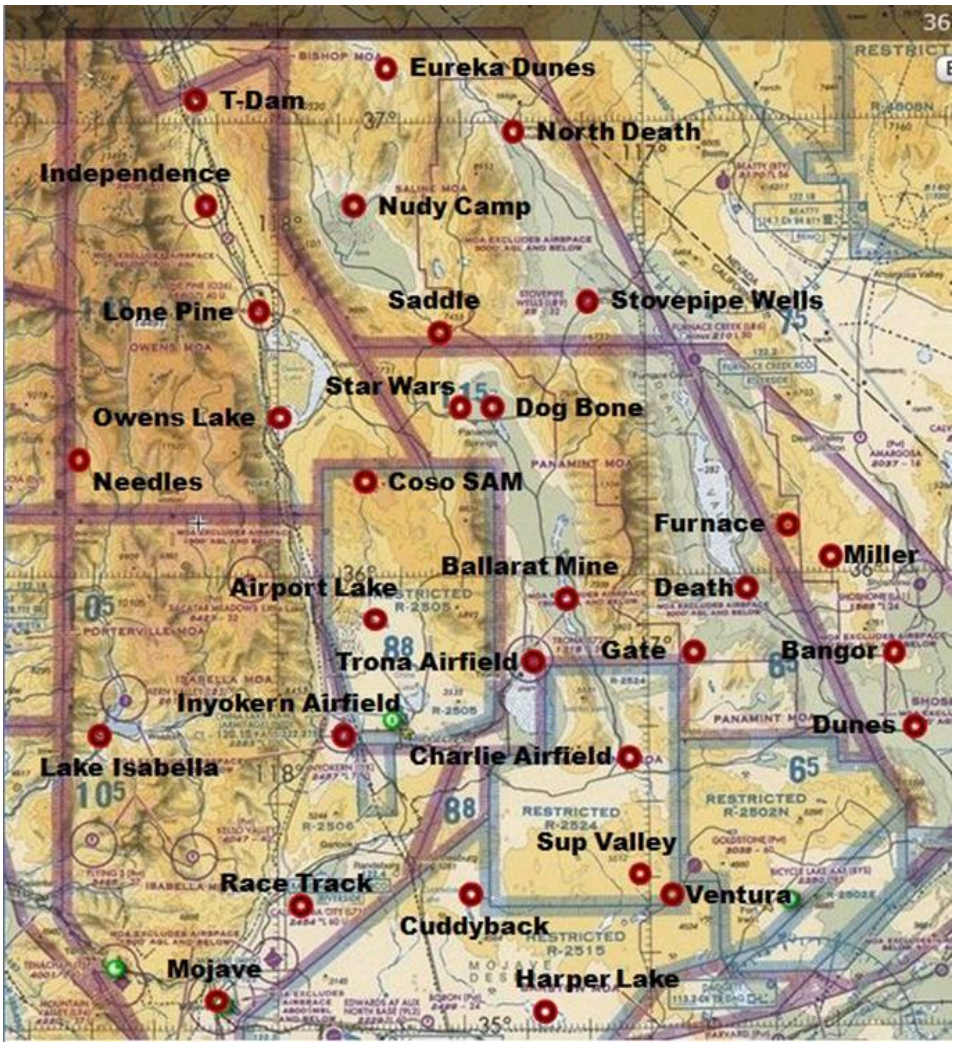


Figure 5-1- GEO Reference Points

GEO Reference Points

OWENS VALLEY	N LAT	W LONG
TINEMAHA RESV. "T-DAM"	N 37 03 41.50 / N 37 03.692	W 118 13 10.80 / W 118 13.180
INDEPENDENCE	N 36 48 54.79 / N 36 48.913	W 118 12 15.41 / W 118 12.257
LONE PINE	N 36 35 25.35 / N 36 35.423	W 118 02 47.25 / W 118 02.788
OWENS LAKE BED	N 36 21 32.90 / N 36 21.548	W 117 57 46.90 / W 117 57.782
SALINE VALLEY		
EUREKA DUNES	N 37 05 58.00 / N 37 05.967	W 117 40 22.00 / W 117 40.367
NUDY CAMP	N 36 48 17.80 / N 36 48.297	W 117 46 25.20 / W 117 46.420
SADDLE	N 36 32 02.40 / N 36 32.040	W 117 33 41.60 / W 117 33.693
DEATH VALLEY		
NORTH DEATH	N 36 58 00.00 / N 36 58.000	W 117 21 00.00 / W 117 21.000
STOVE PIPE	N 36 36 23.00 / N 36 36.383	W 117 08 47.00 / W 117 08.783
PANAMINT VALLEY		
STARWARS CANYON	N 36 21 48.80 / N 36 21.813	W 117 30 32.30 / W 117 30.538
DOGBONE	N 36 23 13.80 / N 36 23.230	W 117 24 18.10 / W 117 24.302
BALLARAT MINES	N 35 56 43.30 / N 35 56.722	W 117 12 02.05 / W 117 12.034
TRONA AIRFIELD	N 35 48 44.20 / N 35 48.737	W 117 19 37.70 / W 117 19.628
ISABELLA		
LAKE ISABELLA	N 35 39 00.00 / N 35 39.000	W 118 23 00.00 / W 118 23.000
NEEDLES	N 36 07 00.00 / N 36 07.000	W 118 29 00.00 / W 118 29.000
INYOKERN AIRFIELD	N 35 38 00.00 / N 35 38.000	W 117 50 00.00 / W 117 50.000
RACE TRACK	N 35 16 17.80 / N 35 16.297	W 117 57 30.90 / W 117 57.515
MOJAVE	N 35 03 00.00 N / 35 03.000	W 118 08 00.00 / W 118 08.000
R2505		
COSO SAM	N 36 12 24.37 / N 36 12.410	W 117 21 00.00 / W 117 43.260
AIRPORT LAKE	N 35 54 06.66 / N 36 54.110	W 117 42 57.01 / W 117 42.950
R2515		
CUDDYBACK	N 35 17 00.00 / N 35 17.000	W 117 28 00.00 / W 117 28.000
HARPER LAKE	N 35 01 00.00 / N 35 01.000	W 117 16 00.00 / W 117 16.000
R2524		
CHARLIE AIRFIELD	N 35 35 00.00 / N 35 35.000	W 117 02 52.83 / W 117 02.880
SUPERIOR VALLEY	N 35 17 21.08 / N 35 17.350	W 117 06 15.10 / W 117 06.250
VENTURA	N 35 16 00.00 / N 35 16.000	W 117 01 00.00 / W 117 01.000

SHOSHONE		
GATE	N 35 48 45.65 / N 35 48.750	W 116 53 18.39 / W 116 53.300
DEATH	N 35 57 00.00 / N 35 57.000	W 116 45 00.00 / W 116 45.000
MILLER	N 36 02 03.00 / N 36 02.500	W 116 26 02.00 / W 116 26.600
BANGOR	N 35 39 00.00 / N 35 39.000	W 116 16 36.16 / W 116 16.600
FURANCE	N 36 11 27.00 / N 36 11.449	W 116 39 51.00 / W 116 39.850
DUNES	N 35 40 59.00 / N 35 40.983	W 116 13 10.00 / W 116 13.166

5.2.2 Sidewinder Low Level Route (Rev 2) with JEDI Transition

The Sidewinder Low Level Route (Rev 2) with JEDI Transition was developed to standardize low level training for DoD operations within the R-2508 Complex and is for local use only. This route is not a published military training route (MTR).

NOTE: All points on this route will be flown sequentially, i.e. A, B, C…M or C, J, K…M, etc.
Opposite direction flight is prohibited.

See **"Special Operating Procedures"** on the following page for specific noise sensitive area locations, avoidance information, and instructions.

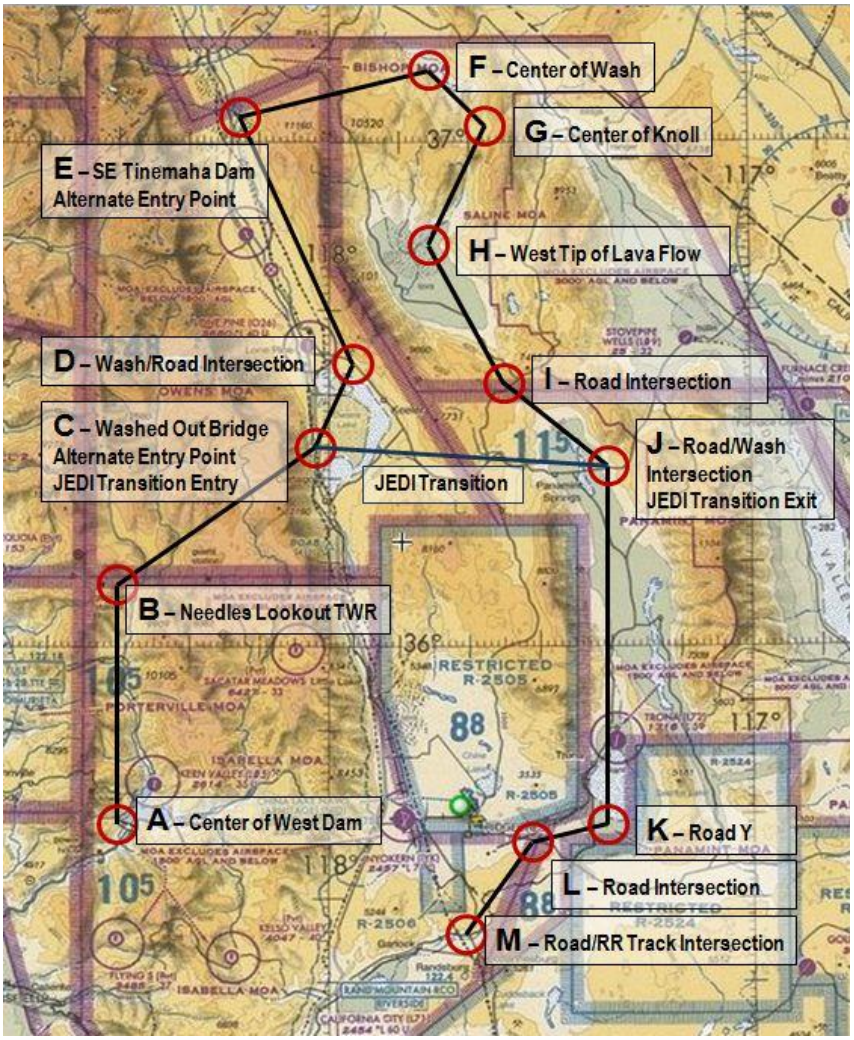


Figure 5-2- Sidewinder Low Level Route

Aircrews must comply with R-2508 Complex noise sensitive area requirements a IAW paragraph 2.4 of this handbook. **Aircrews entering the Sidewinder LL via Point A must avoid Lake Isabella and surrounding communities. See SOP (2) on following page.**

SIDEWINDER LOW LEVEL (Rev 2)
11 Feb 2015

CAUTION: These are R-2508 procedural controls for local use only. Points will be flown sequentially (i.e. A, B, C…M or C, J, K…M, etc). OPPOSITE DIRECTION IS PROHIBITED.

The SIDEWINDER and JEDI Transition are not published MTRs.

ROUTE DESCRIPTION:

PT	Lat/Long	Pt Description/Elevation
A	N 35 38.75 W118 28.94	Ctr of West Dam/2575
B	N 36 06.60 W118 29.12	Needles Lookout Twr/8107
C	N 36 24.74 W118 00.57	Washed Out Bridge/3615
D	N 36 35.61 W117 58.53	Wash/Road Int/3635
E	N 37 02.88 W118 12.79	SE Tinemaha Dam/3894
F	N 37 09.18 W117 46.19	Center of Wash/2956
G	N 37 02.17 W117 37.09	Center of Knoll/4738
H	N 36 47.95 W117 45.69	West Tip Lava Flow/1352
I	N 36 30.84 W117 34.05	Road Int/6109
J	N 36 20.69 W117 21.08	Road/Wash Int/2093
K	N 35 39.34 W117 21.62	Road Y/1624
L	N 35 36.61 W117 31.56	Road Int/2480
M	N 35 25.40 W117 40.32	Road/RR Int/2785

ALTITUDE: ALTITUDE: NLT 200' AGL to 3000' AGL (points A to B); NLT 200' AGL (points B to K); NLT 500' AGL (points K to M). Climb as required to avoid noise sensitive areas and airports (note 8).

ROUTE WIDTH – 2 NM either side of centerline.

Special Operating Procedures:

(1) Entry Procedure: Prior to entry notify Joshua of intentions and planned Entry/Exit point. Above 3000 AGL and prior to route entry make intentions call on Low Level Common (315.9). Give way to any traffic already established on the route prior to entry.

(2) A to B remain above 3000 AGL until 3 NM North of Kern Valley Airport to avoid Lake Isabella and surrounding communities.

(3) Alternate Entry: This is a procedural control and traffic may enter at any point. Preferred alternate entry points are C and E.

(4) Alternate Exit: This is a procedural control and traffic may exit at any point. Preferred alternate exit points are H and K.

(5) All aircraft operating on the Sidewinder/Jedi Transition will utilize the R-2508 low altitude common frequency 315.9. When entering low level environment transmit in the blind call sign, number and type of aircraft, and intentions. Monitor 315.9 until exiting low altitude regime. Repeat calls entering new areas, or crossing ridge lines.

(6) Slower aircraft (i.e. C-12, T-34) may be on the route at the same time. Use caution for airspeed variations that may exist between aircraft. Aircraft being overtaken has the right of way.

(7) To mitigate the risk of opposite direction traffic, offset right of centerline when transiting saddles between valleys. Rising terrain may mask advisory calls.

(8) Avoid all noise sensitive areas by 3000'AGL or 3000' laterally. Avoid all airports along route by 1500' AGL or 3 NM.

(9) Point B to C, avoid the extremely noise sensitive areas of Olancha and Cartago.

(10) Point C to D, avoid the extremely noise sensitive areas of Keeler and Lone Pine. Caution: intensive hang glider activity in the vicinity of Dolomite and northeast shore of Owens lake.

(11) Caution: high migratory bird activity between F and H during daylight hours.

(12) **CAUTION**: Possible merging traffic from aircraft on Jedi Transition (approaching from west via Point C). Sidewinder users offset east of Point J for deconfliction. Sidewinder users make mandatory radio call approaching Point J "Call sign, Sidewinder, approaching Point Juliet". Make calls on 315.9

(13) Point J to K. 198' multi unlit towers N35°53.797 W117°17.558. Avoid Trona Airport by 1500' AGL or 3 NM.

(14) Point K to M. Watch for traffic northbound to China Lake initial at 4000' MSL.

(15) Point L to M, route transits underneath instrument procedure at NID (arc and final approach). Use caution if exiting route prior to point M.

(16) Conflicts: A to L: IR-236; B to D: VR-1255; E to I: VR-1205-1255-1262; I to L: VR-1262, IR-200; K to M: IR-200-211.

JEDI TRANSITION: At Point C proceed east to Point J. **CAUTION**: Possible merging Sidewinder traffic from the north via Point I. Jedi users offset west of Point J for deconfliction. Jedi users make mandatory radio call approaching Point J "Call sign, Jedi Transition, approaching Point Juliet". Make calls on 315.9.

5.3 Special Considerations

Special considerations include:

- Severe Weather Areas
- Open Skies Treaty Flights
- Reporting Suggestions for General Complex Changes (R-2508 Situation Report).

5.3.1 Severe Weather Areas

The Severe Weather Areas were developed to provide a method by which the FAA could request portions of the R-2508 Complex during periods of inclement weather. By letter of agreement, the FAA can request portions of R-2502N/E, R-2515, R-2524, Isabella, Barstow, and Panamint Work Areas.

- The Severe Weather Areas are requested and released by specific altitude blocks and times (i.e. Area 4 at or above FL290). If required, CCF can reactivate any released airspace in 20 minutes.
- Severe Weather Areas will only be released to the FAA with the consent of the using agencies after close examination of mission requirements of scheduled users.

Users should carefully consider mission requirements when responding to requests to release portions of their scheduled airspace. Aircrews shall be familiar with the dimensions of the Severe Weather Areas.

Area Definitions are as follows:

Area (1)	That portion of R-2515 that lies East of the boundary formed by following the NID 152° radial from 35°21’25”N/117°35’31”W direct to 34°51’14”N/117°26’36”W, then continuing east to encompass the Barstow MOA, Barstow East and Barstow West ATCAAs. This includes the overlapping portion of R-2515 and the Barstow MOA/ ATCAAs that are part of Area 5.
Area (2)	That portion of R-2515 that lies West of the boundary formed by following the NID 152° radial from 35°21’25”N/117°35’31”W direct to 34°51’14”N/117°26’36”W. This includes the overlapping portion of R-2515 that is part of Area 5.
Area (3)	That portion of the Isabella MOA/ATCAA that lies southwest of the PMD 330° radial, from 36°06’31”N/118°35’04”W south along the western most boundary of R-2508 to 34°48’40”N/118°07’34”W direct to point of beginning.
Area (4)	That portion of the Panamint MOA/ATCAA that lies southeast of the BTY 182° radial, from 36°26’04”N/116°53’05”W southeast along the eastern most boundary of R-2508 to 35°34’30”N/116°23’33”W. Thence along the northern boundary of R-2502N to 35°37’45”N/116°55’23”W, then north along the boundary of R-2524 to 35°47’45”N/116°55’23”W direct to 35°47’47”N/117°02’12”W direct to point of beginning.
Area (5)	That portion of R-2515 that lies south of the FIM 049° radial, from 34º48’00”N/117º47’28”W direct to 35º11’03”N/116º49’03”W, then continuing south to encompass the Barstow MOA, and the Barstow East and Barstow West ATCAAs.

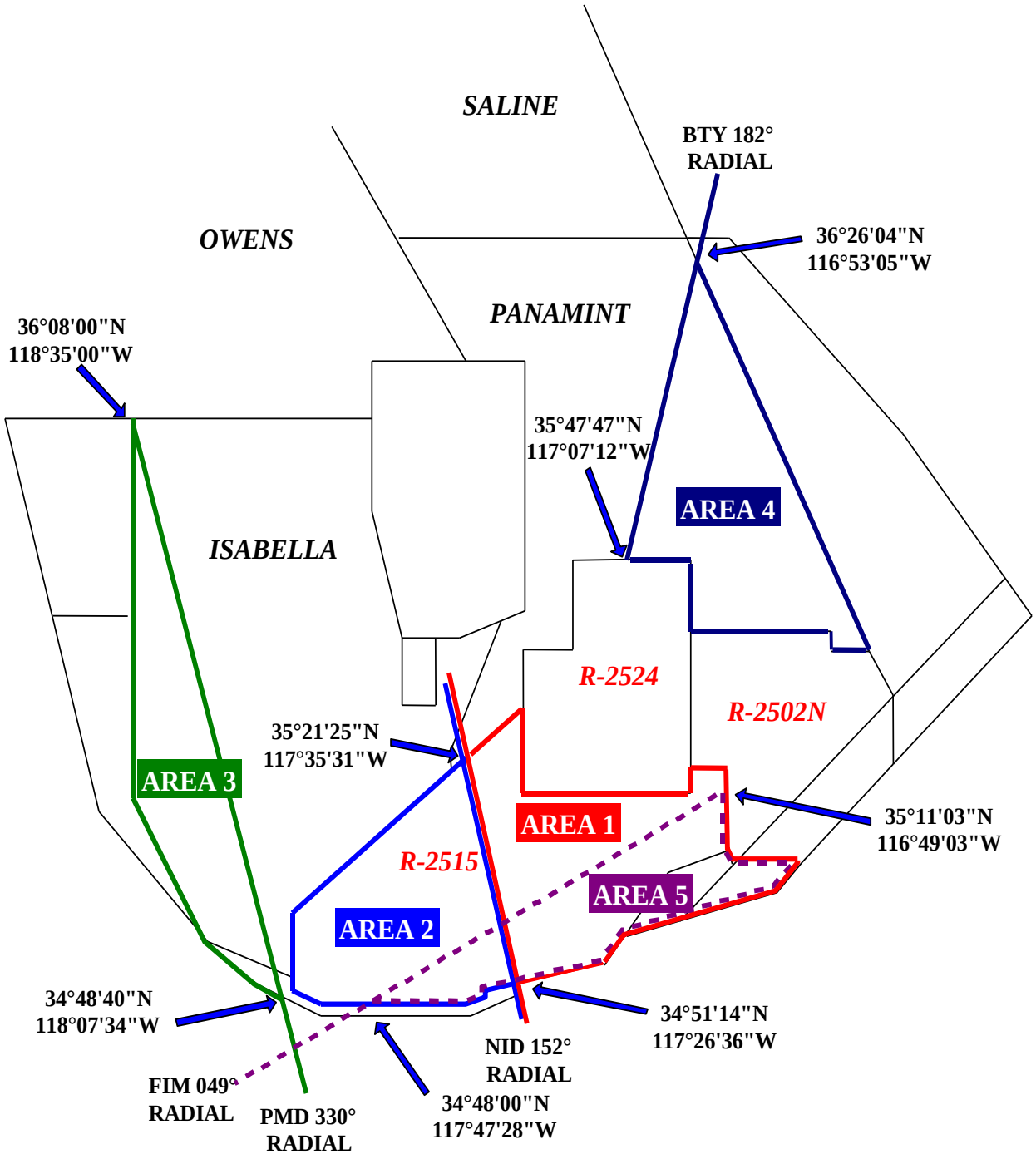


Figure 5-3. *Severe Weather Areas*

5.3.2 Open Skies Treaty Flights

Treaty provisions state that Open Skies flights take precedence over regular air traffic and allow flights through all Special Use Airspace.

CCF is the single point of contact to Joshua Approach, users, and Controlling Agencies for notification of proposed Open Skies flights in the R-2508 Complex. Upon notification, CCF will advise users/agencies of the intended flight path through Complex airspace.

- All users and agencies should be prepared to review and, if necessary, modify their flight requirements for R-2508 Complex airspace based on the proposed overflight window.

- Notice of the actual times and airspace affected by the Open Skies flight plan will be identified by CCF, as those details become available.

5.3.3 Reporting Suggestions for General Complex Changes (R-2508 Situation Report)

The R-2508 Situation Report (SITREP), **Appendix D**, provides R-2508 Complex users, controllers, and other interested parties with an informal method to identify and report circumstances or services that enhance or degrade their mission within the R-2508 Complex.

The SITREP provides R-2508 Complex management with informal user feedback and points out the positive aspects or needed changes to operating policies and procedures. Support by R-2508 Complex users is vital for this program to be effective.

SITREP reviews may include playback of Air Traffic Control radar and audio data. The FAA can only provide this data within 15 days of the occurrence. Therefore **timely submission of SITREPs is critical to obtaining playback data** used to improve policies, procedures, and ensuring continued safe operations within the R-2508 Complex.

NOTE: The information contained in the SITREP is for *Military Use ONLY* and for the exclusive purpose of improving air operations within the R-2508 Complex. The information (call signs and crew names) contained within the SITREP **SHALL NOT** be released.

This form does not replace formal reporting procedures such as the Hazardous Air Traffic Report (HATR), Operational Hazard Report (OHR), Hazard Reports (HAZREPS) or Near Mid-Air Collision Report (NMAC), nor does it address situations that will be reported and handled as flight or controller violations.

To submit a SITREP:

Submit the information via the R-2508 SITREP form located at:

http://www.edwards.af.mil/r-2508.asp

E-mail or mail all pages to CCF (sees page 1-1 for address information).

Upon receipt, CCF will:

1. Notify the submitter upon receipt.
2. Process the report for situation analysis and recommendations.
3. Submit the report and findings to the CCB.

The CCB will assign appropriate action for each situation.

6.0 Operating Procedures for R-2508 Major Work Areas

This chapter discusses the operating procedures for the following:

6.1 Isabella MOA/ATCAA
6.2 Owens MOA/ATCAA
6.3 Saline MOA/ATCAA
6.4 Panamint MOA/ATCAA

This chapter covers the following for each specific work area:

- Description and Operations
- Special Considerations
- Dimensions

The scheduling agency for these MOAs/ATCAAs is the CCF:

Hours of Operation		Contact Numbers
0600–1800 M-F		
	Phone:	DSN 527-2508 (661) 277-2508
	E-mail:	2508ccf@us.af.mil

Published hours of activation are: Monday - Friday 0600–2200L, All other times by NOTAM.
Published hours of operation for R-2508 is continuous

6.1 Isabella MOA/ATCAA

6.1.1 Description and Operations

The Isabella MOA covers 200 feet AGL to 17,999 MSL and the ATCAA covers FL180 to FL600 (see Figures 4-1 and 4-2). Isabella is typically used for the following activities:

- Primary holding point for armed aircraft using R-2505 and test aircraft using R-2524 Research, Development, Test, and Evaluation (RDT&E) and Operational Test and Evaluation (OT&E)
- Rapid maneuvering and ACM conducted over Saltdale/Koehn Lake (heavy use by Edwards AFB at all altitudes)
- Arrivals and departures from NAWS China Lake (R-2505)
- Orbit of refueling aircraft in support of restricted area operations
- Crossing of several Military Training Routes (MTRs) (see Figure 6-1)

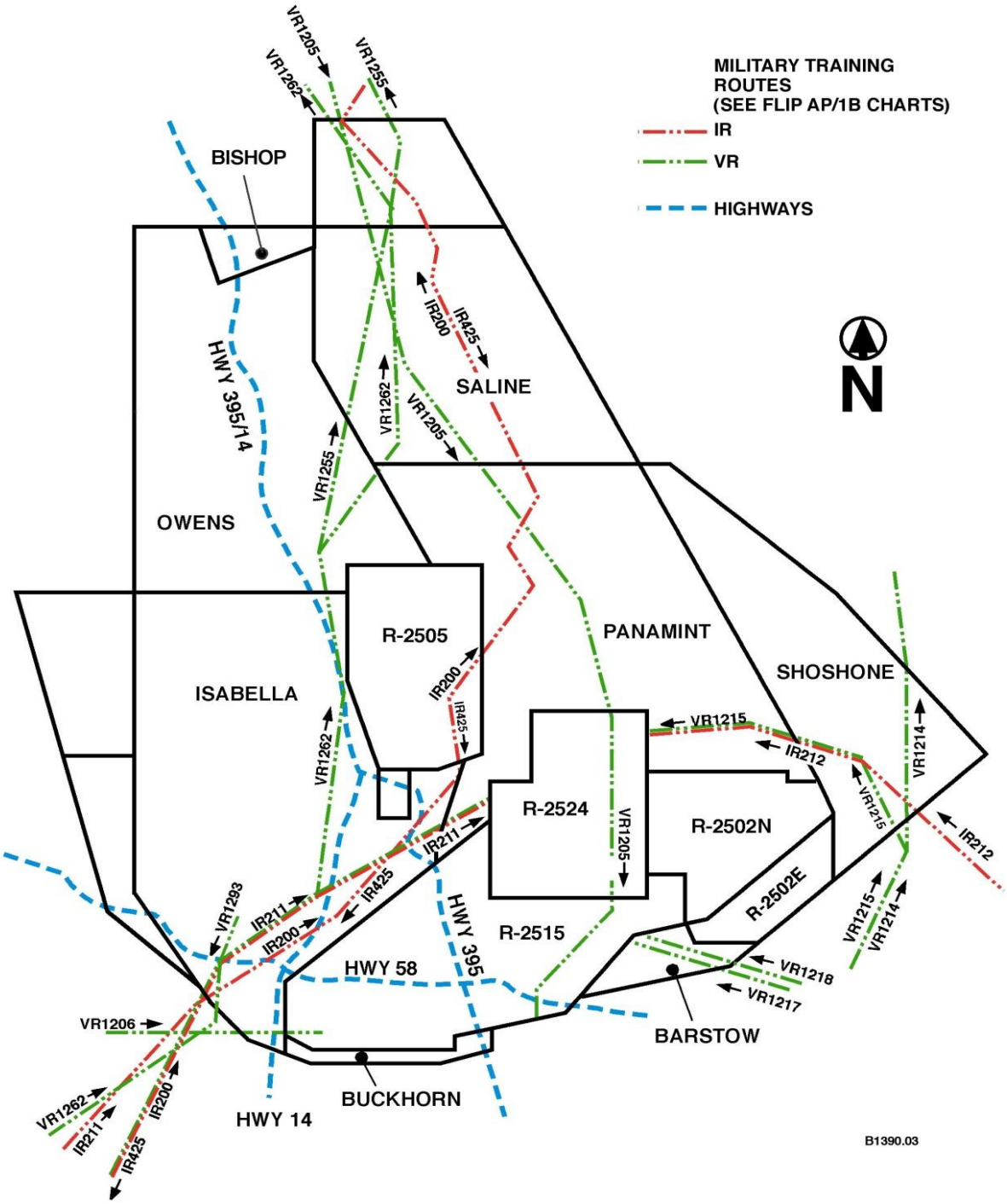


Figure 6-1. *Military Training Routes (MTRs) and Highways.*

6.1.2. Special Considerations

6.1.2.1. Aircraft use the **Edwards AFB local altimeter.**

6.1.2.2. The MOA excludes **Mojave Air & Space Port Class D Surface Area**: Surface to and including 4,800 feet MSL within a 4.3 NM radius of the Mojave Airport, excluding that airspace east and parallel to a line ½ mile west of R-2515.

6.1.2.3. Altitudes in the MOA exclude the airspace up to and including 3,000 feet AGL floor over **Domeland Wilderness Area**, as it existed in 1977. The airspace also excludes the airspace up to and including 1,500 feet AGL within a 3 NM radius of the following airports:

- Rosamond
- Lloyds
- California City
- Tehachapi
- Inyokern-Kern County
- Kelso Valley Ranch
- Flying S Ranch
- Kern Valley
-
- Sacatar-Meadows
- Mountain Valley
- Kern County

6.1.2.4. See Chapter 2, *R-2508 Complex Description and Use*, for more details concerning the following activities:

- Sailplane
- Ultralight
- General aviation VFR Transit routes (see Figure 2-4)
- Parachute
- Land Management helicopters and fixed-wing aircraft
- Populated areas: Inyokern, Lake Isabella, Kernville, Johannesburg, Randsburg, California City, Mojave, and Sacatar (see Figure 2-7)
- Mojave Airport Class “D” Airspace
- Randsburg Mine (blasting)
- Trona Controlled Firing Area (CFA/Trona Corridor)
- Severe Weather Area 3 (see subsection 5.3.1)

6.1.2.5. High Density Traffic Area

The south-east portion of Isabella is a high density traffic area where a large variety of missions are conducted by multiple platforms simultaneously. These activities include, but are not limited to, air-to-air refueling in Isabella Refueling Area, Edwards AFB arrival and departure traffic, Superior Valley transitions, Palmdale Plant 42 arrivals and departure traffic, UAV and rocket operations, and Mojave Test Pilot School operations. Aircrews operating in this area should expect numerous traffic calls and request traffic updates as necessary to maintain positive situational awareness.

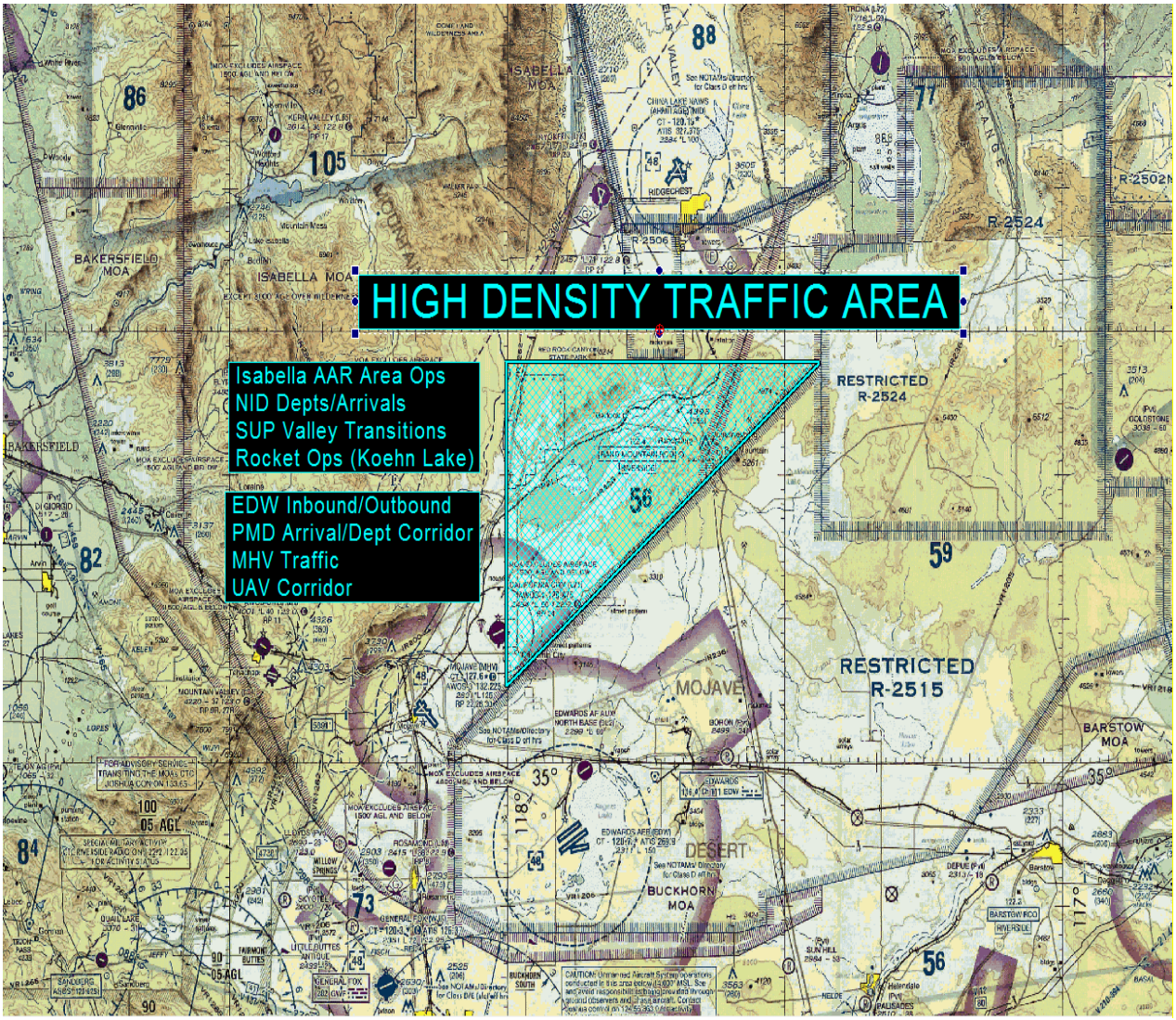


Figure 6-2. High Density Traffic Area

6.1.2.6. Dragon Transition (DT): The DT was created to define a predictable flight path for north and south bound transitions through Isabella by U2/ER2 aircraft. Its primary purpose is to de-conflict these aircraft from air refueling operations within Isabella Refueling Area and enhancing the overall situational awareness of all R-2508 participants. The DT does not relieve aircrews of the responsibility to maintain VFR and operate See and Avoid nor is it meant to imply segregated airspace. Aircrews are responsible for initiating/flying the DT; JOSHUA will not provide vectors.

6.1.2.6.1. Procedures: North and south bound traffic utilizing the DT must remain at or below F180 or at or above FL210 within 5 miles of ROMOF. **NOTE:** ROMOF is used as an R-2508 entry point at FL190 and exit point at FL200 for NAS Lemoore F-18 traffic.

6.1.2.6.2. Description/Location: DT is 5 miles wide, runs north/south between OWENS/ISABELLA border and entry/exit point ROSIE. The DT is defined by the following coordinates:

Beginning at 36° 08.18”N 118°35.05”W;
east to 36° 08.18”N 118°28.96”W;
south to 35° 15.58”N 118°28.96”W;
southeast 34° 56.44’N 118°13.47”W;
southeast to 34° 51.30”N 118° 07.04”W;
west to 34° 51.30”N 118° 13.03”W;
northwest 34° 56.44’N 118° 21.38”W;
northwest 35° 15.58”N 118° 34.89”W;
to the point of beginning.

Dragon Transition

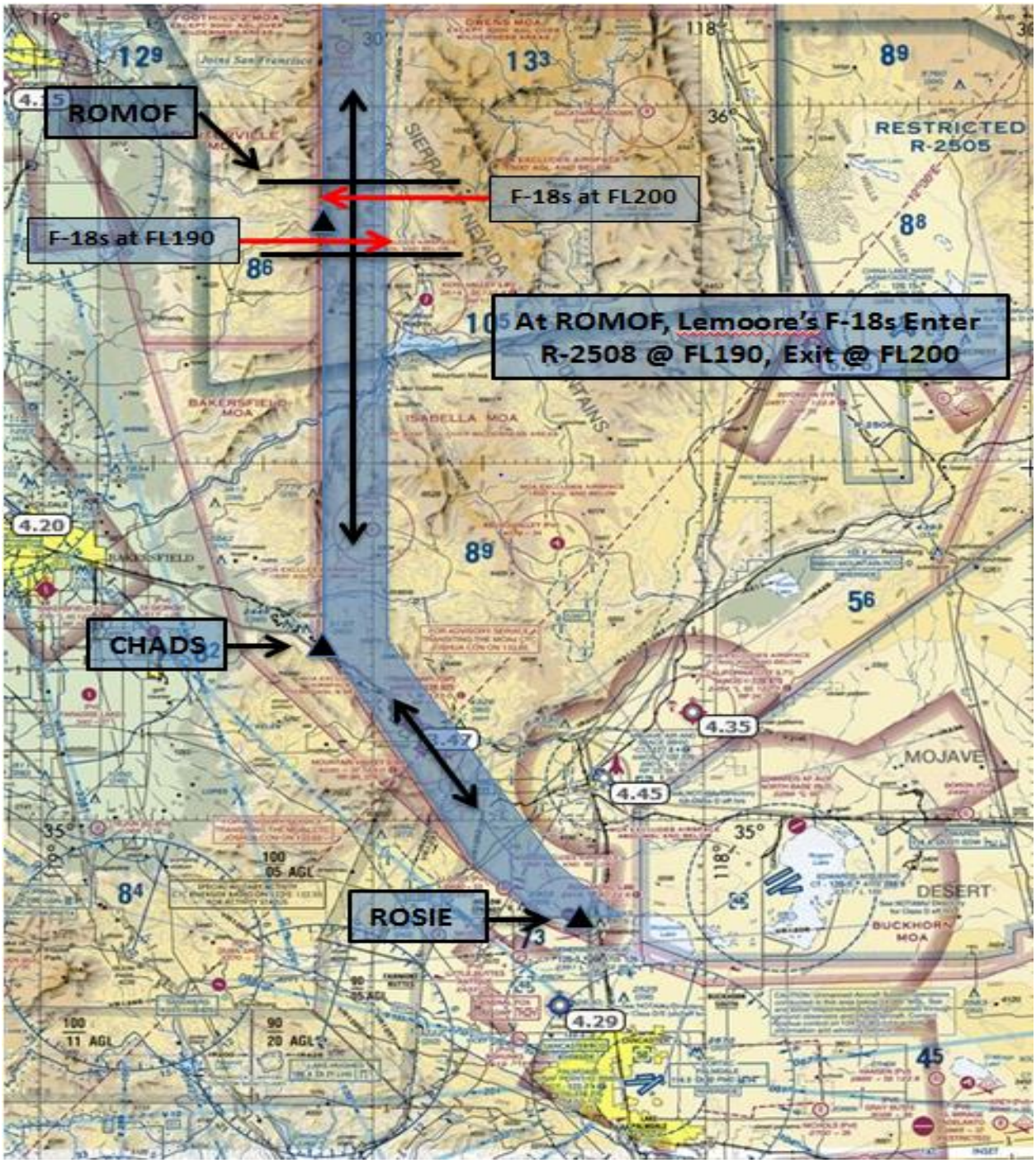


Figure 6-3. Dragon Transition

6.1.2 Dimensions

The dimensions of the **Isabella MOA** are:

Beginning at	36°08’00”N/118°35’03”W;
thence direct	36°08’00”N/117°53’03”W;
thence south and east along the boundary of R-2505 to	
	35°39’15”N/117°29’26”W;
thence direct	35°21’00”N/117°38’33”W;
thence direct	35°19’20”N/117°38’33”W;
thence along the western boundary of R-2515 to	
	34°49’40”N/118°05’48”W;
thence direct	34°48’00”N/118°05’48”W;
thence direct	34°51’00”N/118°14’03”W;
thence direct	34°56’00”N/118°21’03”W;
thence direct	35°15’00”N/118°35’03”W;

Thence direct to the point of beginning.

6.2 Owens MOA/ATCAA

6.2.1 Description and Operations

The Owens MOA covers 200 feet AGL to 17,999 MSL and the ATCAA covers FL180 to FL600. The Bishop MOA underlies the northeast corner of the airspace under the Owens ATCAA. Be aware of the difference in airspace size.

Owens is typically used for the following activities:

- OT&E/RDT&E, ACM, and training by units from NAS Lemoore, NAWS China Lake, Fresno ANG, and Edwards AFB
- Crossing of several MTRs (see Figure 6-2)

NOTE: Owens MOA/ATCAA has the <u>highest density</u> of military use within the Complex. Aircrews should use caution in crossing the Owens Valley east to west/west to east. Typical operations run north to south with multiple aircraft operating at varying altitudes.

6.2.2 Special Considerations

Aircraft use the China Lake local altimeter.

Altitude excludes 3,000 feet AGL floor over **Kings Canyon National Park, Sequoia National Park, and John Muir Wilderness Area**. Altitude also excludes 1,500 feet AGL within a 3 NM radius of the **Lone Pine and Independence airports**.

See Chapter 2, *R-2508 Complex Description and Use*, for more details concerning the following activities:

- Sailplane
- Ultralight
- Hang gliders

- General aviation VFR Transit routes (see Figure 2-4)
- Land Management helicopters and fixed-wing aircraft
- **Sequoia and Kings Canyon National Parks, and John Muir Wilderness Area** (see Figure 2-5)
- Populated areas: **Lone Pine, Independence, Olancha, Cartago, Keeler** (see Figure 2-7)
- Charted airports
- Little Lake Hunting Club

NOTE: Avoid establishing holding patterns and/or conducting ACM activities over communities within the Owens Valley.

6.2.3 Dimensions

The dimensions of the Owens MOA **are:**

Beginning at	37°12’00”N/118°35’03”W;
thence direct	37°12’00”N/118°26’03”W;
	37°02’00”N/118°20’03”W;
	37°09’00”N/118°00’03”W;
	36°46’00”N/118°00’03”W;
	36°14’00”N/117°36’03”W;
thence along the northern and western boundary of R-2505 to	
	36°08’00”N/117°53’03”W;
thence direct	36°08’00”N/118°35’03”W;

Thence direct to the point of beginning.

The dimensions of the **ATCAA** are:

Beginning at	37°12’00”N/118°35’03”W;
thence direct	37°12’00”N/118°00’03”W;
thence direct	36°46’00”N/118°00’03”W;
thence direct	36°14’00”N/117°36’03”W;
thence along the northern and western boundary of R-2505 to	
	36°08’00”N/117°53’03”W;
thence direct	36°08’00”N/118°35’03”W;

Thence direct to the point of beginning.

6.3 Saline MOA/ATCAA

6.3.1 Description and Operations

The Saline MOA covers 200 feet AGL to 17,999 MSL and the ATCAA covers FL180 to FL600. Saline is typically used for the following activities:

- OT&E, RDT&E, ACM, and training by NAS Lemoore, NAWS China Lake, Fresno ANG, and Edwards AFB
- Low and high-altitude refueling activities (Saline Valley)
- Crossing of several MTRs (see Figure 6-2)
- Special platform aircraft orbits

6.3.2 Special Considerations Aircraft use the China Lake local altimeter.

Altitudes do not include 3,000 feet AGL and below over Death Valley National Park matching the line described below.

See Chapter 2, *R-2508 Complex Description and Use*, for more details about the following activities:

- Ultra-light
- General aviation VFR Transit routes (see Figure 2-4)
- Land Management helicopters and fixed-wing aircraft
- Death Valley National Park (see Figure 2-6)
- Populated areas: Stove Pipe Wells, Furnace Creek (see Figure 2-7)
- Charted airports

CAUTION: Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs. The "saddle" on the ridgeline is a narrow passage between the MOAs and is served by VR1205, which inherently possesses a high potential for a head-on collision. Use standard "rules-of-the-road" while approaching and passing through the saddle. Pilots should fly to the right side when passing through the saddle area. This helps prevent head-on collisions with aircraft passing in the opposite direction.

6.3.3 Dimensions

The dimensions of the **Saline MOA and ATCAA** are:

Beginning at	37°12'00"N/118°00'03"W;
thence direct	37°12'00"N/117°20'03"W;
thence direct	36°30'00"N/116°55'03"W;
thence direct	36°30'00"N/117°48'03"W;
thence direct	36°46'00"N/118°00'03"W;

Thence direct to the point of beginning.

The boundary of Death Valley National Park within Saline is:

Beginning at	37°01'19"N/117°13'39"W;
thence direct	37°01'19"N/117°13'50"W;
thence direct	37°05'01"N/117°18'54"W;

thence direct	37°05’05”N/117°33’47”W;
thence direct	36°58’57”N/117°33’47”W;
thence direct	36°58’56”N/117°34’05”W;
thence direct	36°53’55”N/117°34’11”W;
thence direct	36°53’51”N/117°35’16”W;
thence direct	36°51’10”N/117°35’16”W;
thence direct	36°51’08”N/117°36’20”W;
thence direct	36°47’58”N/117°36’18”W;
thence direct	36°47’51”N/117°37’07”W;
thence direct	36°40’21”N/117°37’08”W;
thence direct	36°40’21”N/117°36’03”W;
thence direct	36°37’45”N/117°36’05”W;
thence direct	36°37’45”N/117°31’44”W;
thence direct	36°36’52”N/117°31’44”W;
thence direct	36°36’56”N/117°30’53”W;
thence direct	36°36’38”N/117°30’26”W;
thence direct	36°36’31”N/117°29’54”W;
thence direct	36°35’54”N/117°29’43”W;
thence direct	36°35’27”N/117°28’59”W;
thence direct	36°35’29”N/117°28’41”W;
thence direct	36°34’21”N/117°28’32”W;
thence direct	36°33’29”N/117°28’45”W;
thence direct	36°32’39”N/117°30’16”W;
thence direct	36°31’56”N/117°30’08”W;
thence direct	36°31’29”N/117°28’20”W;
thence direct	36°30’16”N/117°25’34”W;
thence direct	36°30’00”N/117°25’35”W.

6.4 Panamint MOA/ATCAA

6.4.1 Description and Operations

The Panamint MOA covers 200 feet AGL to 17,999 MSL, and the ATCAA covers FL180 to FL600. Panamint is typically used for the following activities:

- Support of R-2502N, R-2502E, and R-2524 operations by Nellis AFB, NAWS China Lake, Fresno ANG, and Edwards AFB
- OT&E, RDT&E, ACM, low-altitude training, and large-scale exercises
- Crossing of several MTRs (see Figure 6-2)
- Low and high-altitude refueling
- UAS Transitions to and from Creech AFB at FL190 and FL200

6.4.2 Special Procedures

Aircraft use the China Lake local altimeter.

The MOA excludes 1,500 feet AGL and below within a 3 NM radius of the Trona airport and 3,000 feet AGL and below over 1977 boundaries of Death Valley National Monument north and east of the line described below.

See Chapter 2, *R-2508 Complex Description and Use*, for more details about the following activities:

- Ultralight
- General aviation VFR Transit routes (see Figure 2-4)
- Land Management helicopters and fixed-wing aircraft
- Death Valley National Park (see Figure 2-6)
- Populated areas: Trona (see Figure 2-7)
- Charted airports
- Trona CFA/Trona Corridor
- Panamint Valley Mining (blasting)
- Severe Weather Area (4) (see subsection 5.3.1)

CAUTION: Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs. The "saddle" on the ridgeline is a narrow passage between the MOAs and is served by VR1205, which inherently possesses a high potential for a head-on collision.

Use standard "rules-of-the-road" while approaching and passing through the saddle. Pilots should fly to the right side when passing through the saddle area. This helps prevent head-on collisions with aircraft passing in the opposite direction.

6.4.3 Dimensions

The dimensions of the **Panamint MOA and ATCAA** are:

Beginning at 36°30'00"N/117°48'03"W;
thence direct 36°30'00"N/116°55'03"W;
thence direct 35°34'30"N/116°23'33"W;
thence along the northern boundary of R-2502N, the eastern, northern, and western boundaries of R-2524, and the northwestern boundary of R-2505 to
35°19'20"N/117°38'33"W;
thence direct 35°21'00"N/117°38'33"W;
thence direct 35°39'15"N/117°29'26"W;
thence along the eastern and northern boundary of R-2505 to
36°14'00"N/117°36'03"W;
Thence direct to the point of beginning.

The boundary of Death Valley National Park within Panamint is:

Beginning at 36°30'00"N/117°25'35"W;
thence direct 36°29'46"N/117°25'36"W;

thence direct	36°27’14”N/117°22’01”W;
thence direct	36°25’41”N/117°22’01”W;
thence direct	36°25’34”N/117°20’58”W;
thence direct	36°26’16”N/117°19’11”W;
thence direct	36°25’00”N/117°18’36”W;
thence direct	36°25’10”N/117°17’57”W;
thence direct	36°24’15”N/117°17’23”W;
thence direct	36°23’48”N/117°15’36”W;
thence direct	36°13’57”N/117°15’33”W;
thence direct	36°13’55”N/117°09’09”W;
thence direct	36°08’44”N/117°09’04”W;
thence direct	36°08’40”N/117°09’04”W;
thence direct	36°06’58”N/117°03’47”W;
thence direct	36°05’54”N/117°04’33”W;
thence direct	36°05’28”N/117°03’54”W;
thence direct	36°01’42”N/117°02’34”W;
thence direct	35°58’53”N/117°04’31”W;
thence direct	35°58’37”N/117°05’17”W;
thence direct	35°57’13”N/117°06’45”W;
thence direct	35°55’23”N/117°06’35”W;
thence direct	35°54’11”N/117°05’24”W;
thence direct	35°53’10”N/117°01’39”W;
thence direct	35°52’54”N/116°55’21”W;
thence direct	35°47’44”N/116°55’22”W;
thence direct	35°47’44”N/116°36’05”W;
thence direct	35°39’03”N/116°36’01”W;
thence direct	35°39’03”N/116°26’06”W.

7.0 Operating Procedures for Peripheral MOAs/ATCAAs

This chapter discusses the operating procedures for the following MOAs and ATCAAs:

7.1 Bakersfield (MOA and ATCAA)
7.2 Barstow (MOA and East & West ATCAAs)
7.3 Bishop (MOA)
7.4 Buckhorn (MOA and ATCAA)
7.5 Daggett Shelf
7.6 Deep Springs (ATCAA)
7.7 Porterville (MOA and ATCAA)
7.8 Shoshone (MOA and North & South ATCAAs)

This chapter first discusses general information relating to all peripheral MOAs and ATCAAs, and then includes the following for each area, as needed:

- Scheduling
- Special Procedures
- Dimensions

7.1 Bakersfield (MOA and ATCAA)

The Bakersfield MOA covers 2,000 feet AGL to 17,999 MSL, while the ATCAA covers FL180 to FL600 (see Figures 4-1 and 4-2). Bakersfield is outside of R-2508 but may be scheduled in conjunction with Isabella Work Area operations.

7.1.1 Scheduling

The Bakersfield MOA/ATCAA must be scheduled in advance with CCF to ensure actions are pre-coordinated with Los Angeles or Oakland Air Route Traffic Control Center (ARTCC). Scheduled events must additionally request the Bakersfield MOA/ATCAA real time with Joshua Approach**.** The MOA is activated intermittent by NOTAM, aircrews must provide a 2 hour notice at minimum in order to issue NOTAM, preferably request day prior.

7.1.2 Special Procedures

For both the MOA and ATCAA, use the Edwards AFB local altimeter.

7.1.3 Dimensions

Both the MOA and the ATCAA share the same dimensions:

Beginning at	35°40’00”N/118°51’03”W;
thence direct	35°40’00”N/118°35’03”W;
thence direct	35°15’00”N/118°35’03”W;
thence direct	34°56’00”N/118°21’03”W;
thence direct	35°14’00”N/118°42’03”W;

Thence direct to the point of beginning.

7.2 Barstow (MOA and East & West ATCAAs)

The Barstow MOA covers 200 feet AGL to 17,999 MSL. Both Barstow East and Barstow West ATCAAs cover FL180 to FL600 (see Figures 4-1 and 4-2). Barstow is used generally for the following purposes:

- Flight test operations at Edwards AFB
- Helicopter and fixed wing aircraft entering, exiting, or awaiting entry into R-2502N and R-2502E
- Military traffic on VR1217/VR1218 (see Figure 6-2)

7.2.1 Scheduling

Times of use are Monday to Friday, 0600–2200. Other times by NOTAM.

7.2.2 Special Procedures

For Barstow MOA and ATCAAs, use the Edwards AFB local altimeter.

Aircrews operating in Barstow or Shoshone must ensure that they request work areas Barstow East, Barstow West, Shoshone North, or Shoshone South ATCAA airspace in conjunction with the appropriate lower MOA airspace when needed.

The ATCAAs over the Barstow MOA have a different boundary than the airspace underneath (see Figures 4-1 and 4-2). Aircrews must be aware of these boundary differences to prevent spillouts into LA ARTCC airspace.

Aircrews requiring <u>FL240 and above within Barstow East ATCAA</u> must request those altitudes <u>real time</u> with ATC Facility/MRU and can expect a maximum of 15-minute delay in receiving clearance.

7.2.3 Dimensions

For the Barstow MOA, the dimensions are:

Beginning at	35°07’00”N/116°34’03”W;
thence direct	35°01’20”N/116°41’03”W;
thence direct	34°56’20”N/117°09’03”W;

Thence along the eastern border of R-2515 and the southern boundary of R-2502E to the point of beginning.

For the Barstow East ATCAA, the dimensions are:

Beginning at	35°07’00”N/116°47’48”W;
thence direct	35°07’00”N/116°34’03”W;
thence direct	35°01’20”N/116°41’03”W;
thence direct	34°58’30”N/116°57’48”W;

Thence direct to the point of beginning.

For the Barstow West ATCAA, the dimensions are:

Beginning at	35°06’30”N/116°58’43”W;
thence direct	35°08’50”N/116°48’43”W;
thence direct	35°07’00”N/116°47’48”W;
thence direct	34°58’30”N/116°57’48”W;
thence direct	34°56’20”N/117°09’03”W;

Thence direct to the point of beginning.

7.3 Bishop (MOA)

The Bishop MOA covers 200 feet AGL to 17,999 MSL (see Figure 4-1). Bishop MOA is located in the northeast corner of the Owens Work Area.

7.3.1 Scheduling

Bishop MOA must be scheduled in advance with CCF to ensure actions are pre-coordinated with LA or Oakland ARTCC. Aircrews must request use of the Bishop MOA real time with Joshua Approach.

Times of use are Monday to Friday, 0600–2200. Other times by NOTAM.

7.3.2 Special Procedures

For the Bishop MOA, use the Bishop local altimeter when in use by Oakland ARTCC. Use the China Lake local altimeter when in use by High Desert TRACON/LA ARTCC.

7.3.3 Dimensions

The dimensions of the MOA are:

Beginning at	37°12’00”N/118°26’03”W;
thence direct	37°12’00”N/118°00’03”W;
thence direct	37°09’00”N/118°00’03”W;
thence direct	37°02’00”N/118°20’03”W;

Thence direct to the point of beginning.

7.4 Buckhorn (MOA and ATCAA)

The Buckhorn MOA covers 200 feet AGL to 17,999 MSL, while the ATCAA covers FL180 to FL600 (see Figure 4-1 and 4-2). Buckhorn is used extensively for test missions at Edwards AFB.

7.4.1 Scheduling

Times of use are Monday to Friday, 0600–2200. Other times by NOTAM.

7.4.2 Special Procedures

For both the MOA and the ACTAA, aircraft use the Edwards AFB local altimeter.

7.4.3 Dimensions

The dimensions of both the MOA and the ATCAA are:

Beginning at	34°49’40”N/118°05’48”W;
thence along the southern boundary of R-2515 to	
	34°51’17”N/117°26’03”W;
thence direct	34°49’30”N/117°26’03”W;
thence direct	34°46’30”N/117°35’03”W;
thence direct	34°46’00”N/118°00’03”W;
thence direct	34°48’00”N/118°05’48”W;

Thence direct to the point of beginning.

7.5 Daggett Shelf

The Daggett Shelf consists of Barstow East ATCAA, R-2502E, and the portion of R-2508 that coincides with R-2502E, FL240 and above (see highlighted portion of Figure 2-1). It was established by a Letter of Agreement (LOA) to provide FAA relief for control of IFR traffic through the Daggett/Hector Corridor and is **not schedulable as an airspace subdivision.**

7.5.1 Command and Control

The Daggett Shelf, along with Shoshone South ATCAA airspace, remains under LA ARTCC control until Joshua Approach requests and receives control.

7.5.2 Scheduling

Aircrews requiring one or more of these areas that comprise the Daggett Shelf or Shoshone South ATCAA, FL240 or above, shall request the area(s) and altitudes from Joshua Approach and should expect up to a 15 minute delay for the transfer of airspace control from LA ARTCC to Joshua Approach.

7.5.3 Special Procedures

DO NOT enter any portion of the Daggett Shelf or Shoshone South until Joshua Approach issues specific clearance.

7.6 Deep Springs (ATCAA)

The Deep Springs ATCAA covers FL240 to FL600 (see Figure 4-2). It borders the northern border of the Saline ATCAA.

7.6.1 Scheduling

Deep Springs ATCAA must be scheduled in advance with CCF to ensure activities are pre-coordinated with LA and Oakland ARTCC.

7.6.2 Special Procedures

Aircraft use the China Lake local altimeter. Scheduled events must additionally request the Deep Springs ATCAA real time with Joshua Approach.

7.6.3 Dimensions

The dimensions of the **ATCAA** are:

Beginning at	37°12’00”N/118°00’03”W;
thence direct	37°30’00”N/118°00’03”W;
thence direct	37°30’00”N/117°30’03”W;
thence direct	37°12’00”N/117°20’03”W;

Thence direct to the point of beginning.

7.7 Porterville (MOA and ATCAA)

The Porterville MOA covers 2,000 feet AGL to 17,999 MSL, and the ATCAA covers FL180 to FL600 (see Figures 4-1 and 4-2). Porterville is outside of the R-2508 but may be scheduled in conjunction with Isabella Work Area.

7.7.1 Scheduling

Porterville MOA/ATCAA must be scheduled in advance with CCF to ensure activities are pre-coordinated with LA or Oakland ARTCC. Scheduled events must additionally request the Porterville MOA/ATCAA real time with Joshua Approach.

The MOA is activated intermittent by NOTAM, aircrews must provide a 2 hour notice at minimum in order to issues a NOTAM, preferably request day prior.

7.7.2 Special Procedures

Aircraft based at NAS Lemoore use the Fresno local altimeter. All other aircraft use the China Lake local altimeter.

Scheduled events must additionally request the Porterville MOA/ATCAA real time with Joshua Approach.

7.7.3 Porterville MOA/ATCAA Dimensions

The dimensions of both the MOA and the ATCAA are:

Beginning at	36°08’00”N/119°00’03”W;
thence direct	36°08’00”N/118°35’03”W;
thence direct	35°40’00”N/118°35’03”W;
thence direct	35°40’00”N/118°51’03”W;

Thence direct to the point of beginning.

7.8 Shoshone (MOA & North/South ATCAAs)

The Shoshone MOA covers 200 feet AGL to 17,999 MSL. The North and South ATCAAs cover FL180 to FL600 (see Figures 4-1 and 4-2). Shoshone MOA/ATCAA airspace is used for the following types of operations:

- OT&E, ACM, low-altitude training, and large-scale exercises (usually in conjunction with Panamint)
- Low-altitude tanking operations in support of large-scale exercises
- Crossing of several MTRs (see Figure 6-2)

7.8.1 Scheduling

Schedule through CCF. Times of use are Monday to Friday, 0600–2200. Other times by NOTAM.

7.8.2 Special Procedures

Aircraft use the China Lake local altimeter.

Aircrews must request use of the Shoshone MOA and ATCAAs real time with Joshua Approach.

Aircrews operating in Barstow or Shoshone must ensure that they request work areas Barstow East, Barstow West, Shoshone North, or Shoshone South ATCAA airspace in conjunction with the appropriate lower MOA airspace when needed.

The ATCAAs over the Shoshone MOA have different boundaries than the airspace underneath (see Figures 4-1 and 4-2). Aircrews must be aware of these boundary differences to prevent spill outs into LA ARTCC airspace.

Also, altitudes are restricted below 1,500 feet AGL within a 3 NM radius of the Shoshone airport and below 3,000 feet AGL over Death Valley National Park north and west of the line indicated below.

Aircrews requiring FL240 and above within Shoshone South ATCAA must request those altitudes real time with Joshua Approach. Aircrews should expect a maximum of 15-minute delay in receiving clearance to operate above FL240.

7.8.3 Shoshone Dimensions

The dimensions of the MOA are:

Beginning at	36°30’00”N/116°55’03”W;
thence direct	36°30’00”N/116°47’03”W;
thence direct	36°06’00”N/116°18’03”W;
thence direct	35°39’00”N/115°53’03”W;
thence direct	35°18’45”N/116°18’48”W;
thence direct	35°28’22”N/116°18’48”W;
thence direct	35°34’30”N/116°23’33”W;

Thence direct to the point of beginning.

The boundary of Death Valley National Park within Shoshone is:

Beginning at	35°39’03”N/116°26’06”W;
thence direct	35°39’03”N/116°21’48”W;
thence direct	35°48’14”N/116°21’49”W;
thence direct	35°48’11”N/116°29’41”W;
thence direct	35°52’17”N/116°29’43”W;
thence direct	35°58’22”N/116°26’22”W;
thence direct	35°58’23”N/116°35’47”W;
thence direct	36°10’08”N/116°35’47”W;
thence direct	36°10’11”N/116°38’58”W;
thence direct	36°17’57”N/116°39’01”W;
thence direct	36°17’58”N/116°40’33”W;
thence direct	36°18’30”N/116°41’05”W;

thence direct	36°24’54”N/116°41’04”W;
thence direct	36°24’54”N/116°40’51”W.

The dimensions of the Shoshone North ATCAA are:

Beginning at	36°30’00”N/116°55’03”W;
thence direct	36°30’00”N/116°47’03”W;
thence direct	36°06’00”N/116°18’03”W;
thence direct	35°44’15”N/115°57’48”W;
thence direct	35°28’35”N/116°18’48”W;
thence direct	35°34’30”N/116°23’33”W;

Thence direct to the point of beginning.

The dimensions of the Shoshone South ATCAA are:

Beginning at	35°44’15”N/115°57’48”W;
thence direct	35°39’00”N/115°53’00”W;
thence direct	35°18’45”N/116°18’46”W;
thence direct	35°28’35”N/116°18’46”W;

Thence direct to the point of beginning.

8.0 Operating Procedures for Individual Ranges/Restricted Areas

This chapter discusses the operating procedures for the following restricted areas:

8.1 R-2502N and R-2502E National Training Center, Fort Irwin

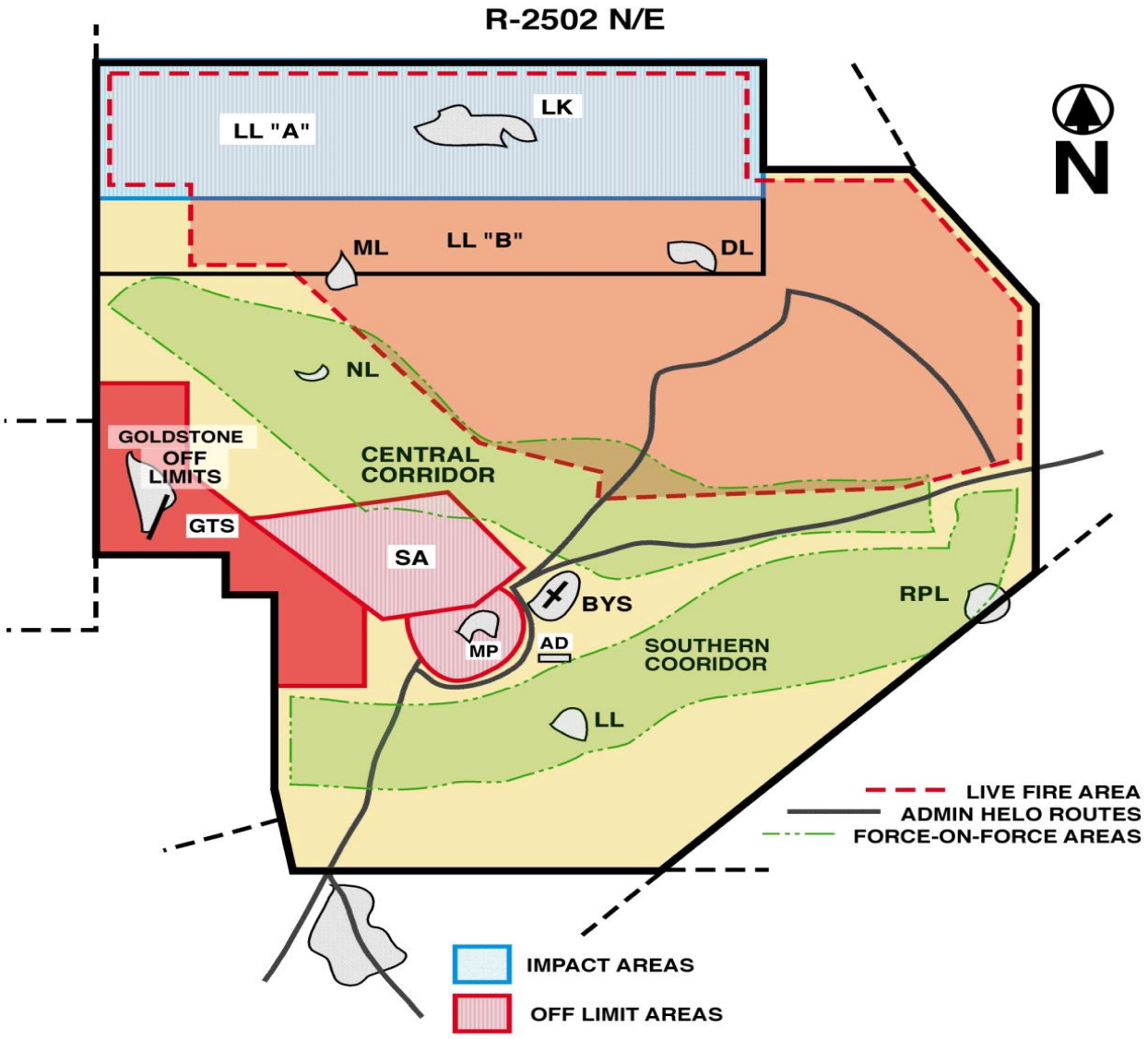
8.2 R-2505, R-2506, and R-2524 Naval Air Warfare Center, Weapons Division, China Lake

8.3 R-2515, Air Force Flight Test Center, Edwards AFB

8.1 R-2502N, R-2502E, National Training Center, Fort Irwin

R-2502N/R-2502E consists of five separate areas and purposes (see Figure 8-1):

Area	Purpose
1. Southern Engagement Corridor	Force-on-Force battle simulation area
2. Central Engagement Corridor	Force-on-Force battle simulation area, close-air-support (CAS) and Show-of-Force (SOF). During a live-fire exercises, actual battle conditions are closely simulated with troops advancing against computerized arrays supported by helicopters and with jet aircraft.
3. Live Fire Exercise Corridor	**Area contains computerized, pop-up, direct-fire artillery, and close-air-support (CAS) targets. During a live-fire exercise, actual battle conditions are closely simulated with artillery fire, tanks, and troops advancing against computerized arrays supported by attack helicopters and with jet aircraft CAS targets.**
4. Leach Lake Air Gunnery Range (north portion of R-2502N) **Beginning at 35°37'45"N/116°55'23"W, thence direct 35°37'45"N/116°29'43"W, thence direct 35°32'53"N/116°29'43"W, thence direct 35°32'53"N/116°55'23"W.**	Maneuvering by Army, Air Force, and Navy flying units providing CAS during rotational periods. During non-rotational periods, overflight of Leach Lake must be scheduled as outlined in subsection 8.1.2.
5. Goldstone Deep Space Tracking Facility (western boundary of R-2502N)	**Intense electromagnetic and other radiation hazards. Avoid overflight below 10,000 feet MSL.** When Goldstone is making high-power transmissions or is involved in a critical/sensitive event, the area of avoidance is increased. Real-time coordination can be accomplished by contacting Joshua Approach or Desert Radio. Broadband jamming and aeronautical telemetry in the 2200–2290 MHz band are not allowed within line of sight of Goldstone without prior scheduling through the Western Area Frequency Coordinator, Point Mugu. Radio frequency emissions in the 2290–2300 MHz and 8400-8450 MHz bands are not allowed within line of sight of Goldstone.



AD – AMMO DUMP	**LL "B" – LEACH LAKE BROVO**
BYS – BICYCLE LAKE	**ML – McLEAN LAKE**
DL – DRINKWATER LAKE	**MP – MAIN POST**
GTS – GOLDSTONE AIRSTRIP	**RPL – RED PASS LAKE**
LK – LEACH LAKE	**SA – SMALL ARMS RANGES***
LL "A" - LEACH LAKE IMPACT	***Up to 120mm tank round and 25mm Bradley round.**

Figure 8-1. *R-2502 Complex.*

8.1.1 Command and Control

Aircraft must be in contact with and under the control of one of the following agencies:

Airspace Information Center (AIC) Fort Irwin "Desert Radio"	AIC is the primary control for R-2502N and R-2502E. AIC is operational 24 hours/7 days. Frequencies: UHF 267.275; VHF 118.175; FM 66.10 Initial contact with Desert Radio is required prior to entering R-2502N and R-2502E.
NTC Airspace Control Center (NACC) Fort Irwin (NACC/Sundance)	NACC/Sundance is a multi-function Air Force element that serves as a focal point for close-air support activities. Functions include airspace procedural control and direct airspace coordination/de-confliction with Operations Group and AIC. Manned 1 hour prior to the first take off time from Nellis AFB until 30 minutes past the last flight's departure from R-2502N/E, or as required. If a flight is approved and Sundance is not operating, contact Desert Radio.

8.1.2 Scheduling

Requests for use of ranges and training areas will be submitted to Range Scheduling (760-380-4321) no later than 5 working days prior to the desired use date for Standard Ranges and 14 days prior for non-standard ranges.

All aircraft operations within R-2502N/E require coordination with Bicycle Lake Army Field.

Contact CCF to schedule the MOAs for entry and exit.

Prior Permission Required (PPR) should be obtained from Bicycle Lake Army Air Field (AAF) 72 hours (3 working days) before operations to allow for required coordination.

Function	Hours of Operation	Contact Numbers
Bicycle Lake AAF: PPR Requests/Activation	24 hours/7 days a week	DSN 470-4320/6816 (760) 380-4320/6816 Fax: DSN 470-6368 (760) 380-6368
Airspace Manager/Operations Officer: Scheduling	0730–1600 M-F	DSN 470-5852/6156 (760) 380-5852/6156 Fax: DSN 470-6368 (760) 380-6368

8.1.3 Special Procedures

Green Flag aircrews deploying in support of NTC Fort Irwin exercises shall receive a local orientation briefing before conducting NTC Fort Irwin operations. The briefing will be conducted by the 549 CTS at Nellis AFB (DSN 682-4262/4060/5561).

Familiarization rides in R-2502N/E will be flown in Southern/Central/Live-Fire Corridors before CAS missions are flown. All helicopter aircrews will be briefed by the Bicycle Lake Army Airfield Aviation Safety Officer (ASO) or NTC Installation Aviation Safety Officer (IASO) prior to flight in R-2502N and R-2502E.

Coordination Altitudes

The Coordination Altitude (CA) is established by NTC as 2000 feet AGL unless otherwise published by NOTAM or in the Rotational Airspace Control Order (ACO).

- **Fixed-wing aircraft:** remain above the CA unless they receive specific authorization from Desert Radio or Sundance/NACC.
- **Helicopters:** remain 500 feet below the CA unless coordinated and approved by Desert Radio or Sundance/NACC."

<u>Additional restrictions as follows:</u>

Overflight of NTC Fort Irwin cantonment and Ammo Supply Point (NU 290 980) and Ammo Supply Point (NU 300 950) is prohibited.

Overflight of Bicycle Lake AAF with ordnance is prohibited.

Overflight of Bicycle Lake AAF by fixed-wing aircraft is restricted to above 5,500 feet MSL unless coordinated and approved by Desert Radio. Green Flag aircraft may request approval through Desert Radio or Sundance.

Overflight of Goldstone area must be coordinated with Desert Radio. Scheduled fixed wing operations in Leach Lake allow aircraft operations down to the surface, **unless otherwise restricted by Desert Radio or Sundance**.

Helicopter Operations

Coordinate all helicopter entries by PPR. Entry procedures will be included with approved PPRs. Coordinate and schedule the local area briefing at Bicycle Lake with the Airfield Safety Officer or IASO in advance. All helicopters will land at Bicycle Lake AAF for a local area briefing before further flight on the reservation.

Helicopters shall monitor at least one Desert Radio radio frequency at all times and will be provided with current range and fixed-wing traffic information as well as flight following service.

8.2 Naval Air Warfare Center, Weapons Division, China Lake

Information on Restricted Areas 2505, 2506, and 2524 may be obtained thought the appropriate range scheduling or test management office as listed below.

Restricted Area	Hours	Contact Numbers
R-2505 & R2506	0700–1700 M-TH 0700–1600 F (non-civilian payday)	DSN 437-6800, (760) 939-6800 Fax: DSN 437-6950, (760) 939-6950
R2524 – Echo Range	0630–1630 M-TH	DSN 437-6800, (619) 939-6800 Fax: DSN 437-9152, (619) 939-9152
R2524 – Superior Valley	0630–1630 M-TH	DSN 437-6800, (619) 939-6800 Fax: DSN 437-9152, (619) 939-9152

8.2.1 Command and Control

Radar advisory service for Restricted Areas 2505, 2506, and 2524 is provided by the China Control, 301.0 MHz.

China Control	Hours	Contact Numbers
Airspace Surveillance Center (ASC) “China Control”	0700–1700 M-TH 0700–1600 F (non-civilian payday)	DSN 437-6908/9, (760) 939-6908/9 Fax: DSN 437-6855, (760) 939-6855

8.3 412 TEST WING, EDWARDS AFB

Information on and scheduling of Restricted Area 2515 may be obtained thought the appropriate office as listed below.

Restricted Area	Hours	Contact Numbers
412 Current Operations Scheduling **Same Day Operations**	0600–1800 M-F	DSN 527-3940, (661) 277-3940 Fax: DSN 527-3005, (661) 277-3005
412 Current Operations Scheduling **Future Operations**	0630–1600 M-F	DSN 527-4110, (661) 277-4110 Fax: DSN 527-9685, (661) 277-9685
R2515 Airspace Management Office	0730–1600 M-F	DSN 527-2515, (661) 277-2515 Fax: DSN 527-4462, (661) 277-4462

8.3.1 Command and Control

Radar advisory service for Restricted Area 2515 is provided by the SPORT, 343.7/132.75 MHz.

SPORT MILITARY RADAR UNIT	Hours	Contact Numbers
MRU: “SPORT”	0700–1700 M-F 0700–1900 M-F (DST) Weekend as required	DSN 527-3928/6184, (661) 277-3928/6184 Fax: DSN 277-8863, (661) 277-8863

Appendix

A

Appendix A: Glossary of Abbreviations, Acronyms, and Terms

This appendix lists and describes the acronyms and abbreviations used in the handbook.

Item	Meaning	Item	Meaning
AAA	Anti-Aircraft Artillery	AWACS	Airborne Warning and Control System
AAF	Army Air Field	BFM	Basic Fighter Maneuvers
ACM	Air Combat Maneuvering	CAS	Close-Air Support
ACO	Airspace Control Order	CCB	Complex Control Board
AFB	Air Force Base	CCF	R-2508 Central Coordinating Facility
AFFS	Army Flight Following Service	CFA	Controlled Firing Area
AFTC	Air Force Test Center	CFR	Code of Federal Regulations
AGGR	Air to Ground Gunnery Range	DoD	Department of Defense
AGL	Above Ground Level	DME	Distance Measuring Equipment
ALTRV	Altitude Reservation	DSN	Defense Switching Network
AIC	Airspace Information Center	ECM	Electronic Counter Measures
ANG	Air National Guard	ECR	Electronic Combat Range
ARM	Anti-Radiation Missile	EW	Electronic Warfare
ARTCC	Air Route Traffic Control Center	FAA	Federal Aviation Administration
ARU	Airborne Radar Unit	FL	Flight Level
ASC	Airspace Surveillance Center	FLIP	Flight Information Publication
ASO	Aviation Safety Officer	GCI	Ground Control Intercept
ATC	Air Traffic Control	GP	General Planning
ATCAA	Air Traffic Control Assigned Airspace	HATR	Hazardous Air Traffic Report
ATO	Air Tasking Order		

Item	Meaning	Item	Meaning
I&M	Improvement and Modernization	OT&E	Operational Test and Evaluation
IASO	Installation Aviation Safety Officer	POC	Point of Contact
IAW	In accordance with	POE	Point of Entry
IFR	Instrument Flight Rules	PPR	Prior Permission Required
JPPB	Joint Policy and Planning Board	RCC	Range Commanders Council
LOA	Letter of Agreement	RCF	Radar Control Facility
MOA	Military Operations Area	RCO	Range Control Officer
MRU	Military Radar Unit	RDT&E	Research, Development, Test, and Evaluation
MSL	Mean Sea Level	ROA	Remotely Operated Aircraft
MTR	Military Training Route	RTB	Return to Base
NACC	NTC Airspace Control Center	RWR	Radar Warning Receiver
NAS	Naval Air Station	SAM	Surface-to-Air Missile
NAWCWD	Naval Air Warfare Center, Weapons Division	SAR	Special Access Required
NAWS	Naval Air Weapons Station	SFC	Surface
NM	Nautical Miles	SRB	Safety Review Board
NMAC	Near Mid-Air Collision Report	SOF	Show-of-Force
NOTAM	Notice to Airman	SUA	Special-Use Airspace
NTC	National Training Center	TFR	Temporary Flight Restriction
NVD	Night Vision Device	TRACON	Terminal Radar Approach Control
O&M	Operations and Maintenance	TW	Test Wing
OHR	Operational Hazard Report	TS	Test Squadron
OSA	Open Skies Airfield	UAS	Unmanned Aerial System
OSIA	On-Site Inspection Agency	UHF	Ultra-High Frequency
		UNLTD	Unlimited
		VFR	Visual Flight Rules

Item	Meaning	Item	Meaning
WAFC	**Western Area Frequency Coordinator**	**412TW**	**412th Test Wing Edwards AFB, CA**

Appendix

B

Appendix B: Large Scale Exercise Planning Checklist

This checklist helps planners prepare for a large-scale exercise. The guidance is given as follows:

B.1 At Least 15 Calendar Days from Operations

B.2 At 7 Calendar Days from Operations

B.3 At 3 Working Days from Operations

B.4 At 1 Working Day from Operations

B.1 At Least 15 Calendar Days from Operations

With at least 15 calendar days until your intended operations, you should be on your way to planning the exercise.

B.1.1 Initiate Planning and Coordination

During initial planning and coordination:

1. Assign a single point-of-contact to represent your mission. Forward this information to CCF and other concerned agencies.
2. Provide the Exercise Planner with a copy of this checklist and attached quick-reference Users Exercise Planning Checklist. These checklists will help planners ensure they get the required coordination and that they meet all exercise data requirements.
3. Prepare the initial plan. This information will be used to prepare a briefing sheet to be distributed to TRACON and R-2508 Complex users. Include:

- Desired airspace areas and altitudes
- Date and time periods (and backups, if applicable)
- Basic scenario with ingress/egress routes, tanking, adversary, and control and communication procedures
- Other information that pertains to operational requirements (i.e., GCI support)

4. Ensure all participants are authorized to operate in accordance with R-2508 Complex operating procedures (see Chapters 2 through 7 of the *R-2508 Complex User's Handbook*).
5. Determine frequencies to be used and coordinate with CCF, FAA facilities, and range agencies.
6. Coordinate check-in/check-out procedures with appropriate FAA facilities.
7. Check for other agencies that may require advance coordination (i.e., FAA ARTCCs, Military representatives to the FAA, Frequency Coordinators). Refer to *R-2508 Complex User's Handbook*.

8. Call the range facility early to identify range requirements. Advance notice and information required may vary between scheduling agencies and types of missions. An early call to the appropriate range facility will help.
9. Coordinate with CCF and required range agencies for basic exercise and range requirements. Ensure all exercise plan changes are coordinated with appropriate agencies throughout the life of the exercise.
10. Coordinate check-in/check-out procedures for the R-2508 Complex in advance with Joshua Approach.
11. If determined necessary, send a brief exercise initial plan to the CCF. If revisions are required, revise the plan and brief the CCF or appointed representative.

B.1.2 Preparing the Plan

When preparing the plan, be sure to include the following:

- R-2508 Complex entry/exit points, altitudes, and routing within the Complex
- Check-in/check-out procedures for the R-2508 Complex
- Tanker locations, altitudes, and frequencies
- AWACS/E-2/designated comm. aircraft location, altitude, and frequency. If no AWACS/E-2 is available, designate a communications aircraft.

NOTE: Communications aircraft must request and receive a Complex Clearance from Joshua Approach before entering the R-2508 Complex.

- ECM aircraft positions
- Designated ACM areas
- All exercise frequencies, call signs, and squawks

NOTE: Immediately submit changes to CCF. Last-minute changes to the plan may not be approved due to lack of coordination time.

B.1.3 Tips for Initial Planning and Coordination

Avoid the following when planning the exercise:

- Do not place refueling or other anchor/orbit points too close to Complex boundaries. There are three non-published refueling areas available for use within the Complex (see Figure 4-4).
- Avoid noise sensitive areas, National Parks, and low-altitude routes in these same areas (see Chapter 2 of the *R-2508 Complex User's Handbook)*.
- Do not place anchor points in areas of concentrated activities, such as Owens Dry Lake, Saltdale, or the Trona Corridor.

You're planning and coordination will be smoother if you also keep in mind the following:

- Existing restrictions (such as National Park over-flight altitudes) are in place to help preserve our use of the Complex to fulfill missions and to protect other interests in the area. Do not request deviations to existing restrictions.
- Do not expect to receive segregated airspace outside of the internal restricted areas.

- Do not expect to receive clearance for unrestricted ACM. Generally, ACM can be conducted in Owens, Saline, or Panamint (see Figure 4-4).
- Expect transit corridor restrictions to be imposed to allow other users access to the work areas without conflicting with exercise ACM activity.

If the exercise activity centers around:

R-2505/Coso Range: Plan on requesting Isabella, Owens, Saline, and/or Panamint. If Panamint is required, plan to conduct ACM north of 36°08'N and remaining west of Telescope Peak (36°08'N and 117°05'W).

R-2524: Request to have ACM activity in Panamint south of 36°08'N and west of Telescope Peak.

R-2502N (Leach Lake): Request ACM activity in Panamint south of 36°08'N and east of Telescope Peak.

- Call or send a message to the scheduling agencies with jurisdiction over planned use restricted areas/ranges and airspace to validate coordinated requirements.

B.2 At 7 Calendar Days from Operations

Within 7 days of planned operations:

1. Have your exercise representative brief the approved exercise plan in advance to CCF. Invite range and ATC representatives from China Lake ASC, Edwards AFB SPORT, and Joshua Approach, as appropriate.

B.3 At 3 Working Days from Operations

Within 3 working days of your planned operations:

1. Finalize the exercise plan by defining operational requirements in the R-2508 Complex. Coordinate this plan with CCF and request any additional assistance needed.
2. Brief representatives from each participating unit on exercise procedures prior to their strike/tactics planning.
3. Plan to have at least one representative from CCF and appropriate agencies brief participating aircrews on airspace and range procedures and concerns.

B.4 At 1 Working Day from Operations

At least 1 working day before the start of operations, submit final call signs, number and type aircraft, squawks, and changes to CCF.

Changes other than minor (i.e., call sign, number and type aircraft, and time changes) will normally not be accepted after this time.

Appendix

C

Appendix C: Mission Planning Checklist

When planning a mission, the mission planner must submit the final form by e-mail. The mission planner is responsible for ensuring that CCF received the plan.

NOTE: Ensure that the information submitted to CCF is complete and accurate for planning and scheduling the exercise. The better you plan, the fewer problems exercise aircraft will likely encounter.

On the form, include the following:

1. Point of Contact / Mission Planner name and phone number (DSN and commercial).

- Identify method of contact (e-mail address).
- If POC will not be consistently available, list alternates with corresponding contact information.

2. Airspace requirements.

Identify:

- Dates and Times (indicate "Z" [ZULU] or "L" [LOCAL])
- MOAs/ATCAAs and Restricted areas (if for transition only, state "transition only")
- Altitudes requested
- Tanker areas/tracks for use in or in vicinity of the Complex
- Canned routes, MTRs, and/or entry/exit fixes for ingress/egress

EXAMPLE: **1 MAY 2016**

R-2508/Isabella/Panamint, 1600–1730 (Z), 0–FL350
R-2524 (SV), 1945–2115 (Z), 0–FL240
R-2515 (GT), 2030–2200 (Z), 0–FL180, Transit only
Isabella Refueling Area (ARISB), 1500–1615 (Z), FL210–FL250
Ingress / Egress: CHADS / ROSIE

3. Alternate dates and times requested.
4. Number and type aircraft. List separately by area if not applicable to all areas. Include departure/arrival airports for aircraft.
5. Mission Title (i.e., JTFX 14-1) and Activity Description. Specify all activities that apply; i.e., tanking, AIC, ACM, bombing, terrain following. Also, answer the following questions:

- ECM? If yes, specify:

Passive (chaff) or active (jamming)

Intended areas and times for use*

- Comm Ship? If yes:

State type of aircraft and planned orbit location (even if outside of the Complex).

Briefly describe the communication scenario i.e., AWACS will keep adversaries on discrete and strike will check in on range frequency.

List Comm Ship POC and phone number, if other than the Mission Planner.

If the Comm Ship is an AWACS or ARU, separate coordination requirements apply. The POC must directly deal with CCF.

- ACM? If yes, identify adversary aircraft and CAP points (areas and altitude).
- Planned frequency use*

Identify any discrete frequencies planned for use in the Complex and requirements for monitoring (see *R-2508 Complex User's Handbook* for inactive/active monitoring).

NOTE: Unless special comm. ship coordination is approved for check-in and/or checkout, individual flights must contact Joshua Approach for ingress/egress on appropriate ATC frequency.

For range use, list planned range frequencies. State if more than one range frequency is needed for simultaneous use (versus just a backup frequency).

Identify special requirements for frequency coordination. For example, if all Complex ops requested to be worked on one or more discrete or range frequencies, specify what you are asking for. Do not assume that listing frequencies alleviates the need to change frequencies. You must coordinate specifically between affected agencies for use of a single frequency or a set of frequencies.

This request does not relieve the Mission Planner of responsibility to coordinate frequency/ECM requirements through appropriate Frequency or Spectrum Managers

- Pre-Coordinated Squawks? For JCS large-scale exercises, Mode 3 codes may be assigned by HQ NORAD. Pre-assigned NORAD discrete codes may be obtained by message at least 30 days before STARTEX, addressed to: HQ NORAD PETERSON AFB CO//J3OG//
- Supersonic Flight? Refer to *R-2508 Complex User's Handbook* for the policy on shared-use airspace. Expect specific approval for range operations.
- Additional Requirements? Identify flight plans (RTB or NID, VFR or IFR egress), special routing information, GCI (specify requirements), requests for additional briefing material/support.

6. **Specific Range (Internal Restricted Area) Requirements.**

- Range (Superior Valley, Baker, George, Coso, Charlie Airfield)

Number and type aerial targets

Number and type delivery maneuvers (state if captive)

Number and type of ordnance for each aircraft (GM-MK/Mod guidance and W/H sections). State if live or inert.

Instrumentation requested

Impact information requested

Aircraft, ground, ordnance positioning requirements

- Additional range requirements

Laser? If yes, describe by range.

Supersonic Operations? If yes, state reason for requirement.

Any other special activities planned or additional services needed?

7. Describe mission Concept of Operations, Special Instructions, and/or Mission Scenario as it applies to the R-2508 Complex. Provide CCF with the Air Tasking Order (ATO) and aircraft call signs immediately upon issuance.

8. Describe contingency plans and scenario changes due to loss of tanker or AWACS support. Will one of the mission aircraft act as a Comm ship? Routing coordination for: (insert mission title)

Appendix

D

Appendix D: R-2508 Situation Report

R-2508 SITUATION REPORT		**DATE RECEIVED:**
FROM: **(OPTIONAL)**	TO: **R-2508 Central Coordinating Facility,** **100 E. Sparks Dr. Edwards AFB CA 93524-8090** **DSN: 527-2508 or 2508ccf@us.af.mil**	DATE OF REPORT:
This form is intended for the reporting of circumstances/services that enhance or degrade the users' mission within the R-2508 Complex. It may be used by aircrews or controllers to submit any constructive information to improve the safety and efficiency of aviation operations in the R-2508 Complex. Identification of the drafter is optional. This form will Not be used to replace reporting of situations that require submission of Hazardous Air Traffic reports (HATR), Operational Air Hazard Reports (OHR), or Near Mid-Air Collision (NMAC) reports. This report should be submitted within 5 days of the incident to ensure availability of the data necessary to analyze the reported situation. The information contained on this form is for <u>MILITARY OFFICIAL USE ONLY</u> and will be used for the exclusive purpose of improving safety and operations within the R-2508 Complex. No punitive or disciplinary action will be taken as a result of statements made on this form.		
DATE/TIME SITUATION OCCURRED:	LOCATION SITUATION OCCURRED:	
CALLSIGN(S) / TYPE AIRCRAFT:	OTHER AIRCRAFT INVOLVED:	
FREQUENCY(IES):	OTHER CALL SIGN(S) IF KNOWN:	
ALTITUDE:	CONTROLLING AGENCY:	
NARRATIVE: **(Be as complete as possible. Include recommendations to prevent reoccurrence. Add additional sheets as necessary.)**		

Appendix

D