

# R-2508 Complex Users Handbook

## 12 February 2019



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## **Chapter 1: Introduction**

This handbook prescribes policy and standard operating procedures for all users operating in the R-2508 Complex. Request for waivers or approval of non-standard operations in the complex must be requested through the Complex Control Board (CCB). The CCB meets bi-monthly. For inclusion on the next available CCB meeting contact the Central Coordinating Facility at 661-277-2508.

**This handbook dated 12 February 2019 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](mailto: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 User's Handbook**
- **R-2508 Complex User's Brief**
- **Situation Report (SITREP)**
- **R-2508 Pilot Guide and Aerial Refueling Areas**
- **Sidewinder Low Level SOP**
- **Sidewinder Low Level Map**
- **R-2508 Transient Pilot Briefing (for KNID arrivals & departures only)**
- **R-2508 Complex Airspace Request Form**
- **R-2515 Airspace website link**

**CCF Daily Schedule and additional online information available via the R-2508 Complex AFNET SharePoint Site: <https://cs2.eis.af.mil/sites/12162/default.aspx>** 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 maintain currency. Information is updated real time. To establish an AFNet account you will need a current Information Awareness training certificate, a completed DD Form 2875, and approval from 412<sup>th</sup> OSS IAO at DSN: 525-4269 or (661) 525-4269.

## **Chapter 2: 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:

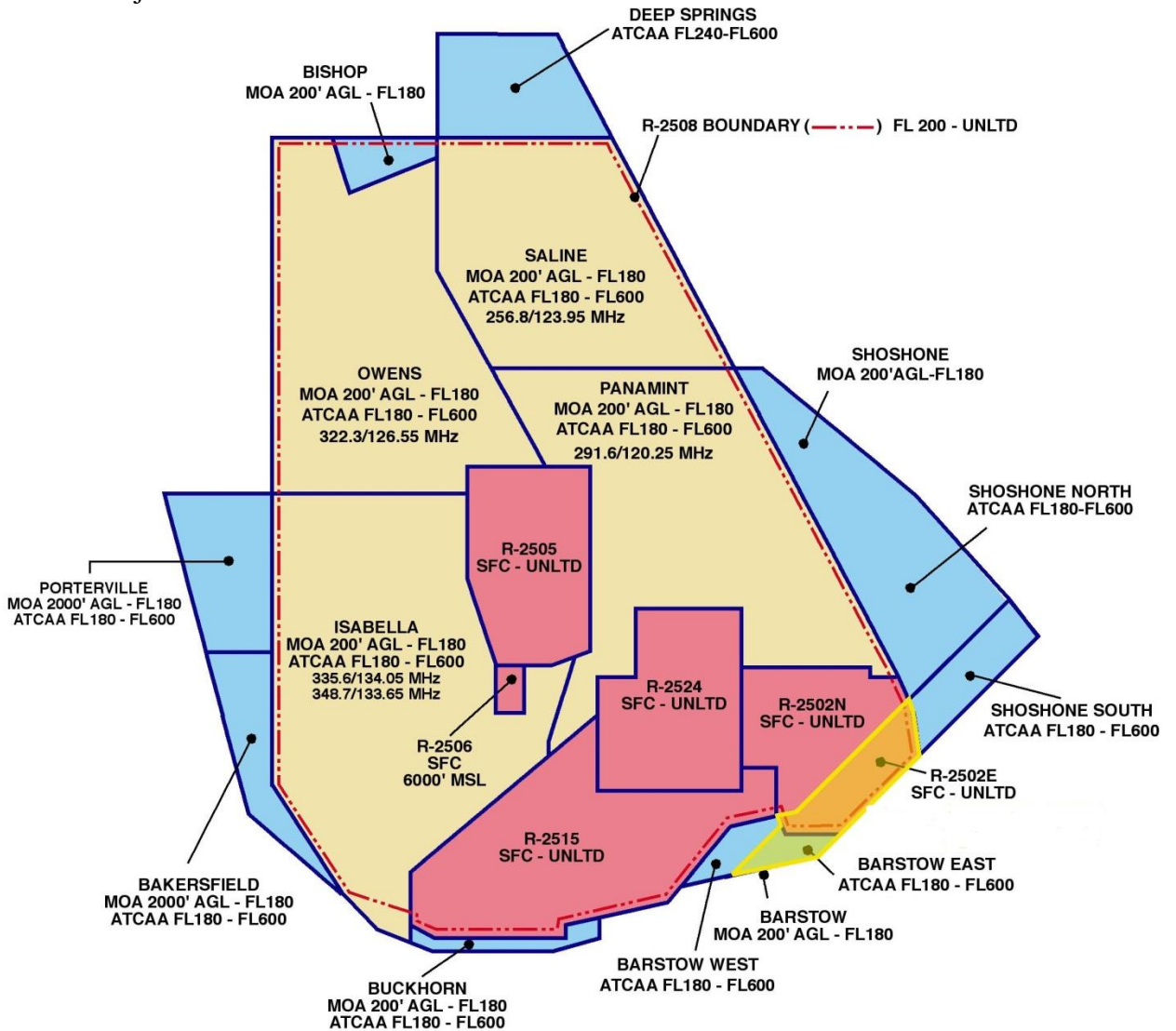
- 412 Test Wing (412TW), Edwards Air Force Base (AFB), CA.
- National Training Center (NTC), Fort Irwin, CA.
- Naval Air Warfare Center Weapons Division (NAWCWD), China Lake, CA
- The R-2508 Complex is composed of internal restricted areas; Military Operations Areas (MOAs), Air Traffic Control Assigned 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:** R-2502N – Joshua Control Facility (Joshua Approach)
  - R-2502E – Los Angeles ARTCC
  - **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 (412 TW)
  - **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.

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

- FAA/DoD Joint Use: 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.



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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 MOAs and 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

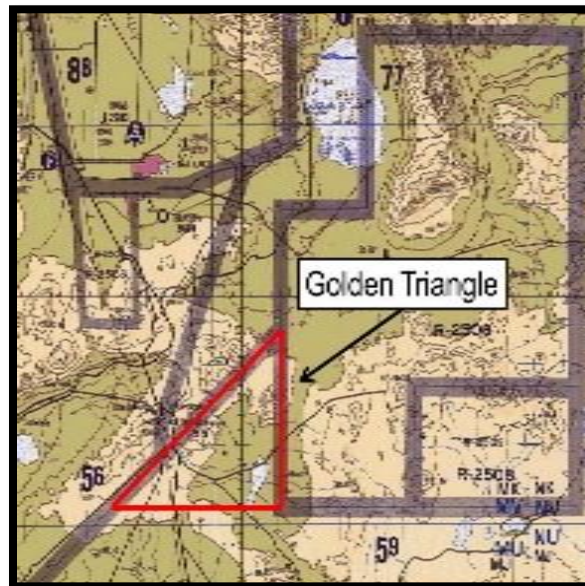
This creates working airspace from 200 feet AGL and up, throughout the entire R-2508 Complex. Isabella, Saline, Panamint work areas and R-2515 have peripheral MOAs and/or ATCAAs that increase the size of the usable airspace. Additional peripheral areas are:

- 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 Areas: Includes Golden Triangle, Trona CFA, and Trona Corridor**

**2.1.2.1. The Golden Triangle** is a portion of R-2515 that extends north of the westerly extension of the southern boundary of R-2524 (see Figure 2-2). 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.

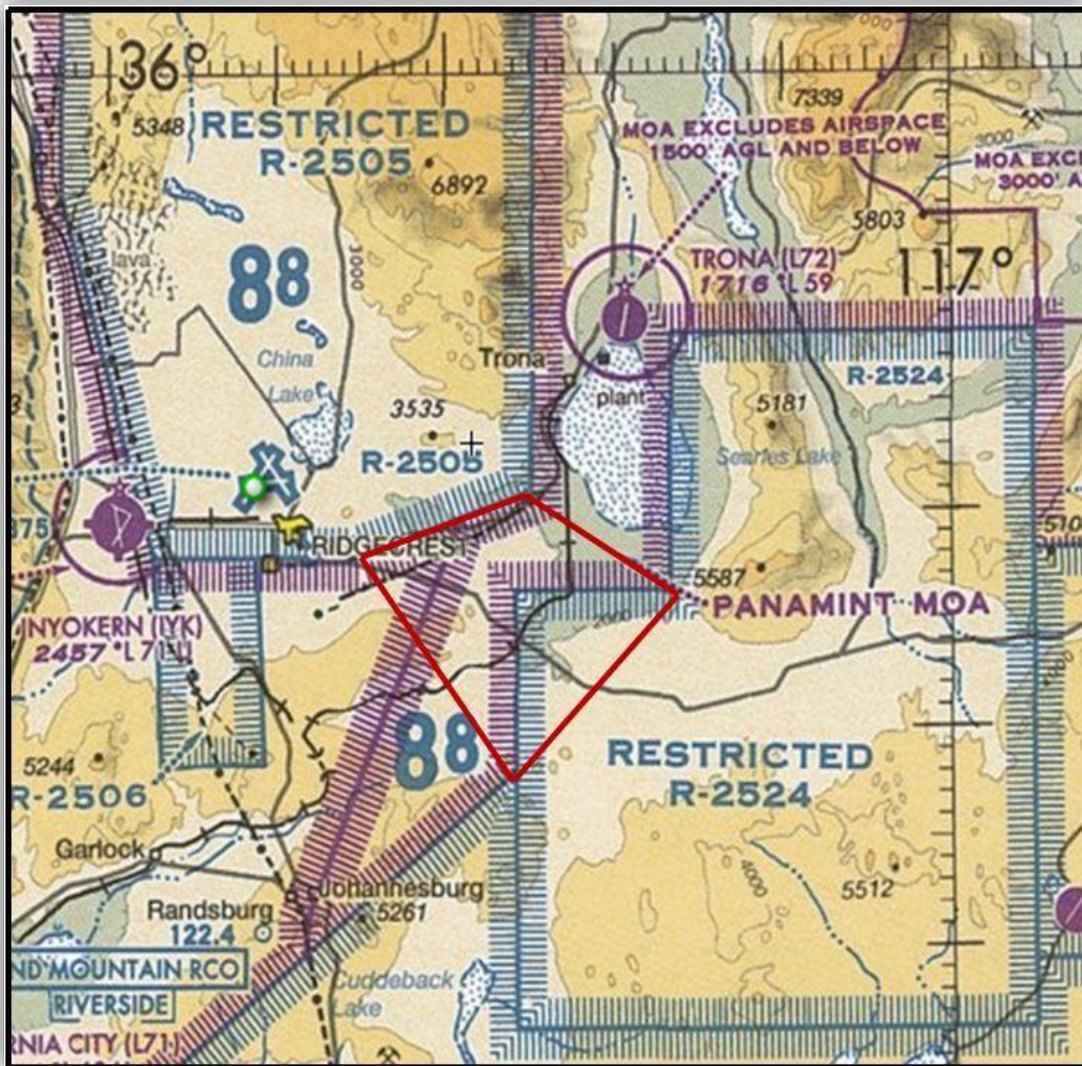


**Figure: 2-2 Golden Triangle**

**2.1.2.2. The Trona Controlled Firing Area (CFA)** (Figure 2-3) is used for free flight weapon systems transiting from launch areas within R-2505 to target areas within R-2524 and from launch areas within R-2524 to target areas within R-2505. The CFA encompasses an area between R-2505 and R-2524. Boundaries:

Beginning at 35°37'30"N/117°35'33"W;  
thence direct 35°40'30"N/117°25'03"W;  
thence direct 35°36'00"N/117°16'55"W;  
thence direct 35°27'40"N/117°26'03"W;  
thence to the point of beginning.

Altitudes: 3,000ft AGL up to, but not including, FL200



**Figure 2-3: Trona Controlled Firing Area (CFA)**

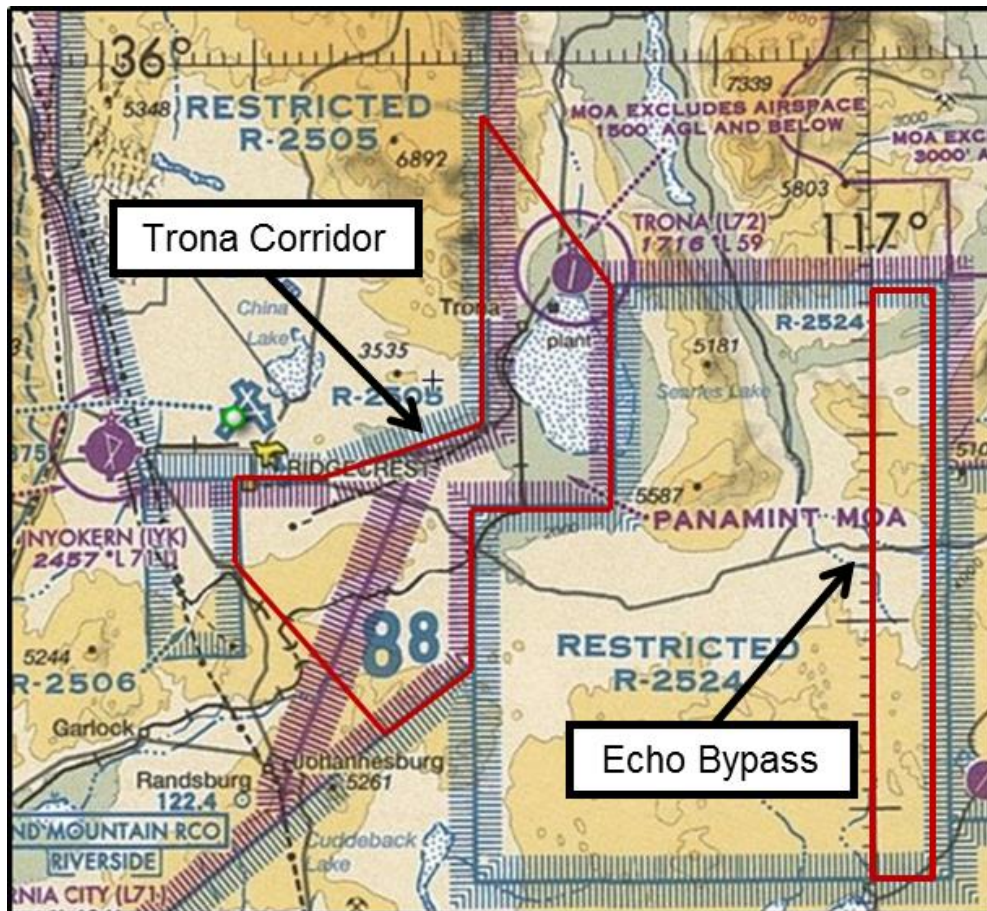


**2.1.2.3. The Trona Corridor** (figure 2-4) encompasses an area between R-2505 and R-2524 and is used for the launching of free flight weapon systems FL200 and above. Additionally, real time transition of Unmanned Aerial System/s (UAS's) FL180 and above occur between R-2505 and R-2524. The Corridor may be scheduled and used in conjunction with the Trona CFA.

**NOTE:** The Echo Bypass may be used to transit between R-2515 and Panamint (subject to China Control approval).

Boundaries:

Beginning at 35°47'50"N/117°16'52"W;  
 thence direct 35°35'58"N/117°16'52"W;  
 thence direct 35°35'58"N/117°26'13"W;  
 thence direct 35°27'44"N/117°26'13"W;  
 thence direct 35°23'58"N/117°31'20"W;  
 thence direct 35°33'14"N/117°40'42"W;  
 thence direct 35°37'25"N/117°40'45"W;  
 thence direct 35°37'25"N/117°36'10"W;  
 thence direct 35°40'36"N/117°25'01"W;  
 thence direct 35°57'12"N/117°25'03"W;  
 thence to point of beginning.



**Figure 2-4: Trona Corridor**

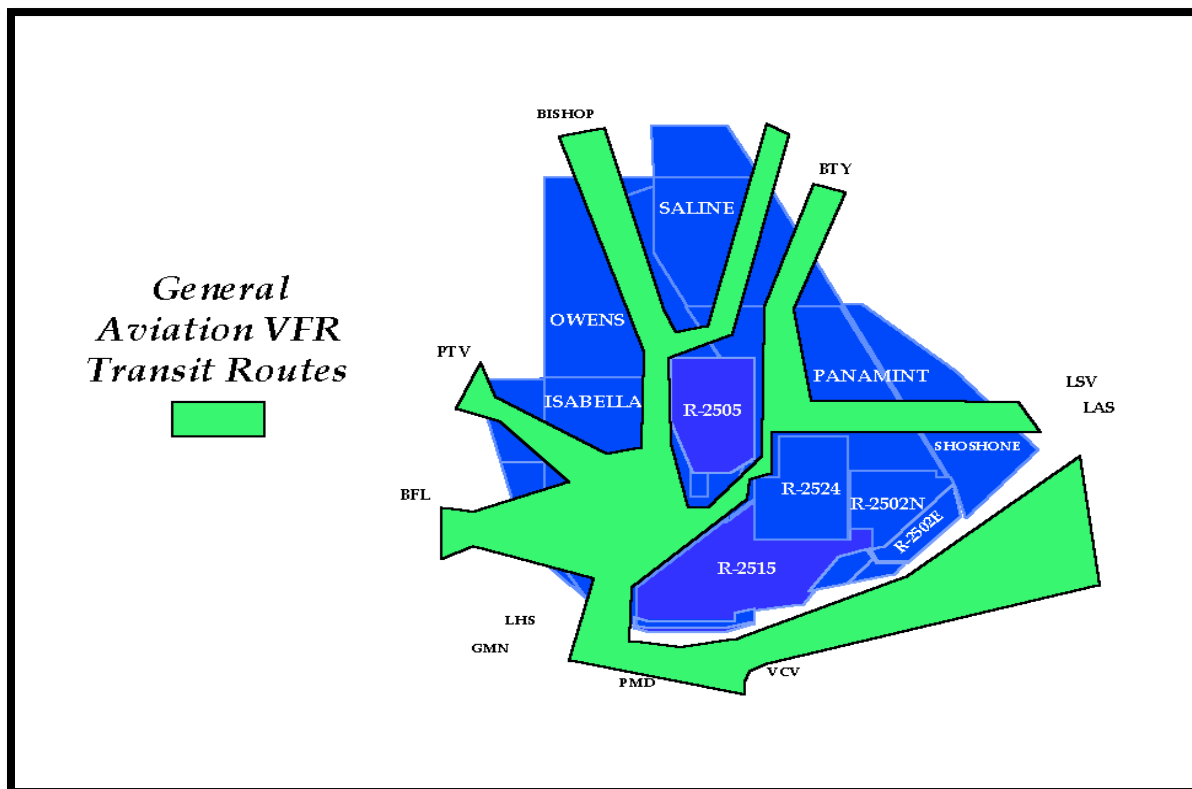
**2.2. Type of Activity within Work Areas:** Typical operations within the Complex include:

- 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 2-5 shows the most common and heavily flown routes.



*Figure 2-5: General Aviation VFR Transit Routes*

### 2.3.2. Hang Gliding, Ultralight, and Parachuting.

2.3.2.1. Hang glider operations are occasionally 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. Hang Glider operations are not scheduled through CCF.

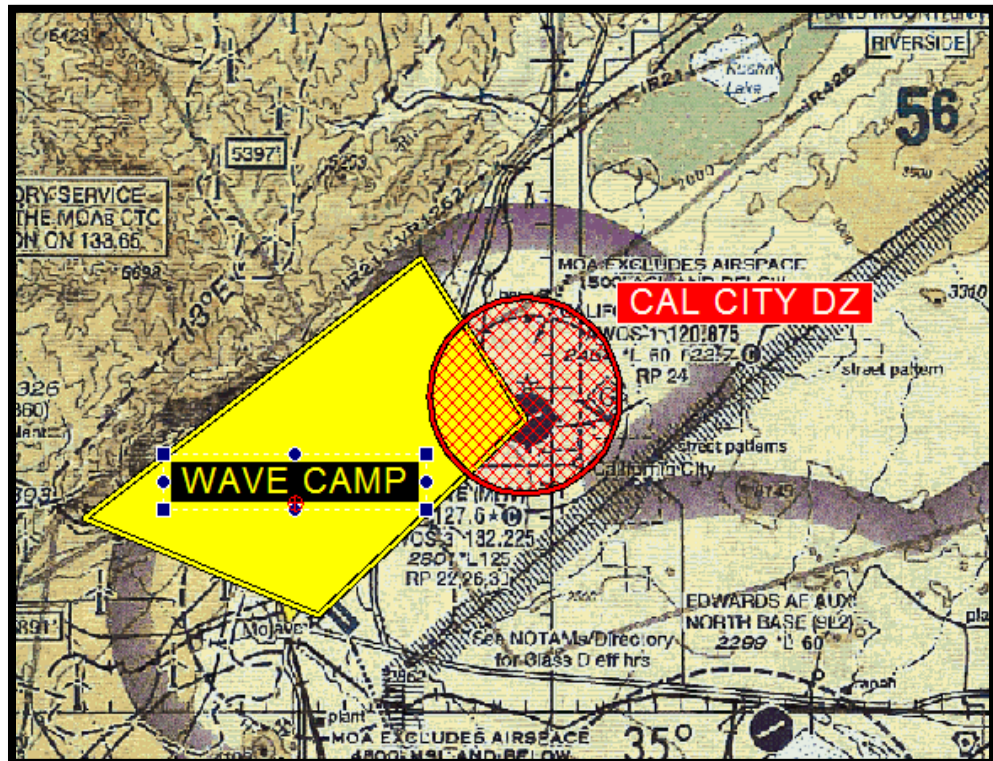
2.3.2.2. Ultralight activity takes place in many areas throughout the R-2508 Complex MOAs and is primarily centered on towns and civil airports within the R-2508 Complex. Ultralight activities are not scheduled through CCF.

2.3.2.3. California City Airport is occasionally used for parachute activities from surface to 17,999 feet MSL by private parachute clubs and DoD aircraft (see Figure 2-6). Parachuting activities originating from California City are published via NOTAM. When notified, CCF posts parachute activity on the Daily Brief Sheet.

**2.3.3. Sailplane:** Sailplane activities are conducted from the Tehachapi Mountain Valley, Lone Pine, Independence, Rosamond, Mojave, California City, and Inyokern airports. The “Wave Camp” sailplane operating area (see Figure 2-6) is located in the Isabella MOA and can be scheduled for use whenever soaring conditions permit. During times when

Wave Camp is active, sailplane operations can be extremely heavy in the vicinity of Mojave and California City Airports due to launch and recovery of flights to/from 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).



**Figure 2-6: Wave Camp and California City Parachute Area**

- Sailplane operations below FL180 are concentrated, but not confined, in the Isabella MOA, and will remain clear of all internal restricted areas.
- Sailplane operations above FL180 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" (see Figure 2-7). 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:

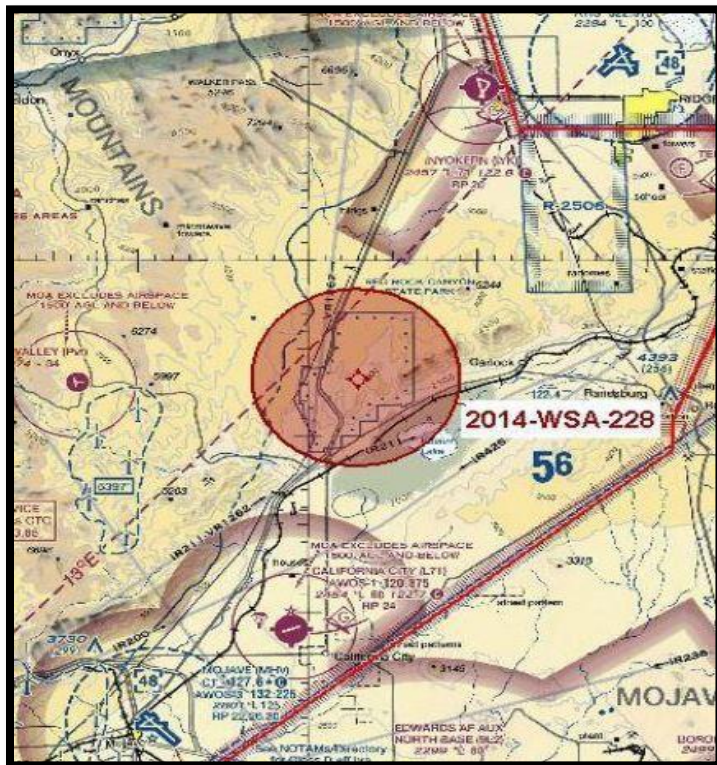


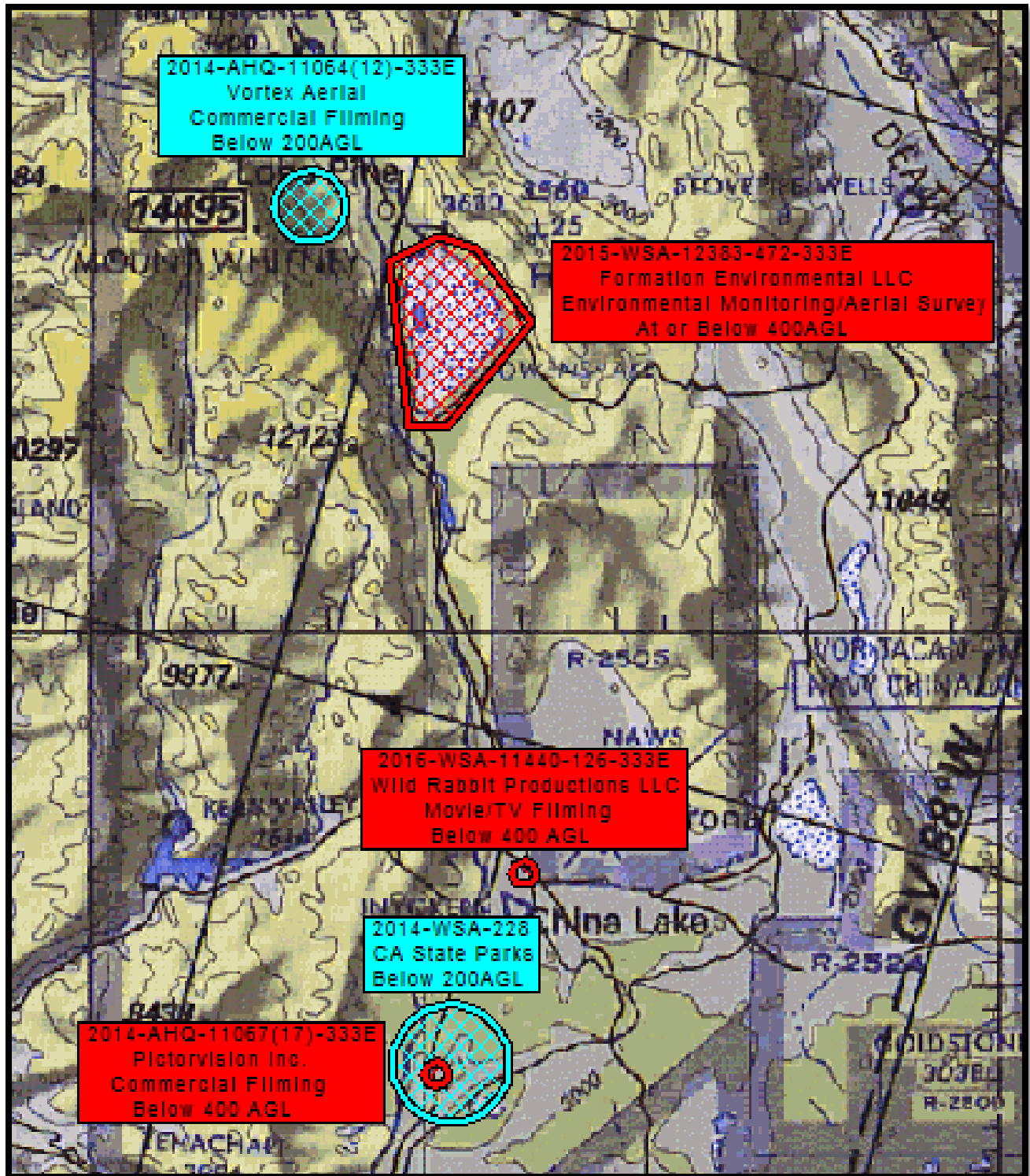
Figure 2-7: Small UAS Area

**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](mailto: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.

**2.3.4.1. Known Commercial sUAS Areas (current as of 11/21/16) (see Fig 2-7A).** When notified, CCF will post sUAS activity on the Daily Brief Sheet. Aircrews should also check NOTAMS/DROTAMS for most current information.



**Figure 2-7A: Additional Known Commercial Small UAS Area**

**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.

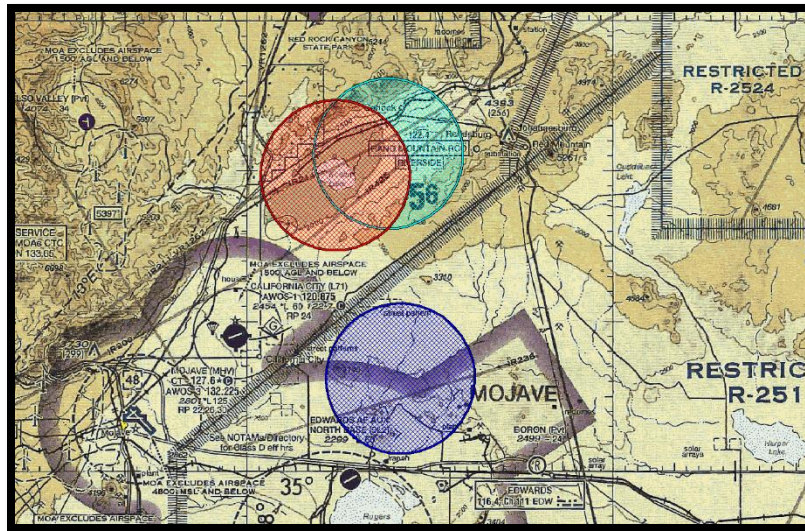
**Commander, 412th TW, 412 OSS/OSO R - 2515 Airspace Management, Edwards AFB** at (661) 277-2515 of intent to operate in the vicinity of IR-425 (between Points AC and AD) at least 72 hrs prior to the start of UAS operations. R-2515 Airspace Management hours of operation are M-F, 0800-1600, excluding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

**2.3.5. Mojave Aerobatic Practice Area (APA):** 4.3NM radius around MHV and 4,500 to 10,500 MSL. Located within lateral confines of MHV Class D (see Figure 2-8). Participating aircraft are Extra 300s (blue & red or blue, red, and white). Activated real-time by JOSHUA.  
**NOTE: MHV Class D: 5NM radius excluding overlapping portion of R-2515, SFC-4,800 MSL.**



**Figure 2-8: MHV Aerobatic Practice Area (APA)**

**2.3.6. Amateur Rocketry Operations:** May launch to altitudes up to 18,000ft when R-2508 is active, and up to 50,000ft at other times. Rocket operations may have associated sUAS operations inside the same area for the purpose of filming launches from above (see Figure 2-9).



**Figure2-9: Amateur Rocketry Operations**

**2.3.7. Land Management Agency Operations:** Agency helicopters and fixed-wing aircraft operate in the R-2508 Complex, primarily in the western portions of Isabella and Owens, and throughout the Panamint and Death Valley areas. Administrative support aircraft operations are normally 1,500ft 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.

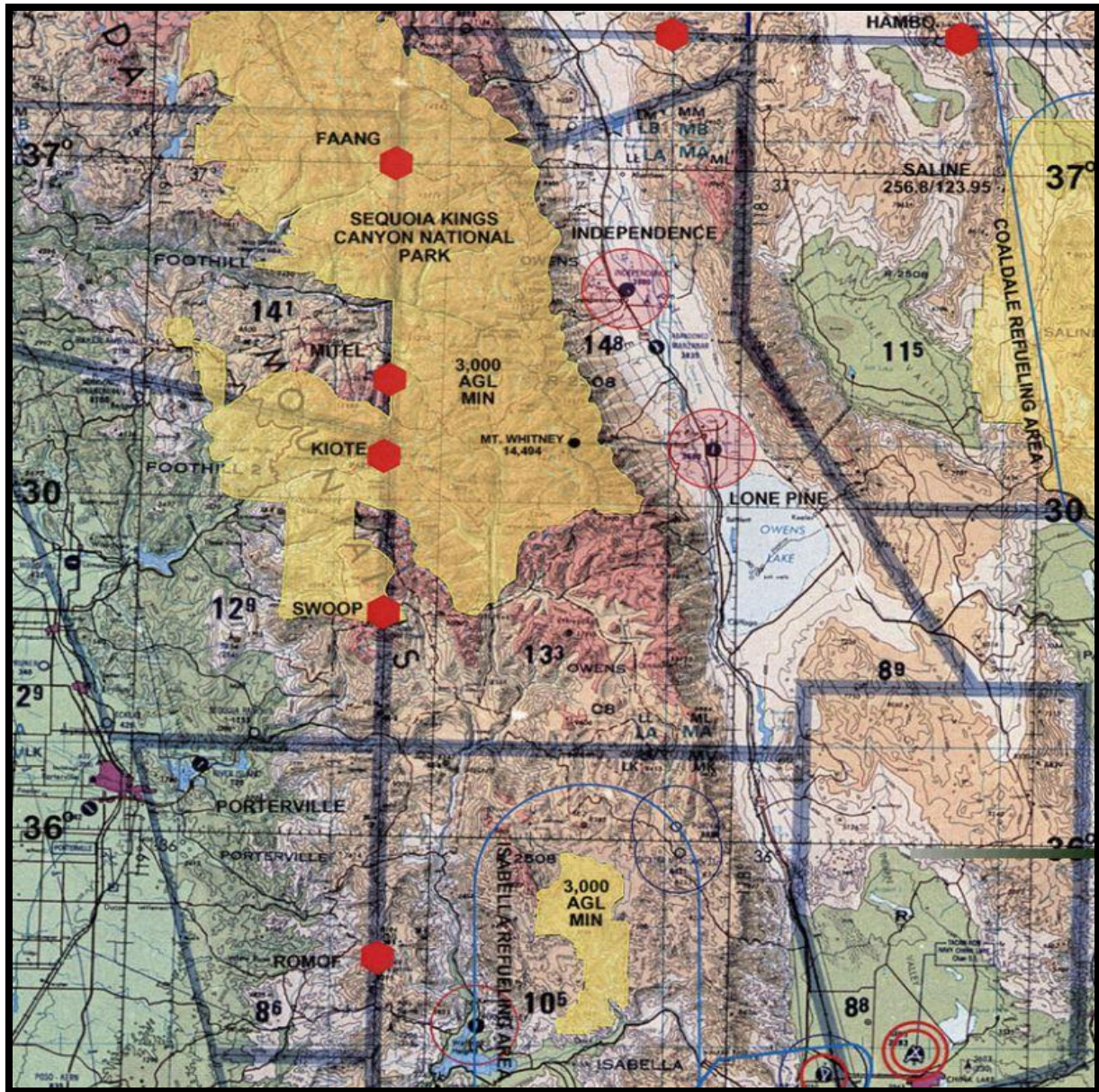
**2.4. Sensitive Areas:** The military mission within the R-2508 Complex has long enjoyed the support of the population that lives beneath the R-2508 Complex airspace (see Figure 2-12). This support is essential to DoD’s effort to preserve the R-2508 Complex for future military use. Occasional sonic booms and noise complaints relating to flight over sensitive areas (small towns, airports, and recreation areas 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.**

**2.4.1. Over-flight of National Parks/Wilderness Areas.**

2.4.1.1. Low flying 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.

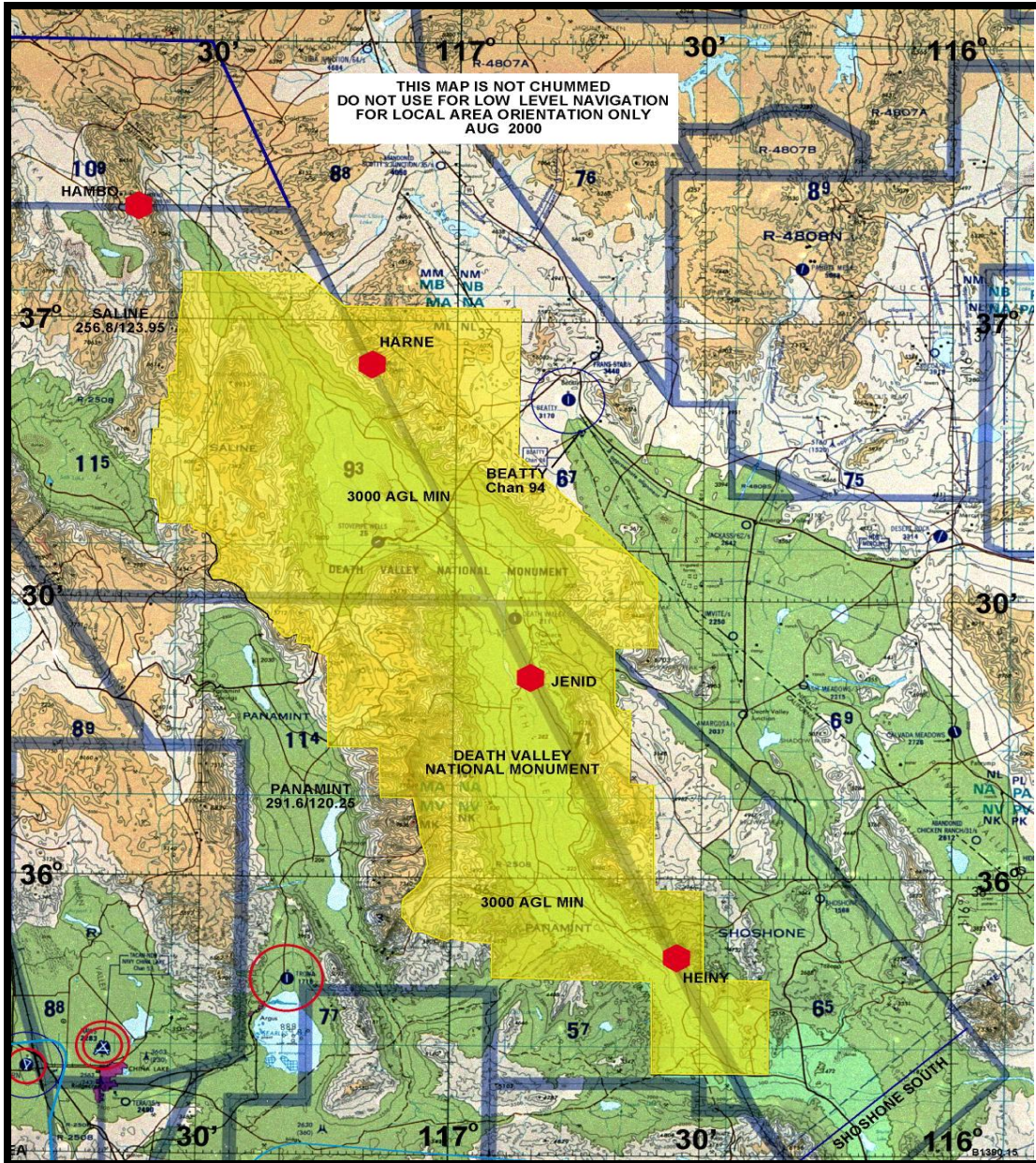
**2.4.1.2. Sequoia and Kings Canyon National Parks (SEKI).** All participating aircrews operating within the Complex over the Sequoia and Kings Canyon National Parks (see Figure 2-10), in the western Owens work area, shall maintain an altitude of FL180 or above unless that area is specifically scheduled lower in accordance with current established procedures through the (CCF). All units requesting the airspace below FL180 over SEKI in the western Owens work area shall schedule that work area in advance with the CCF IAW current procedures. Unscheduled operations below FL180 over SEKI are authorized for safety of flight considerations. At no time will any participating aircraft descend below 3,000ft AGL within the boundaries of SEKI except in an emergency situation. Lateral separation from SEKI is 3,000 ft.



*Figure 2-10: Sequoia/Kings Canyon National Park, Domeland, & John Muir Wilderness Area*



**2.4.1.3. 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 3,000ft (approximately ½ mile) from Death Valley National Park (1977 Park Boundaries), Domeland, and John Muir Wilderness Areas (see Figures 2-10 and 2-11).

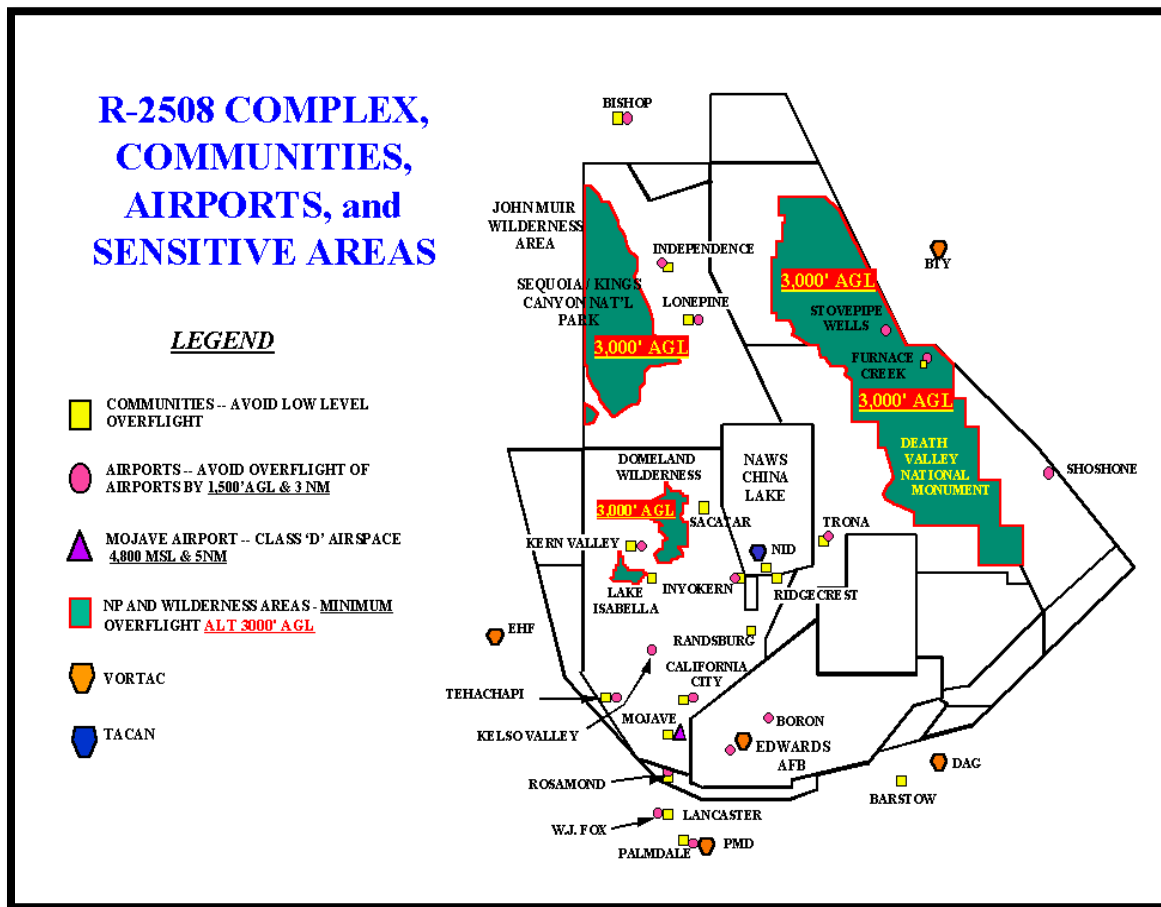


*Figure 2-11: Death Valley National Park*

**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.

**2.4.2. Overflight of Populated Areas:** R-2508 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 2-12) include:

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

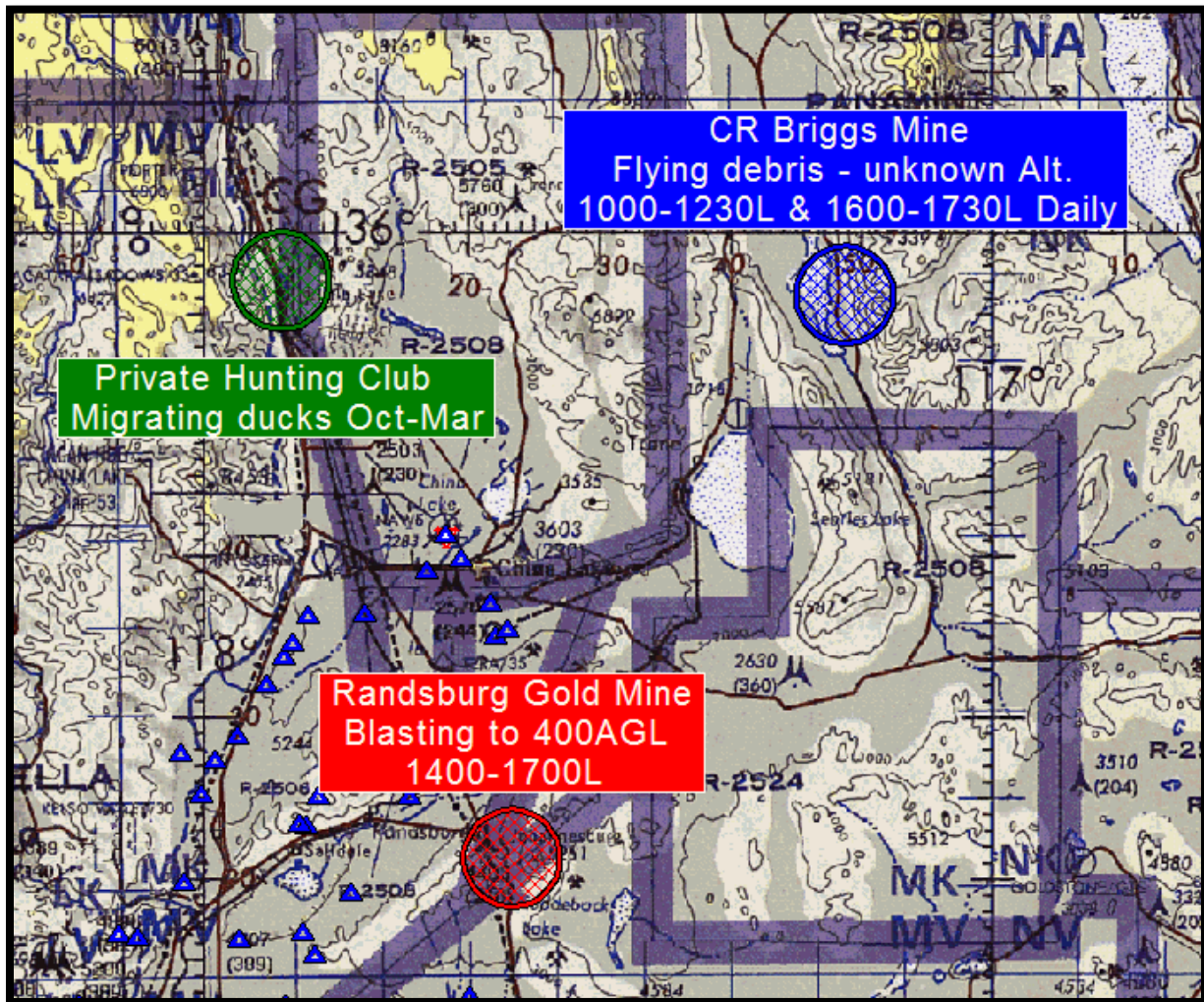


*Figure 2-12: R-2508 Complex Communities, Airports, and Sensitive Areas*

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.

**2.4.3. Overflight of Private Commercial Activities:** Aircrews should be aware of private commercial activities that occur within the R-2508 Complex (see Figure 2-13). 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 Mine:** Located at 35° 56' 17"N/117° 11' 09"W. Conducts blasting daily between 1000-1230L and 1600-1730L with flying debris to unknown altitudes.



**Figure 2-13: Private Commercial Activities**

**2.5. 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.

## **Chapter 3: R-2508 ATC Services and Using Agencies**

**3.1. Traffic Advisories, Boundary Advisories, and ATC Services:** Joshua Control Facility (JCF) 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.
- JCF 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.

**3.2. 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 8 for scheduling and operating procedures for internal restricted areas.

### **3.3. Reporting Suggestions for General Complex Changes (R-2508 Situation Report)**

The R-2508 Situation Report (SITREP), **Attachment 1**, 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 improve policies, procedures, and ensure continued safe operations within the R-2508 Complex.

- The information contained in the SITREP is for Local 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/Home/R-2508> and <https://cs2.eis.af.mil/sites/default.aspx>
- CCF will notify the submitter upon receipt, process the report for situation analysis and recommendations, and submit the report and findings to the CCB.
- The CCB will assign appropriate action for each situation

## **Chapter 4: General Operating Procedures for R-2508 Complex**

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

- General Complex Information
- The Scheduling Process
- Complex Scheduling Agencies
- Special Activities
- Scheduling Special Operations
- Scheduling Large-Scale Exercises
- Unmanned Aerial System (UAS)/Remotely Piloted Aircraft (RPA)
- Flight Planning Requirements

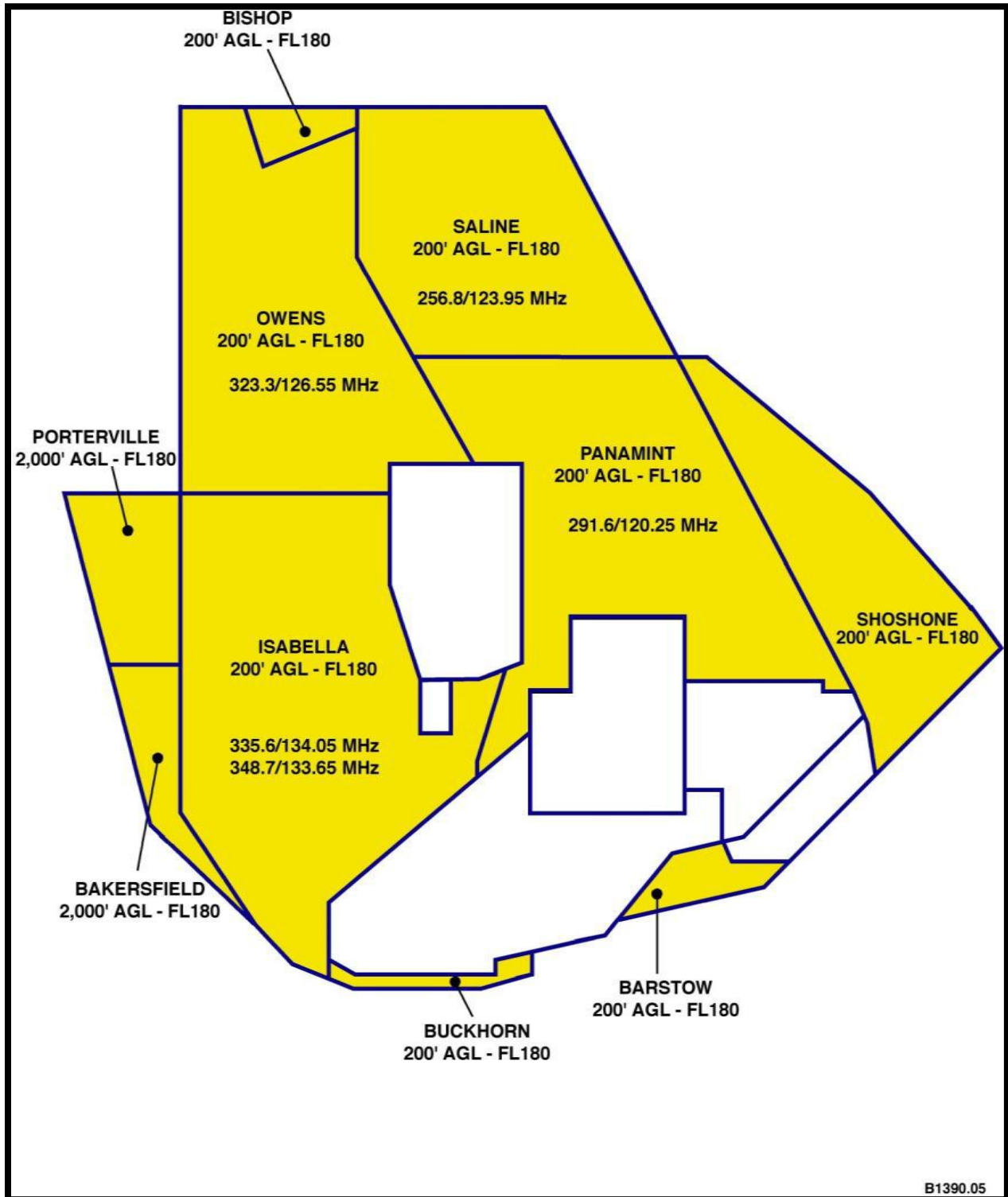
**4.1. General Complex Information:** The Joint Policy and Planning Board (JPPB) is chartered by the DoD to act as the overarching and policy body for the R-2508 Complex. All JPPB sponsored units operating within the R-2508 Complex shall receive an annual R-2508 Complex briefing on Complex Operations 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 March thru April each year. Additionally, CCF provides airspace briefings for special/large scale operations on an as needed basis.

**NOTE: 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 (**MOAs**) and Air Traffic Control Assigned Airspace (**ATCAAs**).

**MOAs:** The four main MOA work areas; Isabella, Owens (including Bishop MOA), Saline, and Panamint, have a lower altitude limit of 200 feet AGL (see Figure 4-1).



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

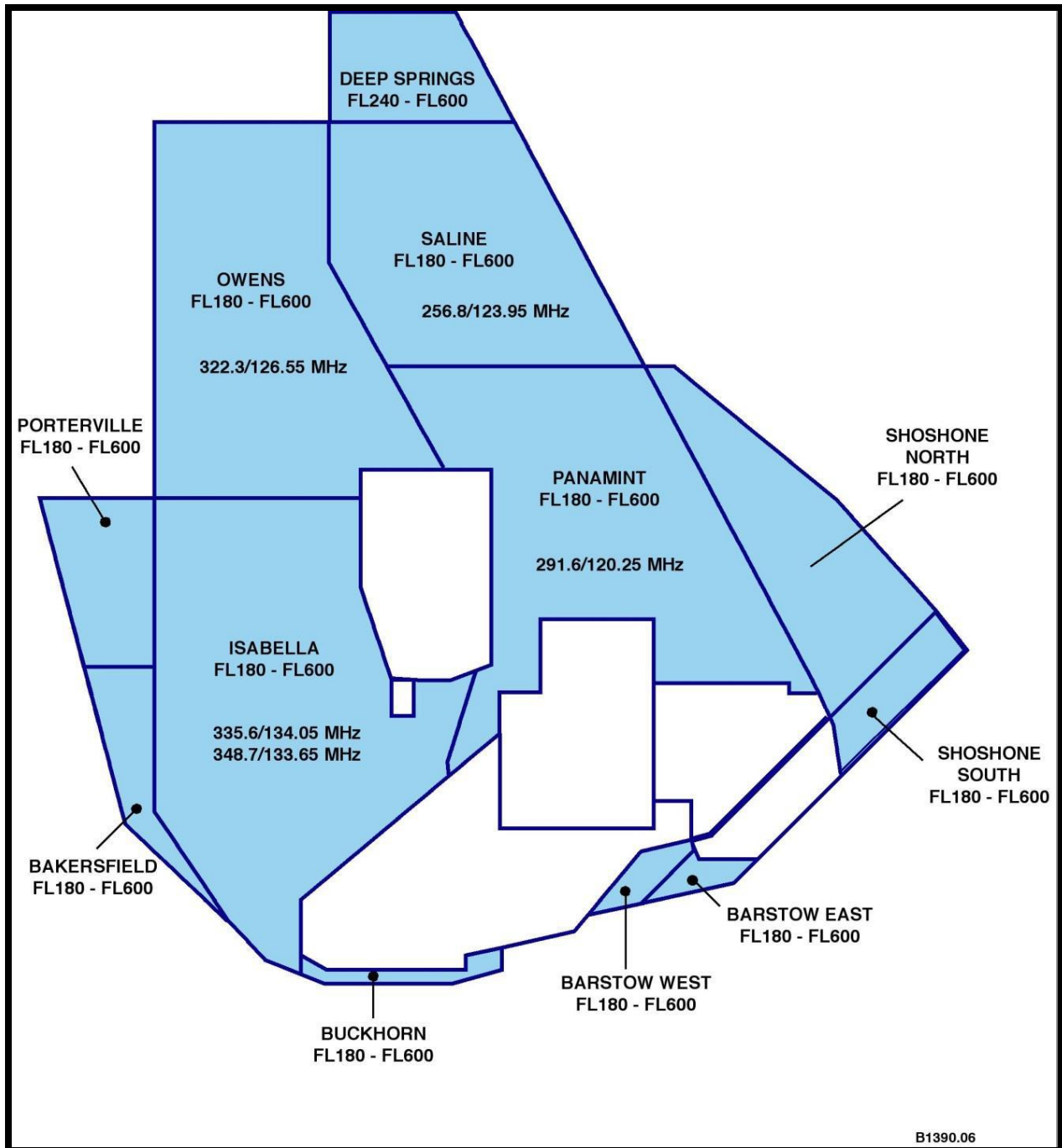
- MOAs **DO NOT** include airspace below 1,500 feet AGL within 3 miles of any charted airport, except for Mojave Airport's Class D airspace (4,800 feet MSL within a 5 NM radius, excluding the airspace east and parallel to a line ½ mile west of R-2515).
- Portions of these major work areas are located over Sequoia/Kings Canyon National Parks, John Muir and Domeland Wilderness Areas, and Death Valley National Park; (see Figures 2-10 & 2-11) where the lower limit of the MOA is 3,000 feet AGL.

**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 2-10 & 2-11 or contact CCF for more information.**

**CAUTION: The Owens MOA/ATCAA and Bishop MOA 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. Aircrews must be aware of this boundary difference to prevent spill-outs into Oakland Air Route Traffic Control Center (ARTCC) airspace.**



**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. 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 Approach is not authorized to schedule or activate any R-2508 Complex Airspace. Advanced scheduling is required through CCF.**

**4.2.2. Aircraft Scheduling:** To schedule aircraft in the R-2508 Complex:

4.2.2.1. 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.

4.2.2.2. 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

Information shall include:

- Aircraft Call Sign (not to exceed seven characters)
- Number/Type aircraft
- ZULU Date of Mission
- 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. NOTE:
- 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
  - Any MTRs, low-level or navigation routes that affect R-2508 Complex airspace.
  - Any special activities (e.g. NVG/NVD, ECM, AAR, LIGHTS OUT, etc.)

**NOTE: Aircrews are responsible for scheduling Internal Restricted Areas with appropriate Using Agency. Additionally, aircrews are responsible for scheduling the use of IR/VR routes of intended use with the appropriate route scheduling agency.**

**• Airspace Request Form Abbreviations (and CCF 24-HR Schedule)**

BAKERSFIELD MOA/ATCAA	BK	SHOSHONE MOA	SH
BARSTOW MOA	BA	SHOSHONE NORTH ATCAA	SHN
BARSTOW EAST ATCAA	BAE	SHOSHONE SOUTH ATCAA	SHS
BARSTOW WEST ATCAA	BAW	ISABELLA REFUEL AREA	ARISB
BISHOP MOA	BI	SHOSHONE REFUEL AREA	ARSHN
BUCKHORN MOA/ATCAA	BH	COALDALE REFUEL AREA	AROAL
DEEP SPRINGS ATCAA	DS	LINUS REFUEL AREA	ARLNS
ISABELLA MOA/ATCAA	I	PANCHO 3	P3
OWENS MOA/ATCAA	O	SAGE 2	S2
SALINE MOA/ATCAA	S	WAR 2	W2
PANAMINT MOA/ATCAA	T	GOLDEN TRIANGLE	GT
PORTERVILLE MOA/ATCAA	PV		
BLACK MOUNTAIN SUPERSONIC			BMSS
HIGH ALTITUDE SUPERSONIC			SS

4.2.2.3. 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.

**NOTE: Notification of cancellations is required to ensure proper management and release of Complex airspace for joint use.**

4.2.2.4. Center Scheduling Enterprise (CSE).

- CCF will accept CSE generated airspace requests in lieu of R-2508 Complex Airspace Request Forms for 412 TW (including Plant 42) only. ***NOTE: CSE generated airspace requests with missing call signs, incorrect altitudes for associated airframes, etc., will not be accepted by CCF.***
- CCF will not accept CSE generated airspace requests in lieu of R-2508 Complex Airspace Request Forms for aircraft with departure points other than KEDW or KPMD. **NOTE: Units flying in R-2508 in support of 412 TW that originate from other than KPMD or KEDW must submit an R-2508 Complex Airspace Request Form IAW paras 4.2.2.1. and 4.2.2.2. above.**

**4.2.3. Policy 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.

<b>R-2508 Central Coordinating Facility - Complex Shared Use Airspace</b>				
<b>Area</b>	<b>Agency</b>	<b>Hours of Operation</b>	<b>Function</b>	<b>Contact Numbers</b>
<b>R-2508, MOAs and ATCAAs</b>	R-2508 Central Coordinating Facility (CCF) Edwards AFB	0600–1800 M-F	Complex Management, Airspace Scheduling Mission Coordination Airspace Briefings	DSN 527-2508 (661) 277-2508 After hours phone: 1-866-805-2851
			Email: <a href="mailto:2508ccf@us.af.mil">2508ccf@us.af.mil</a>	
<b>Desert Radio - National Training Center (NTC) Fort Irwin</b>				
<b>R-2502N R2502E</b>	Desert Radio Fort Irwin	24 hours a day	Desert Radio ATC	DSN 470-4320/6816/7559 (760) 380-4320/6816/7559 Fax: DSN 470-6368 or (760) 380-6368
		0800–1600 M-F		
		0800–1600 M-F	Range Scheduling	DSN: 470-3875 (760) 380-3875
			Airspace Manager	DSN 470-5852 / 6156 (760) 380-5852 / 6156
		Facility Manager	DSN 470-6369 (760) 380-6368	
<b>Naval Air Warfare Center Weapons Division (NAWCWD) China Lake</b>				
<b>R-2505 R-2506 R-2524 Superior Valley</b>	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
<b>412th Center Scheduling (412TW) Edwards AFB</b>				
<b>R-2515</b>	412th Current Ops Scheduling Edwards AFB  Airspace Manager	0600–1700 M-F	412th Current Ops Scheduling	DSN 527-4110 (661) 277-4110
		0730-1630 M-F	Next day Scheduling:	Fax: DSN 527-9685/3005 (661) 277-9685/3005
			Same Day Scheduling: (Current Ops)	DSN 527-3940 (661) 277-3940
		Airspace Management	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
- Tow Operations
- Airborne Radar Unit (ARU)/Airborne Warning and Control Systems (AWACS) Operations
- Large Scale Exercises
- Remotely Piloted Aircraft (RPA)/Unmanned Aerial System (UAS)
- Laser Activities

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 de-conflict the proposed operation from other activities within the Complex.
- See Appendix B: Mission Planning Checklist, to simplify coordination with CCF for Special Activities for missions involving more than 10 aircraft.

**4.5.1. Lights Out Operations** within R-2508 normally require units to establish a Letter of Procedure (LOP) with the Complex Control Board (CCB). Units requesting to conduct “Lights Out” operations within R-2508 shall provide two (2) working days prior notification for one-time use or IAW established LOP for recurring “Lights Out” operations. 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 by ATC.

**NOTE: 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 the activity in the remarks section of the airspace request form.

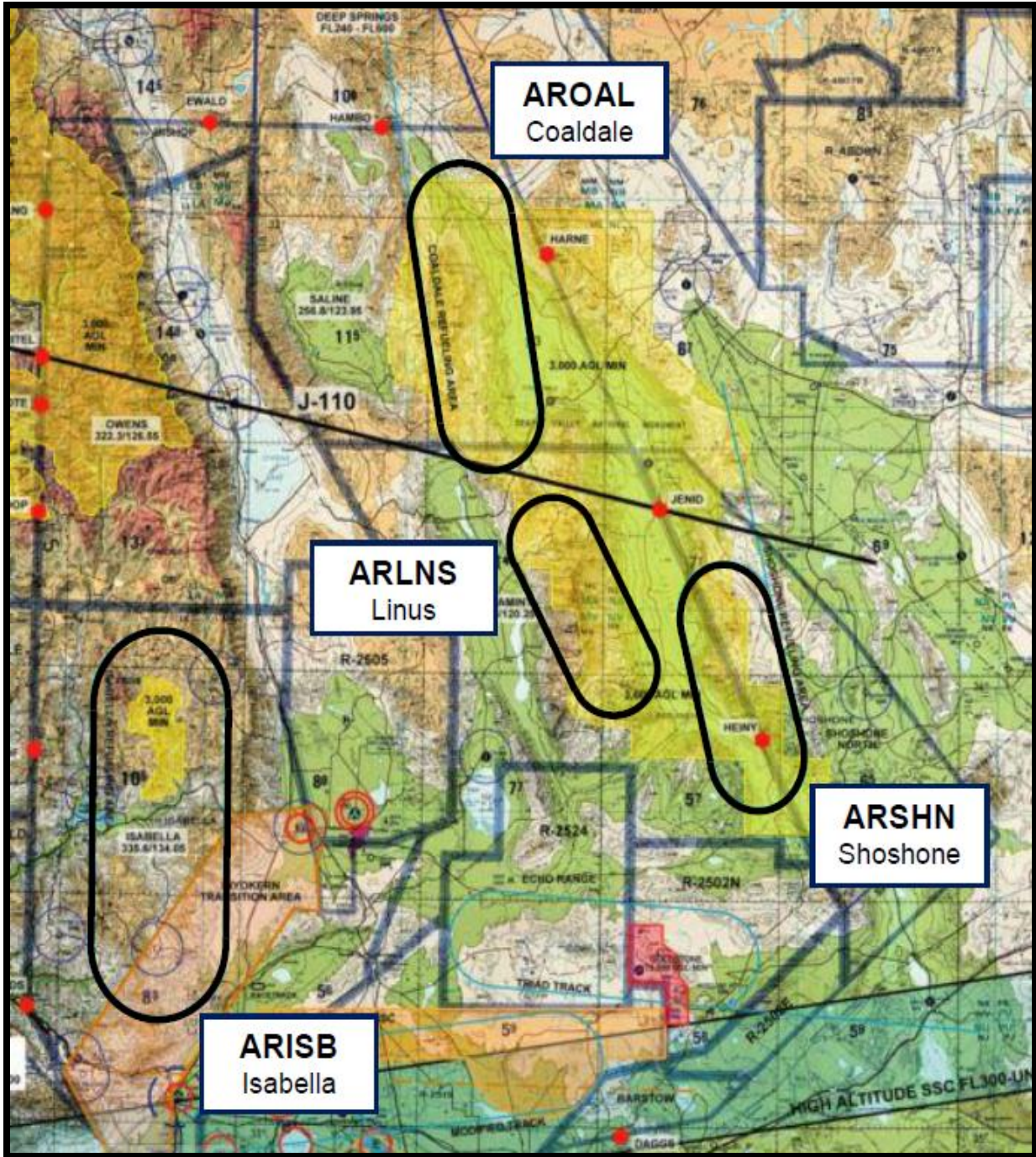
<b>Spectrum Managers</b>	<b>DSN</b>	<b>Commercial</b>
<b>WAFC, Pt. Mugu</b>	<b>351-7983</b>	<b>(805) 989-7983</b>
<b>412 TW, Edwards AFB</b>	<b>527-2390</b>	<b>(661) 277-2390</b>
<b>NAWCWD, China Lake</b>	<b>437-6827</b>	<b>(760) 939-6827</b>
<b>National Training Center, Fort Irwin</b>	<b>470-3043</b>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

**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 directly with the CCF or thru 412th Current Ops Scheduling NLT 1600L day prior to mission.

**NOTE: Refueling areas are within concurrent use airspace, are not protected, and “See and Avoid” procedures apply.**

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



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

**NOTE:** Tankers flying in support of **Green Flag West** operations should schedule directly with the 549th CTS scheduling office at Nellis AFB, DSN 682-8570, Fax DSN 682-4274. No radar coverage is available below 10,000 MSL for ARSHN or AROAL.



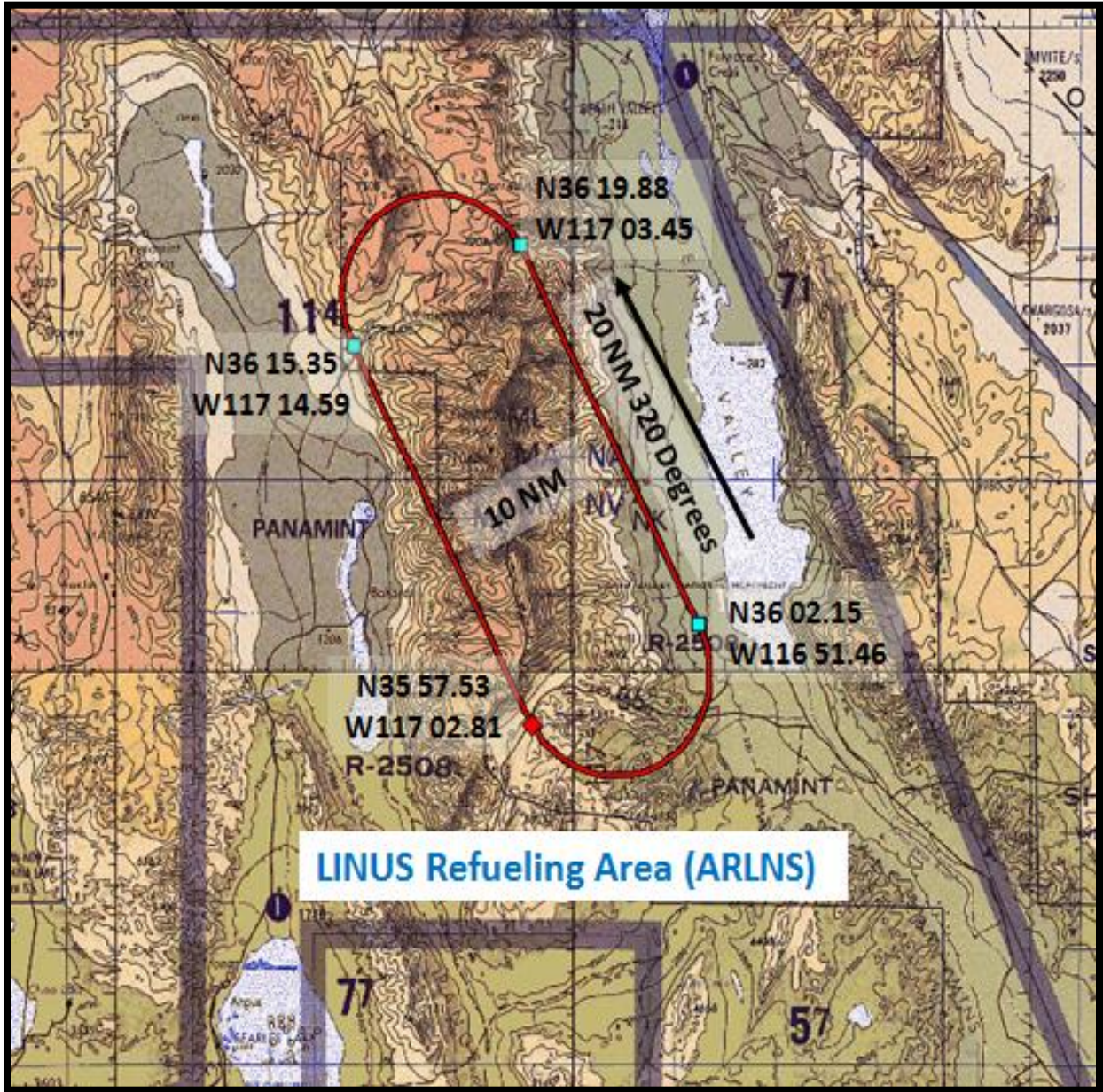


Figure 4-5 Linus Refueling Area – Green Flag West Only

#### 4.5.4.1. R-2508 Refueling Area Rules of Engagement.

- Always use the “**See-and-Avoid**” principle throughout your refueling operations.
- Refueling areas are **NOT exclusive-use airspace** and are **NOT protected** from other Complex aircraft operating in the area.
- **If you see a tanker formation that is not part of your operation, attempt to 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.
- Conduct AAR operations within **ARISB at and above 21,000’ MSL** unless precluded by receiver aircraft operations or test requirements/limits. When conducting AAR at altitudes lower than 21,000’ MSL, aircrews should be cognizant of high speed fighter cross traffic between ROMOF and Superior Valley at or below FL200. **NOTE: Unless an operational necessity exists, aircrews should consider AROAL or ARSHN.**
- **Standard AAR altitude blocks in ISBAR: FL210B230, FL240B260, and FL270B290.**

**4.5.4.2. Discrete Tanker Beacon Codes:** Tanker aircraft on active AAR missions will be issued discrete Mode 3 beacon codes by ATC 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. **NOTE: The below discrete beacon codes do not signify particular Refueling Areas or altitude blocks.**

- 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 the above, 412 TW assigned and/or sponsored tankers are assigned Mode 1 squawk 02 and Mode 2 squawk 7210.

#### 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 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 412<sup>th</sup> Center Scheduling for same day operations at DSN: 527-3940, next day or future operations at DSN: 527-4110.

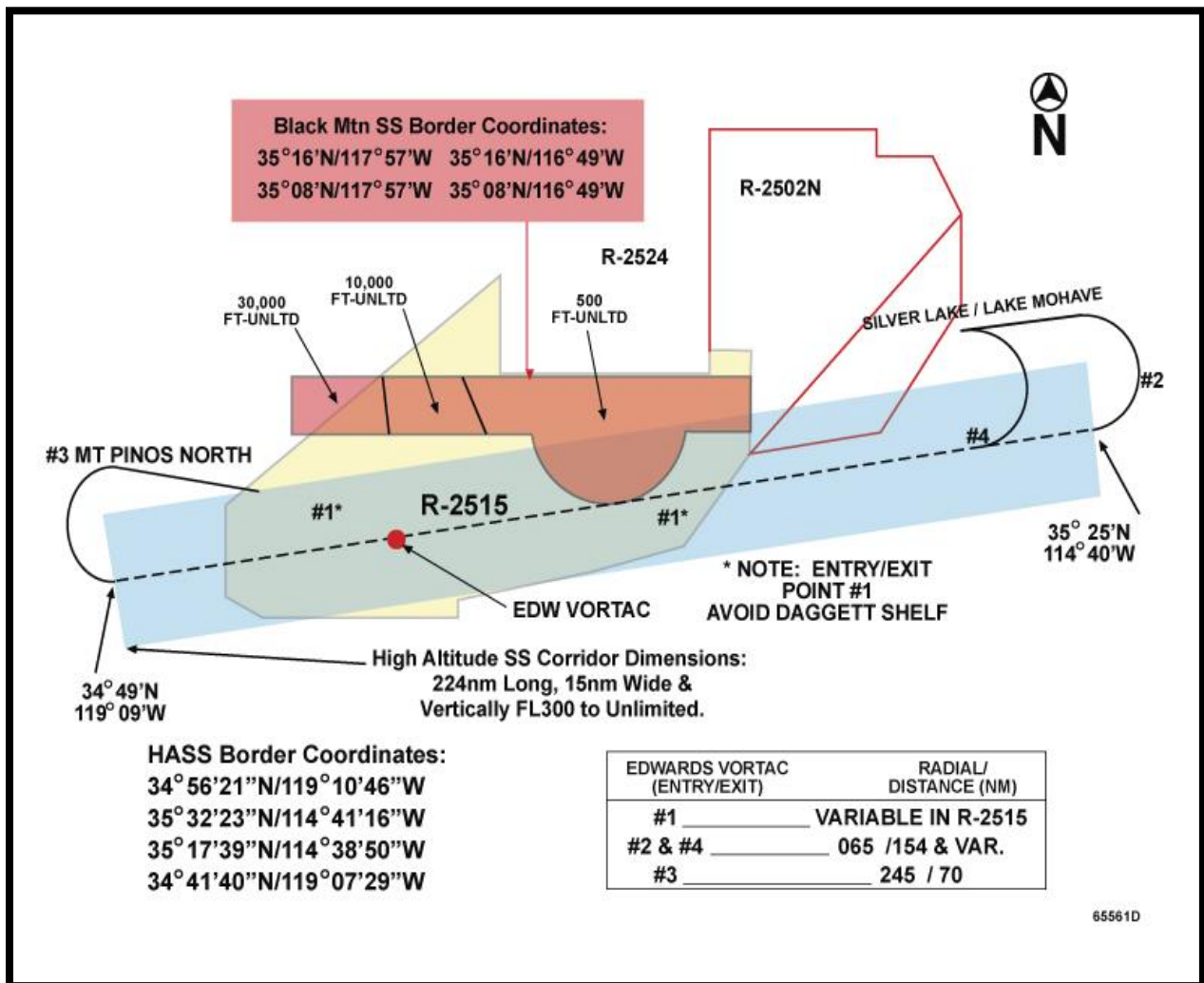


Figure 4-6: Supersonic Corridors

#### 4.5.6. Tow Operations

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

- Category A: Items towed within 500 feet of towing aircraft
- Category B: Items towed between 500 feet and 1 statute mile from towing aircraft
- Category C: Items towed more than 1 statute mile from towing aircraft

4.5.6.2. 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.

4.5.6.3. The following rules apply to tow operations:

- 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. **NOTE: Night tow operations are limited to Category A only.**
- 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.
- 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 five (5) days prior to the mission being flown.

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

**4.5.7.1. ARUs/AWACS shall:**

- Provide mission frequency to JOSHUA that enables direct contact between JOSHUA and mission aircraft.

- Obtain orbit airspace to provide service to an exercise taking place within the R-2508 Complex.
  - 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
- Advise JOSHUA as soon as possible when an aircraft declares an emergency or encounters any unusual situation that requires any form of special handling.
- Initiate a radar correlation check.
- Maintain communications with Joshua on the appropriate ATC frequency or a pre-coordinated mission/tactical frequency (AWACS/ARU).
- 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. 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 is complete, advise mission aircraft 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.**

**4.5.7.2. JOSHUA shall:**

- Perform all coordination with the appropriate ARTCC for inbound/outbound mission aircraft.
- Issue a Work Area Clearance and assign a Mode 3 discrete beacon code to mission aircraft.
- Forward mission aircraft radar data information to the AWACS/ARU to include:
  - Aircraft identification
  - Assigned discrete beacon code
- Inactively monitor the AWACS/ARU mission/tactical frequency.
- Provide traffic advisories, traffic alerts on non-mission aircraft operating in the R-2508 Complex, and boundary advisories on the mission/tactical frequency.

- Issue departure clearances and perform all associated ATC coordination with the appropriate ARTCC.

**NOTE: Joshua will not provide advisories between mission aircraft.**

**4.5.8. Large Scale Exercises:** Large Scale Exercises are those exercises 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:

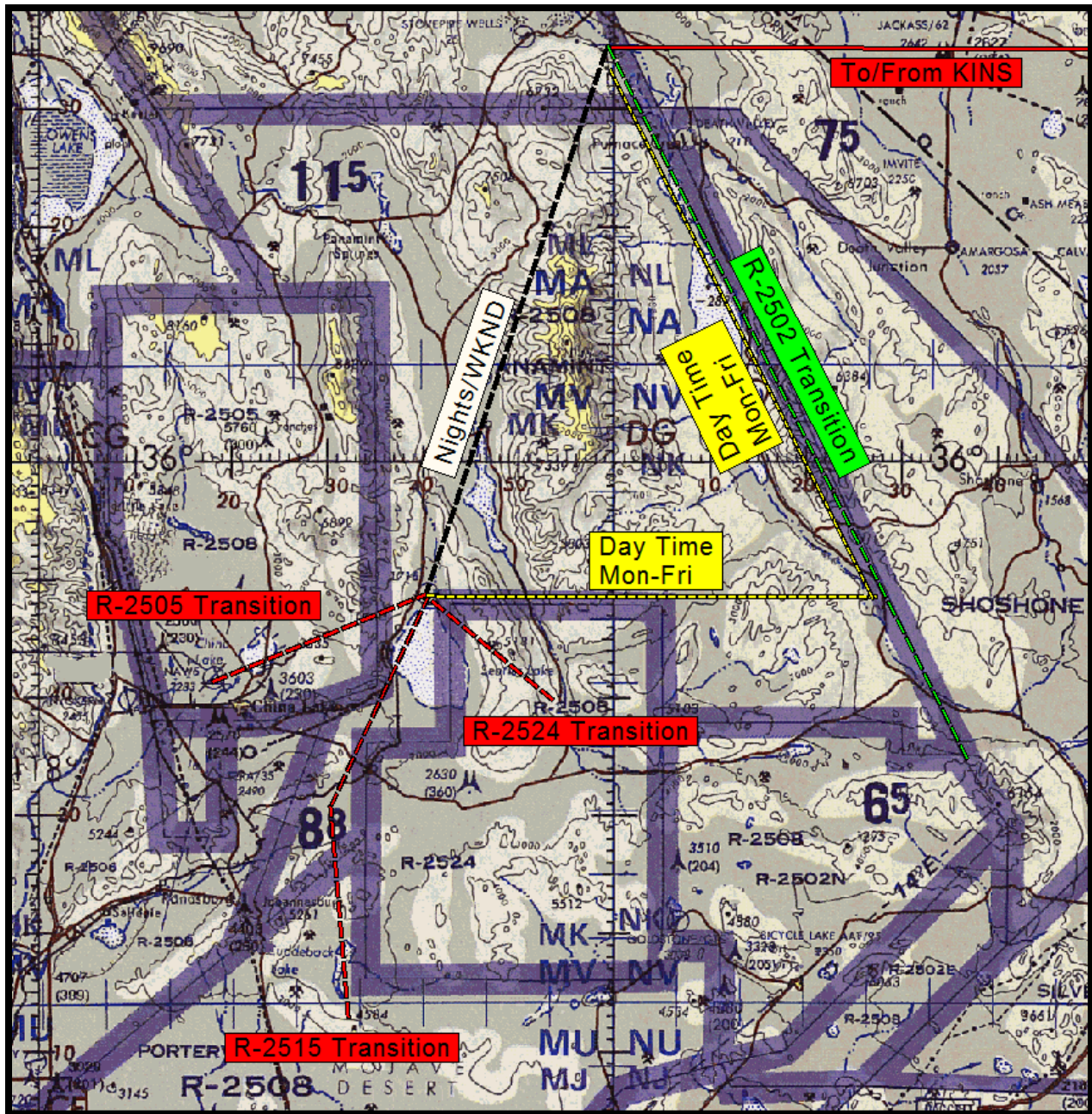
- Provide scenario of exercise plan and airspace requirements to CCF via email and Joshua by e-mail or fax.
- Coordinate in advance with FAA (ARTCCs, Joshua), Military Representatives to FAA, CCF, and/or other special-use airspace agencies.
- Set up a mission briefing for all participating aircrews.
- Generate an operations plan covering detailed operating procedures to which the range agency and CCF will have direct input.
- Serve as special frequency management liaison.

**NOTE: Mission planners are strongly encouraged to take advantage of CCFs extensive knowledge and experience in coordinating large-scale exercises in the R-2508 Complex. 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.**

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

#### 4.5.9. Remotely Piloted Aircraft (RPA) / Unmanned Aerial Systems (UAS) (see Figure 4-7):

- Operations within shared use airspace shall be conducted at or above 40,000 feet MSL.
- Transitions shall be conducted IAW approved transition routes at FL190 or FL200.
- CCF may authorize exceptions to this policy after core hours and on weekends dependent on other mission requirements.



**Figure 4-7: Approved RPA/UAS Transition Routes**

**4.5.9.1. RPA/UAS Scheduling and Coordination:** All RPA/UAS operations must be scheduled thru CCF and the applicable internal restricted area scheduling activity two (2) working days in advance. **NOTE: Does not apply to those operations outlined below.**

**4.5.9.2. 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.

**4.5.10. Laser Operations (non-eye safe):** All non-eye safe laser operations require specific R-2508 CCB approval. Project officers should contact CCF well in advance and plan on conducting these missions on weekends, at night, or above FL400.

**4.6. 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.

**4.6.1. To File To/From R-2508 Complex.**

4.6.1.1. File two (2) 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	



4.6.1.2. 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.

4.6.1.3. The point of entry/exit into R-2508 airspace should be an R-2508 Entry/Exit fix (see Figure 4-8) 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.**

**4.6.2. VFR Flights in R-2508 Complex.**

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

**4.6.3. R-2508 Complex Entry/Exit Points**

<b>Name</b>	<b>Radial / DME</b>	<b>Latitude</b>	<b>Longitude</b>
<b>FAANG</b>	NLC 043°/77	37°00'00"N	118°35'03"W
<b>EWALD</b>	BTY 274°/71	37°12'00"N	118°07'48"W
<b>HAMBO</b>	BTY 283°/50	37°12'00"N	117°38'33"W
<b>HARNE</b>	BTY 274°/22	36°55'25"N	117°11'15"W
<b>JENID</b>	BTY 175°/27	36°21'15"N	116°51'30"W
<b>HEINY</b>	BTY 154°/58	35°51'30"N	116°32'33"W
<b>DAGGS</b>	EDW 076°/38	34°59'00"N	116°57'00"W
<b>ROSIE</b>	PMD 317°/15	34°51'08"N	118°12'23"W
<b>CHADS</b>	*NID 226°/51	35°15'00"N	118°35'00"W
<b>ROMOF</b>	*NID 267°/44	35°49'00"N	118°35'03"W
<b>SWOOP</b>	NLC 075°/67	36°19'00"N	118°35'05"W
<b>KIOTE</b>	NLC 062°/68	36°34'20"N	118°35'24"W
<b>MITEL</b>	CZQ 086°/61	36°41'03"N	118°35'03"W

**NOTE: NID TACAN is unmonitored when China Lake Airfield is closed.**

**NOTE: FAA published Entry/Exit Points.**

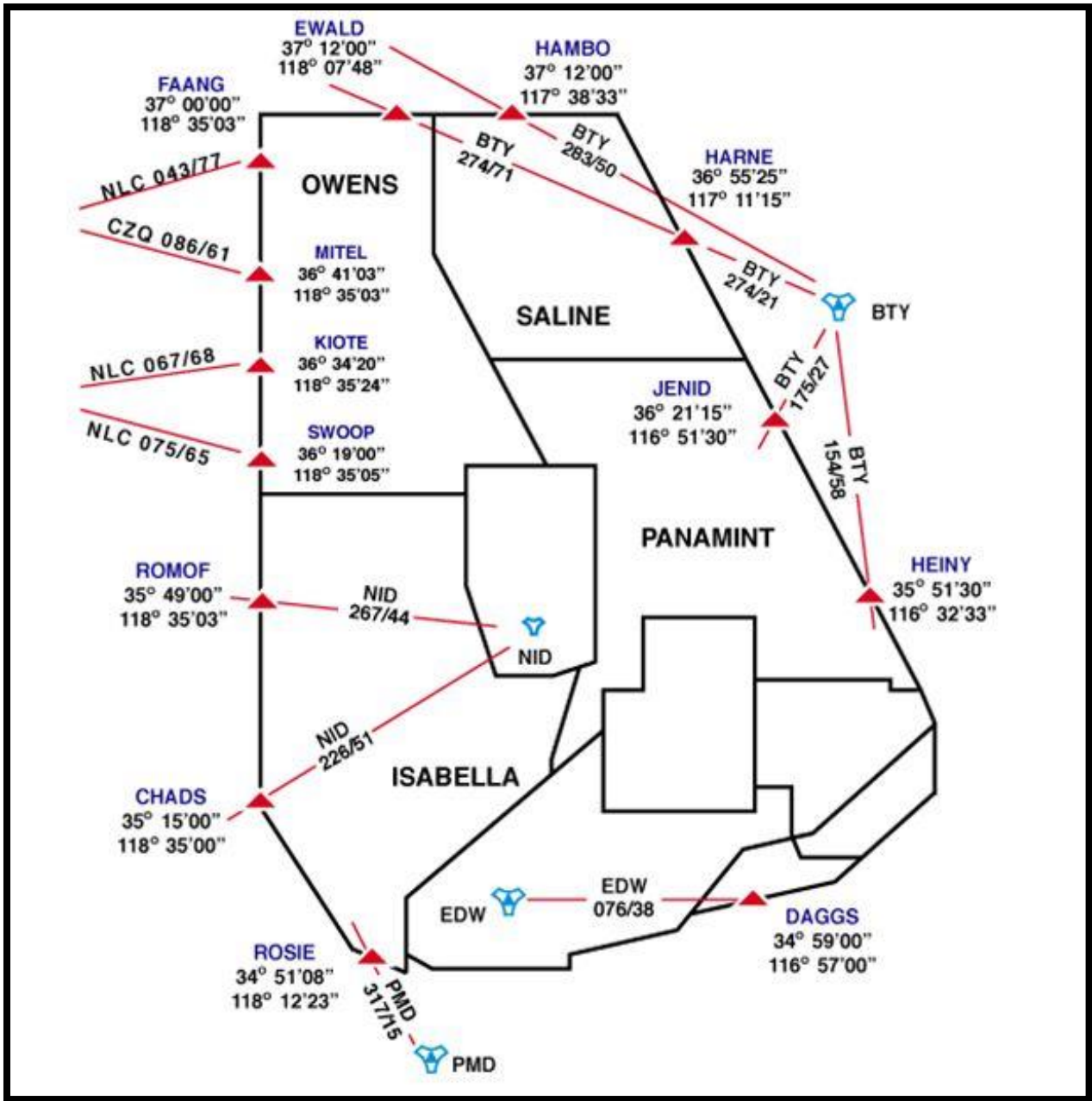


Figure 4-8: R-2508 Complex Entry/Exit Points

## **Chapter 5: R-2508 Flying Procedures**

This section discusses the following:

- Flying Procedures
- Low Level Flying
- Special Considerations

**5.1. Flying Procedures:** All users must understand and comply with R-2508 Complex procedures.

**5.1.1. 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.

**5.1.2. Contract Civil Aircraft MOA Operations:** In order to schedule a contract civil aircraft to operate in the R-2508 Joint Use Airspace below FL180, the aircraft must be:

- Sponsored by a JPPB command,
- Briefed to operate in the R-2508 Complex,
- Scheduled with the R-2508 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, R-2508 policy requires a Letter of Agreement with the R-2508 CCB.

**5.1.3. 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 JO 7110.65, on a non-interference basis, and can expect to encounter delays.

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

**5.1.4.1. 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

**5.1.4.2. 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.

**5.1.4.3. 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.

**5.1.4.4. Mode C:** 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.

**5.1.4.5. Traffic Advisories:** Aircrews 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.

**NOTE: 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.**

**5.1.4.6. 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 borders and/or near the top of the area at VFR hemispheric altitudes when practical.

**5.1.5. Operating Procedures:** These procedures apply to all aircraft operating within R-2508 Complex.

**5.1.5.1. 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.

<b>Work Area</b>	<b>Frequencies</b>
<b>JOSHUA APPROACH (Primary Frequency)</b>	<b>348.7 / 133.65</b>
<b>ISABELLA</b>	<b>335.6 / 134.05</b>
<b>OWENS</b>	<b>322.3 / 126.55</b>
<b>SALINE</b>	<b>256.8 / 123.95</b>
<b>PANAMINT</b>	<b>291.6 / 120.25</b>

**5.1.5.2. R-2508 Complex Clearances:** 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:

**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, and 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 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 3,000ft 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 must request **SHOSHONE NORTH & SOUTH real time with Joshua Approach on initial check-in to activate.**

**NOTE: 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. Aircrews issued clearance altitudes lower than mission requirements must request higher altitudes from Joshua Approach.**

**5.1.5.3. Local Altimeter Setting:** 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).

**5.1.5.4. Departing Complex VFR:** Participating aircraft departing the R-2508 Complex shall maintain VFR until crossing the R-2508 Complex boundary.

**5.1.5.5. Enroute Clearances:** Flight crews are responsible for obtaining an enroute clearance prior to departing Complex boundaries IFR. If departing VFR, advise Joshua Approach.

**5.1.5.6. IFR/VFR Separation:** 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.

**5.1.5.7. Active and Inactive Monitoring:** 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.

**5.1.5.8. Air Combat Maneuvers (ACM):**

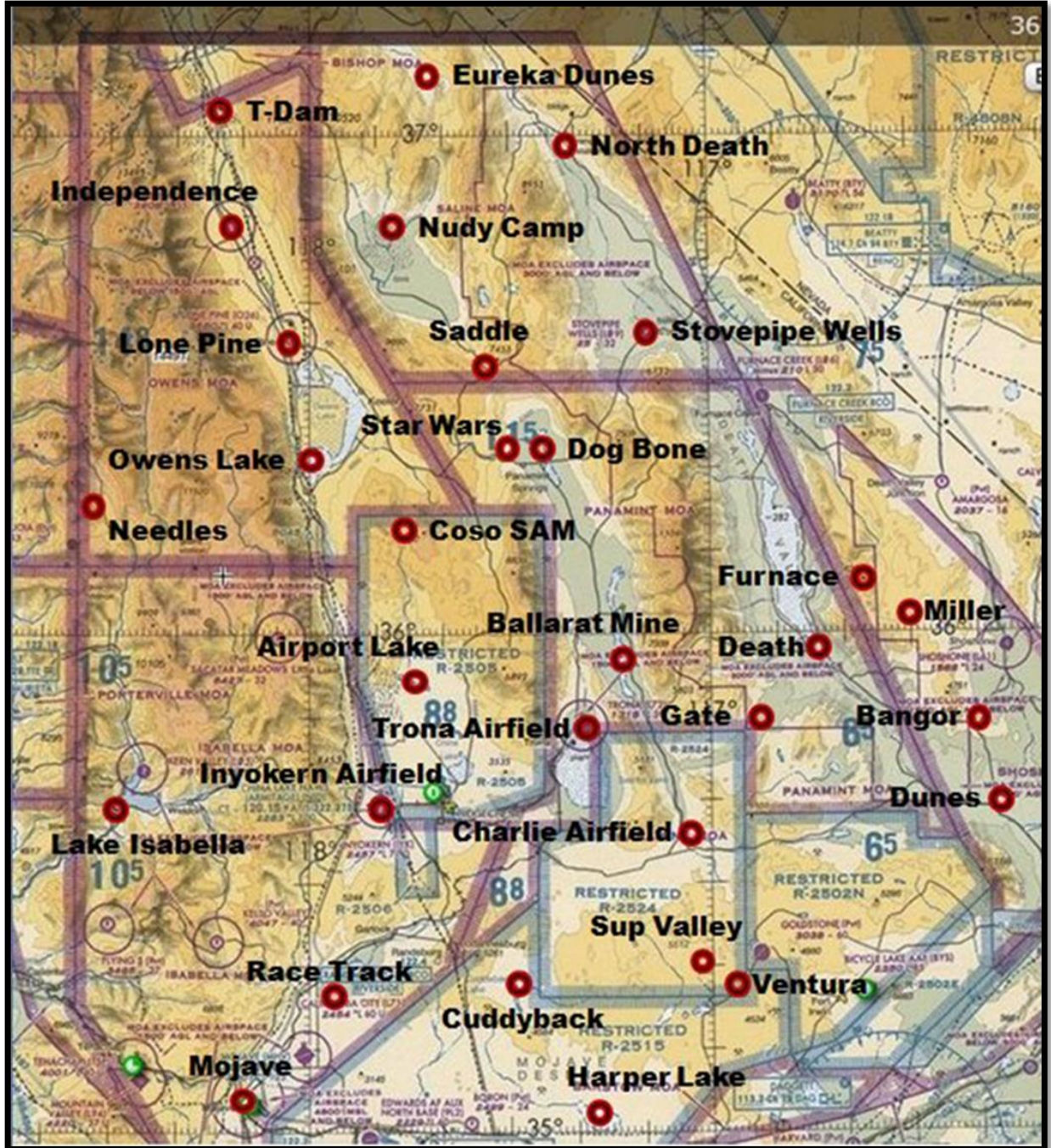
- When using maneuvering areas for ACM or any other mission requiring extensive maneuvering, advise Joshua Approach of the area.
- When conducting ACM, aircrews should be aware of noise-sensitive areas that must be avoided to the maximum extent possible.
- Be aware that low-level flying activities are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

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.

**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 is NOT monitored by Joshua Approach**

**5.2.1. GEO Reference Points (see Figure 5-1):** 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*

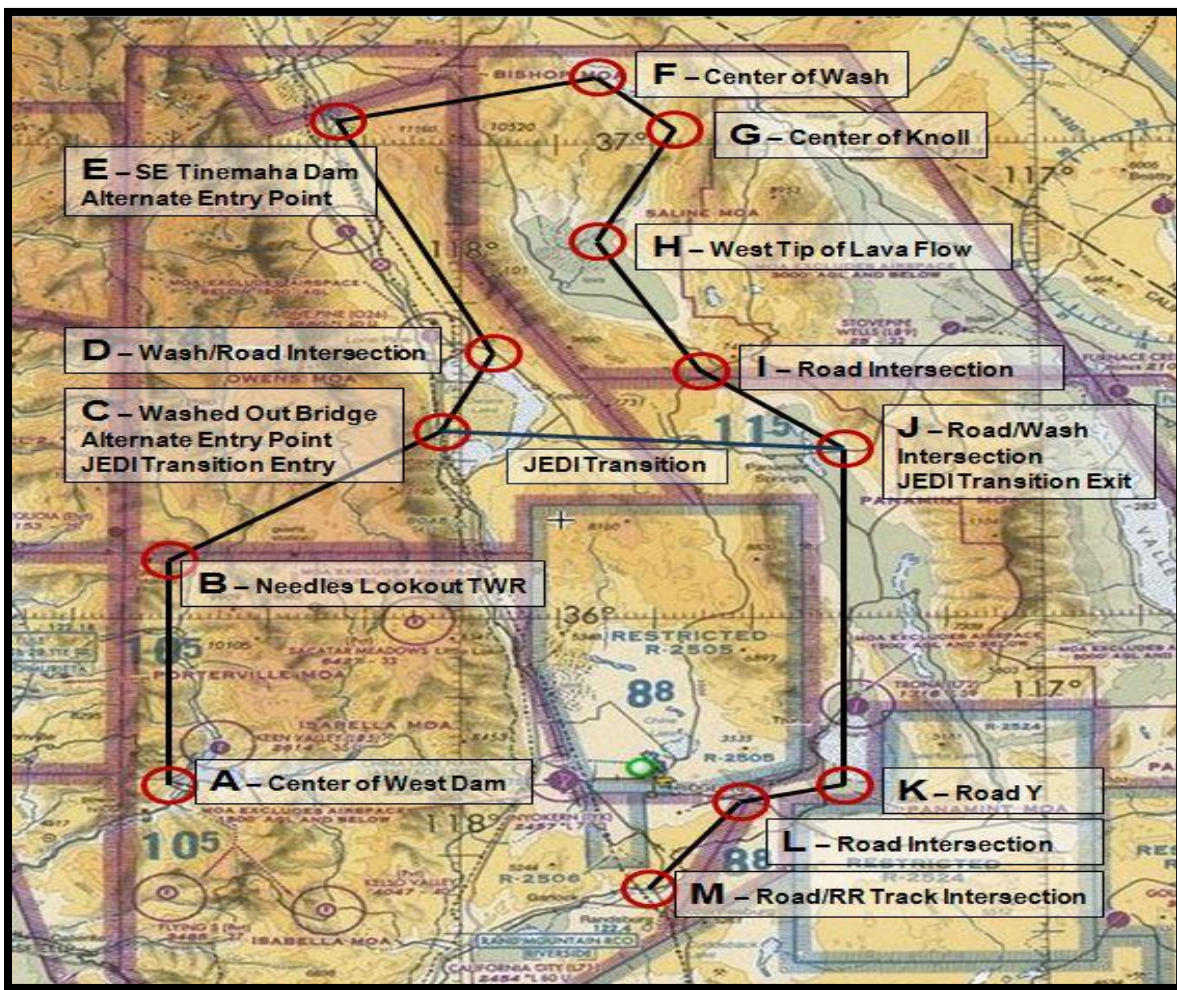


<b>OWENS VALLEY</b>	<b>N LAT</b>	<b>W LONG</b>
TINEMAHA RESV. "T-DAM"	N 37 03 41.50 / N 37 03.692	W 118 13 10.80 / W 118 13.180
INDEPENDENCE	N 36 48 54.79 / N 36 48.913	W 118 12 15.41 / W 118 12.257
LONE PINE	N 36 35 25.35 / N 36 35.423	W 118 02 47.25 / W 118 02.788
OWENS LAKE BED	N 36 21 32.90 / N 36 21.548	W 117 57 46.90 / W 117 57.782
<b>SALINE VALLEY</b>		
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
<b>DEATH VALLEY</b>		
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
<b>PANAMINT VALLEY</b>		
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
<b>ISABELLA</b>		
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
<b>R2505</b>		
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
<b>R2515</b>		
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
<b>R2524</b>		

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

**5.2.2. SIDEWINDER LOW LEVEL** (see Figures 5-2 & 5-3): 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).

- All points will be flown sequentially, i.e. A, B, C...M or C, J, K...M, etc.
- Opposite direction flight is prohibited.
- Aircrews must comply with R-2508 Complex noise sensitive area requirements IAW paragraph 2.4 of this handbook.
- Aircrews entering the Sidewinder LL via Point A must avoid Lake Isabella and surrounding communities.



5-2 Figure: Sidewinder Low Level Route

## 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.

Figure 5-3: Sidewinder Low Level Special Operating Procedures

### 5.3. Special Considerations:

- Severe Weather Areas
- Open Skies Treaty Flights

**5.3.1. Severe Weather Areas (see Figure 5-4):** 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.

#### Severe Weather Areas Defined

<b>Area (1)</b>	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.
<b>Area (2)</b>	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.
<b>Area (3)</b>	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.
<b>Area (4)</b>	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.
<b>Area (5)</b>	That portion of R-2515 that lies south of the FIM 049° radial, from 34°48'00"N/117°47'28"W direct to 35°11'03"N/116°49'03"W, then continuing south to encompass the Barstow MOA, and the Barstow East and Barstow West ATCAAs.

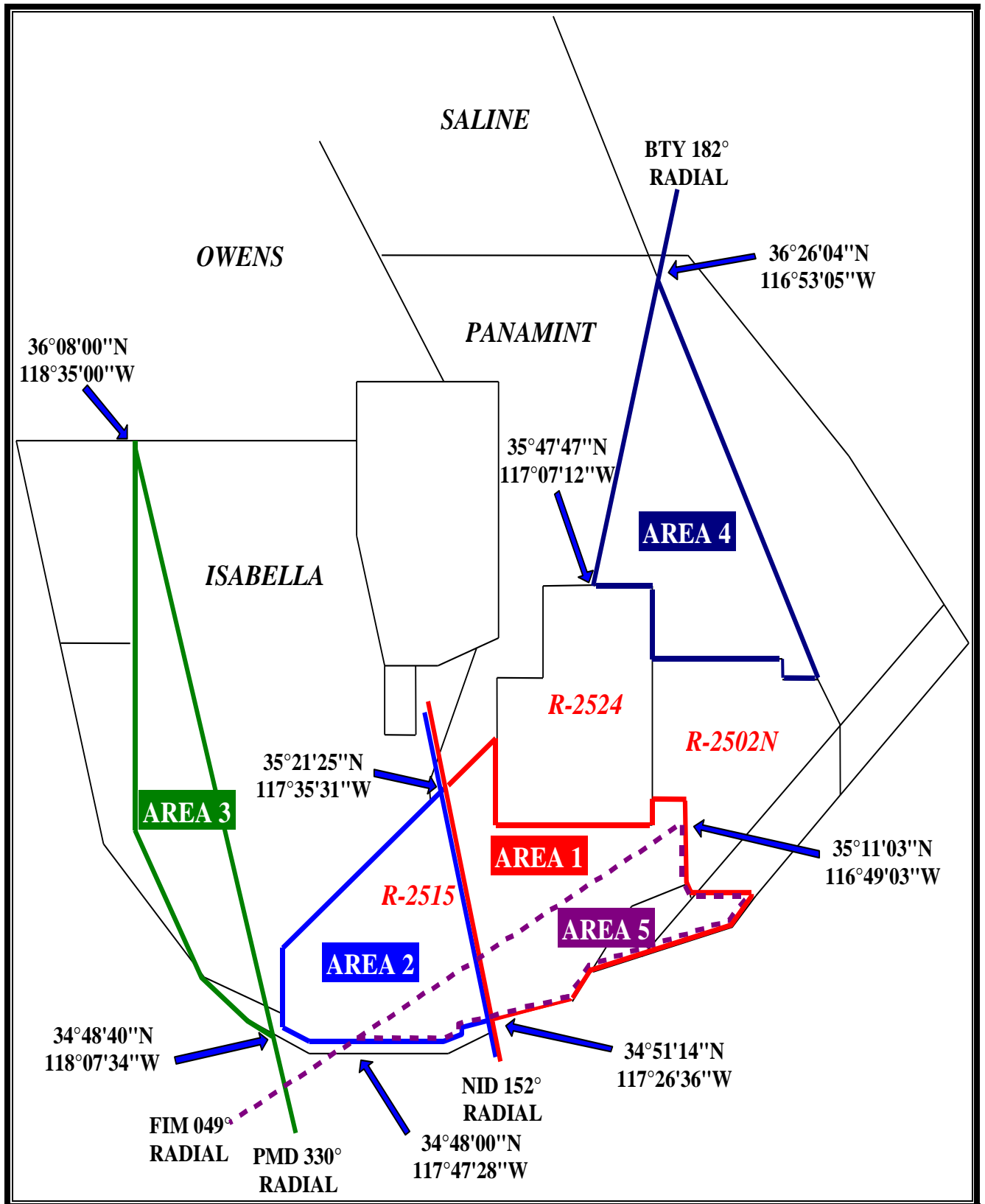
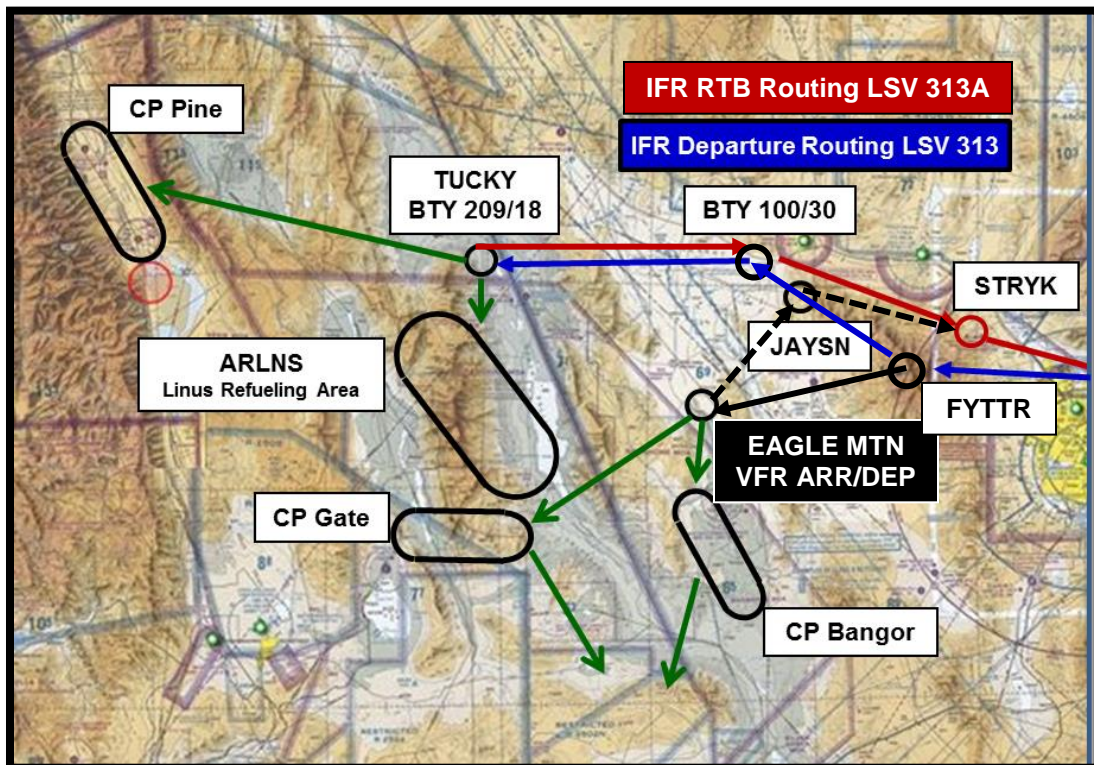


Figure 5-4: Severe Weather Areas

### 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. Green Flag West:



*Figure 5-5: Green Flag West*

- IFR Departure Routing... via FYTTR...BTY 100/30...TUCKY
- IFR RTB Routing... via TUCKY...BTY 100/30...STRYK
- LSV VFR Departure Routing FYTTR...Eagle Mountain
- LSV VFR RTB Routing Eagle Mountain...JAYSN...STRYK
- Refueling Area LINUS (ARLNS) 22K' (See also Figure 4-5)
- CP Pine CAS Orbit Hold at 21K' then operate 20K' to 200 AGL in Owens MOA/ATCAA

## **Chapter 6: Operating Procedures for R-2508 Major Work Areas**

This chapter covers the four principle work areas (Isabella, Owens, Saline, and Panamint MOAs/ATCAAs) in terms of:

- Description and Operations
- Special Considerations
- Dimensions

CCF is the Scheduling Agency for Isabella, Owens, Saline, and Panamint MOAs/ATCAAs, plus the R-2508 Restricted Area. Published hours of activation are: Monday - Friday 0600–2200L, All other times by NOTAM. Published hours of operation for R-2508 is continuous.

### **CCF Contact Info:**

<b>Hours of Operation</b>	<b>Phone</b>	<b>Email</b>	<b>Web Site / SharePoint</b>
0600-1800L (excluding holidays)	(661) 277-2508 DSN: 527-2508	<a href="mailto:2508ccf@us.af.mil">2508ccf@us.af.mil</a>	<a href="http://www.edwards.af.mil/Home/R-2508">http://www.edwards.af.mil/Home/R-2508</a>  <a href="https://cs2.eis.af.mil/sites/12162/default.aspx">https://cs2.eis.af.mil/sites/12162/default.aspx</a>

### **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)

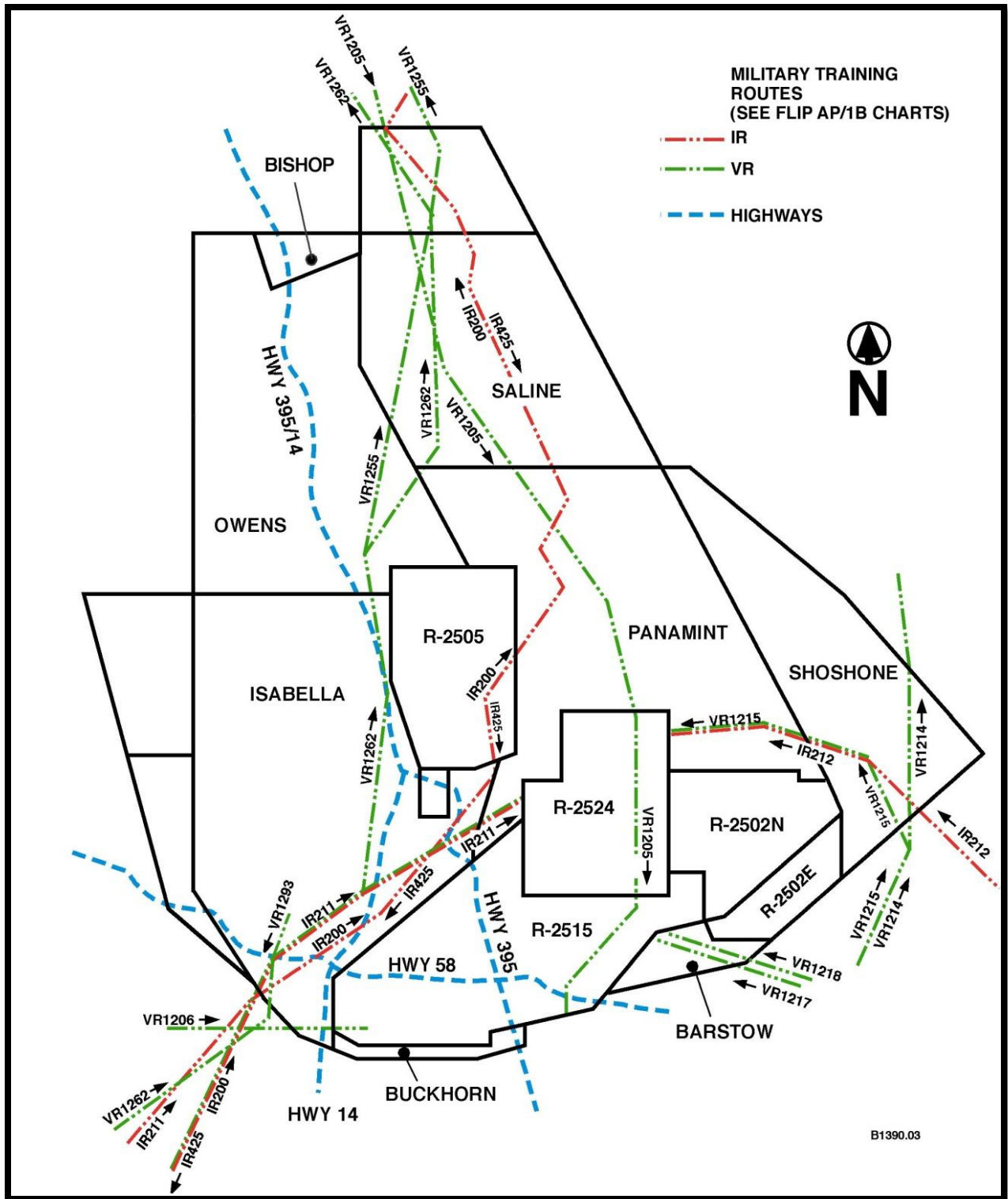


Figure 6-1: Military Training Routes (MTRs) and Highways



### 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 **boundary**.

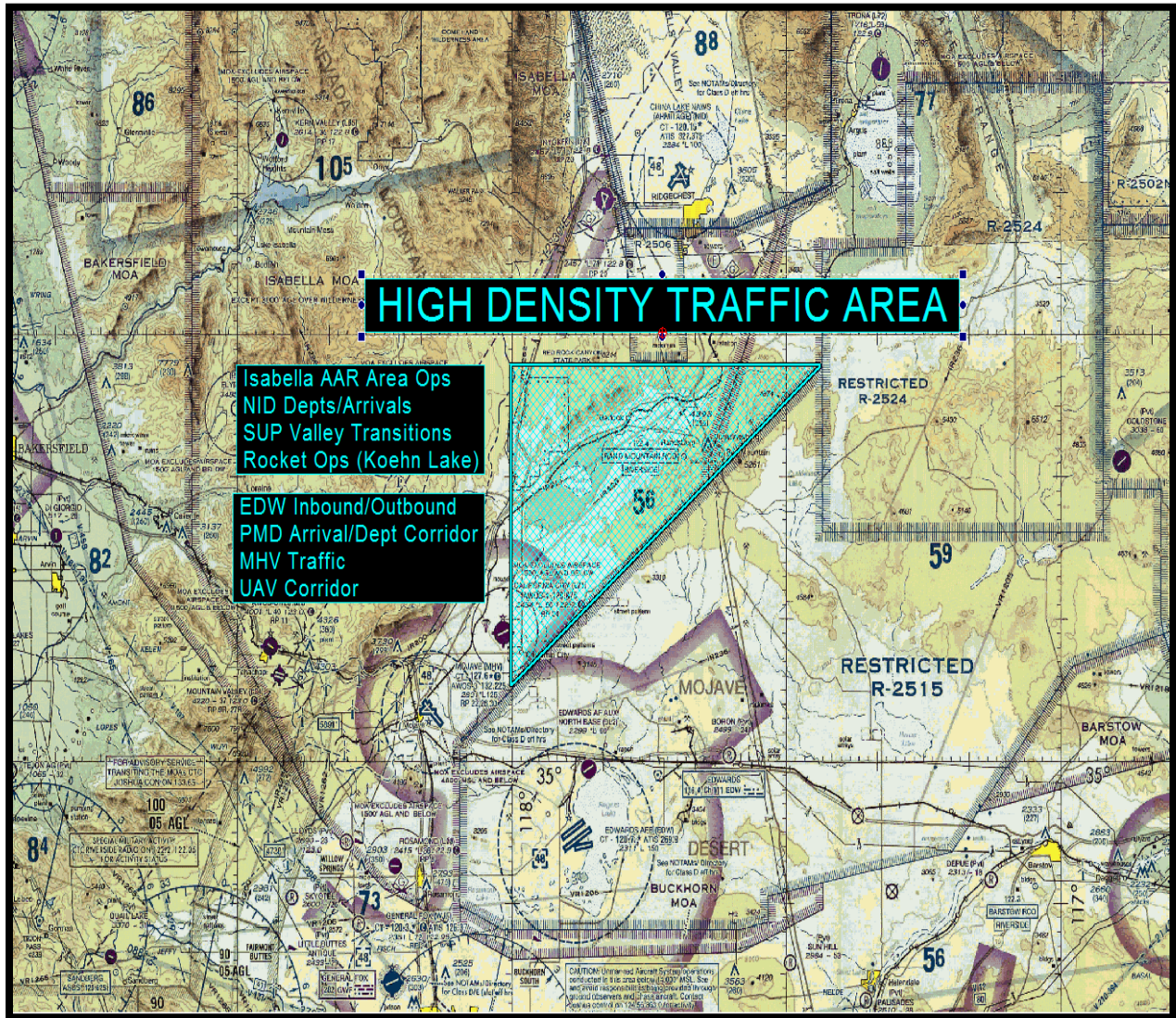
6.1.2.3. Altitudes in the MOA exclude the airspace up to and including 3,000 feet AGL floor over **Domeland Wilderness Area**, as it existed in 1977. The airspace also excludes the airspace up to and including 1,500 feet AGL within a 3 NM radius of the following airports:

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

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

- Trona Controlled Firing Area (CFA) and Trona Corridor (see Paras 2.1.2.2. & 2.1.2.3.)
- General aviation VFR Transit routes (see Para 2.3.1.)
- Ultralight (see Para 2.3.2.2.)
- Sailplane (see Para 2.3.3.)
- Parachute Activity (see Para 2.3.2.3.)
- Mojave Airport Class “D” and Aerobatic Practice Area (APA) (see Para 2.3.5.)
- Land Management helicopters and fixed-wing aircraft (Para 2.3.7.)
- Populated areas: Inyokern, Lake Isabella, Kernville, Johannesburg, Randsburg, California City, Mojave, and Sacatar (see Para 2.4.2.)
- Randsburg Mine (blasting) (see Para 2.4.3.)
- Little Lake Hunting Club (see Para 2.4.3.)
- Severe Weather Area 3 (see Para 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 (see Figure 6-2).



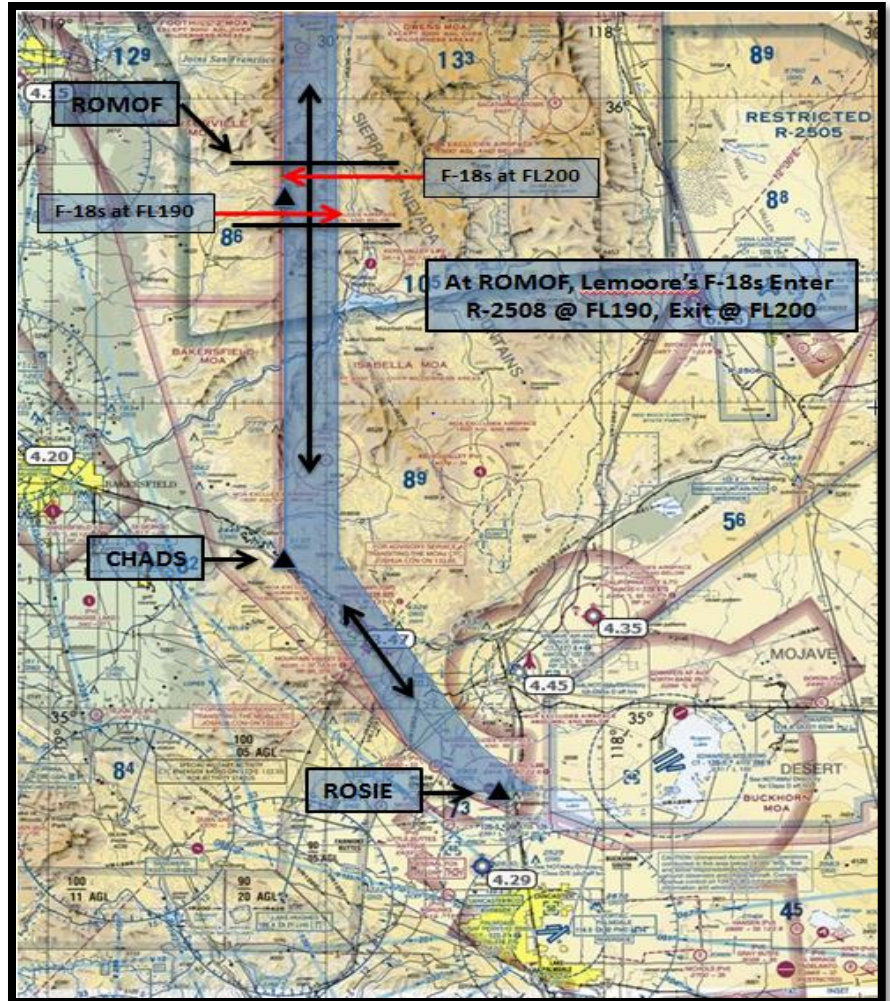
*Figure 6-2. High Density Traffic Area*

**6.1.2.6. Dragon Transition (DT) (see Figure 6-3):** 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.

**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.**

**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 to	35° 15.58"N 118° 34.89"W
to the point of beginning.	



*Figure 6-3: Dragon Transition*

### 6.1.3. Isabella MOA/ATCAA Dimensions.

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 6-1)

**NOTE: 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.

6.2.2.1. Aircraft use the China Lake local altimeter.

6.2.2.2. 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.

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

- General aviation VFR Transit routes (see Para 2.3.1.)
- Hang gliders and Ultralights (see Paras 2.3.2.1 & 2.3.2.2.)
- Sailplane (see Para 2.3.3.)
- Land Management helicopters and fixed-wing aircraft (see Para 2.3.7.)

- Sequoia/Kings Canyon National Parks and John Muir Wilderness Area (see Para 2.4.1.2.)
- Populated areas: Lone Pine, Independence, Olancho, Cartago, Keeler (see Para 2.4.2.)
- Chartered airports (see Para 2.4.2.)

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

**6.2.3. Dimensions.**

**6.2.3.1. Owens MOA Dimensions:**

Beginning at	37°12'00"N/118°35'03"W
thence direct	37°12'00"N/118°26'03"W
thence direct	37°02'00"N/118°20'03"W
thence direct	37°09'00"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.	

**6.2.3.2. Owens ATCAA Dimensions:**

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 6-1)
- Special platform aircraft orbits

### 6.3.2. Special Considerations

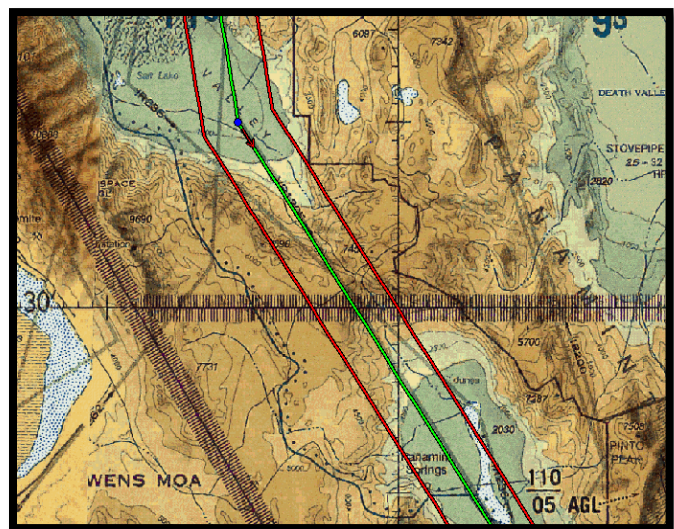
6.3.2.1. Aircraft use the China Lake local altimeter.

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

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

- General aviation VFR Transit routes (see Para 2.3.1.)
- Ultralight (see Para 2.3.2.2.)
- Land Management helicopters and fixed-wing aircraft (Para 2.3.7.)
- Death Valley National Park (see Para 2.4.1.3.)
- Populated areas: Inyokern, Lake Isabella, Kernville, Johannesburg, Randsburg, California City, Mojave, and Sacatar (see Para 2.4.2.)

**NOTE: Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs (see Figure 6-4). 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.**



**Figure 6-4: VR-1205 Hunter Mountain Saddle**

### 6.3.3. Dimensions.

6.3.3.1. The dimensions of the Saline MOA/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.	

6.3.3.2. The boundary of Death Valley National Park (see Figure 2-11) 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 6-1)
- Low and high-altitude refueling
- UAS Transitions to and from Creech AFB at FL190 and FL200

### 6.4.2. Special Procedures

6.4.2.1. Aircraft use the China Lake local altimeter.

6.4.2.2. 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.

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

- Trona Controlled Firing Area (CFA) and Trona Corridor (see Paras 2.1.2.2. & 2.1.2.3.)
- General aviation VFR Transit routes (see Para 2.3.1.)
- Ultralight (see Para 2.3.2.2.)
- Land Management helicopters and fixed-wing aircraft (Para 2.3.7.)
- Death Valley National Park (see Figure 2.4.1.3.)
- Populated areas: Trona (see Para 2.4.2.)
- CR Briggs Mine (blasting) (see Para 2.4.3.)
- Severe Weather Area 4 (see Para 5.3.1.)

**NOTE: Pay specific and careful attention to the ridge crossing at Hunter Mountain that divides the Panamint and Saline MOAs (see Figure 6-4). 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.

6.4.3.1. 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.	

6.4.3.2. 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

## **Chapter 7: Operating Procedures for Peripheral MOAs/ATCAAs**

This chapter discusses the operating procedures for the following MOAs and ATCAAs in terms of Scheduling, Special Procedures, and Dimensions:

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

**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 then request the Bakersfield MOA/ATCAA real time with Joshua Approach. The MOA is activated intermittently by NOTAM, therefore aircrews must provide a minimum 2 hour notice (preferably 1 day prior) to allow for NOTAM processing.

**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 6-1)

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

**NOTE: 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 spill-outs into LA Center airspace.**

**7.2.3. Dimensions.**

7.2.3.1. 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.

7.2.3.2. 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.

7.2.3.3. 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. Additionally, 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:**

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:** Both MOA and ATCAA share the same dimensions.

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

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

**7.5.2. Special Procedures:**

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

**7.5.3. Dimensions:**

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

**7.6. 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.

**7.6.1. 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.

**7.6.2. 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.

**7.6.3. Dimensions:**

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.

## 7.7. Shoshone (MOA and 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 6-1)

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

### 7.7.2. 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 they request work areas Barstow East, Barstow West, Shoshone North, and/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.
- Altitudes Restrictions: 1,500 feet AGL within a 3 NM radius of the Shoshone airport and 3,000 feet AGL over Death Valley National Park (coordinates 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.

### 7.7.3. Dimensions:

7.7.3.1. The dimensions of Shoshone 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

7.7.3.2. The boundary of Death Valley National Park within Shoshone MOA are:

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

7.7.3.3. 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.

7.7.3.4. 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.



## **Chapter 8: Operating Procedures for Individual Ranges/Restricted Areas**

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

- R-2502N and R-2502E National Training Center, Fort Irwin
- R-2505, R-2506, and R-2524 Naval Air Warfare Center, Weapons Division, China Lake
- R-2515, Air Force Flight Test Center, Edwards AFB

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

**8.1.1. Command and Control:** Aircraft must be in contact with and under the control of one of the following agencies:

<b>Airspace Information Center (AIC) Fort Irwin</b> “Desert Radio”	AIC is the primary control for R-2502N and R-2502E. AIC is operational 24 hours/7 days. Frequencies: UHF 281.45; VHF 126.2; FM 66.10 Initial contact with Desert Radio is required prior to entering R-2502N and R-2502E.
<b>NTC Airspace Control Center (NACC) Fort Irwin</b> (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.

<b>Function</b>	<b>Hours of Operation</b>	<b>Contact Numbers</b>
Bicycle Lake AAF: PPR Requests/Activation	24 hours/7 days a week	DSN 470-4320/6816/7559 (760) 380-4320/6816/7559 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

## 8.2. Naval Air Warfare Center, Weapons Division, China Lake

**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.

<b>China Control</b>	<b>Hours</b>	<b>Contact Numbers</b>
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

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

<b>Restricted Area</b>	<b>Hours</b>	<b>Contact Numbers</b>
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

**8.3. 412 Test Wing, Edwards AFB**

**8.3.1. Command and Control:** Radar advisory service for Restricted Area 2515 is provided by the SPORT, 343.7/132.75 MHz.

<b>SPORT MILITARY RADAR UNIT</b>	<b>Hours</b>	<b>Contact Numbers</b>
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

**8.3.2. Scheduling:** Information on and scheduling of Restricted Area 2515 may be obtained through the appropriate office as listed below.

<b>Restricted Area</b>	<b>Hours</b>	<b>Contact Numbers</b>
<ul style="list-style-type: none"> <li>• 412 Current Operations Scheduling</li> <li>• <b>Same Day Operations</b></li> </ul>	0600–1800 M-F	<ul style="list-style-type: none"> <li>• DSN 527-3940, (661) 277-3940 Fax: DSN 527-3005, (661) 277-3005</li> </ul>
412 Current Operations Scheduling <b>Future Operations</b>	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

## **Appendix A: Glossary of Abbreviations, Acronyms, and Terms**

<b>Item</b>	<b>Meaning</b>
AAF	Army Air Field
ACM	Air Combat Maneuvering
AFB	Air Force Base
AFTC	Air Force Test Center
AGL	Above Ground Level
ANG	Air National Guard
ARTCC	Air Route Traffic Control Center
ARU	Airborne Radar Unit
ASC	Airspace Surveillance Center
ATC	Air Traffic Control
ATCAA	Air Traffic Control Assigned Airspace
AWACS	Airborne Warning and Control System
BFM	Basic Fighter Maneuvers
CCB	R-2508 Complex Control Board
CCF	R-2508 Central Coordinating Facility
CFA	Controlled Firing Area
CFR	Code of Federal Regulations
DoD	Department of Defense
DSN	Defense Switching Network
ECM	Electronic Counter Measures
FAA	Federal Aviation Administration
FL	Flight Level
FLIP	Flight Information Publication
GP	General Planning
HATR	Hazardous Air Traffic Report
IAW	In accordance with
IFR	Instrument Flight Rules
JPPB	R-2508 Joint Policy and Planning Board
LOA	Letter of Agreement
MOA	Military Operations Area
MRU	Military Radar Unit
MSL	Mean Sea Level
MTR	Military Training Route
NACC	NTC Airspace Control Center
NAS	Naval Air Station
NAWCWD	Naval Air Warfare Center, Weapons Division
NAWS	Naval Air Weapons Station
NM	Nautical Miles
NMAC	Near Mid-Air Collision Report
NOTAM	Notice to Airman

NTC	National Training Center
NVD	Night Vision Device
OHR	Operational Hazard Report
OT&E	Operational Test and Evaluation
PPR	Prior Permission Required
RDT&E	Research, Development, Test, and Evaluation
RTB	Return to Base
SAM	Surface-to-Air Missile
SAR	Special Access Required
SFC	Surface
SRB	Safety Review Board
SUA	Special-Use Airspace
TFR	Temporary Flight Restriction
TRACON	Terminal Radar Approach Control
TW	Test Wing
UAS	Unmanned Aerial System
UHF	Ultra-High Frequency
VFR	Visual Flight Rules
WAFC	412TW Western Area Frequency Coordinator

## **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**

- Assign a single point-of-contact to represent your mission. Forward this information to CCF and other concerned agencies.
- 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.
- Prepare the initial plan. This information will be used to prepare a briefing sheet to be distributed to Joshua Approach 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)
- Ensure all participants are authorized to operate in accordance with R-2508 Complex operating procedures (see Chapters 2 through 7).
- Determine frequencies to be used and coordinate with CCF, FAA facilities, and range agencies.
- Coordinate check-in/check-out procedures with appropriate FAA facilities.
- Check for other agencies that may require advance coordination (i.e., FAA ARTCCs, Military representatives to the FAA, Frequency Coordinators).
- Call the range facility early to identify range requirements. Advance notice and information required may vary between scheduling agencies and types of missions.
- 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 duration of the exercise.
- Coordinate check-in/check-out procedures for the R-2508 Complex in advance with Joshua Approach.
- 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.
- ECM aircraft positions
- Designated ACM areas
- All exercise frequencies, call signs, and squawks

**NOTE 1: Communications aircraft must request and receive a Complex Clearance from Joshua Approach before entering the R-2508 Complex.**

**NOTE 2: 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:**

**B.1.3.1. 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).
- Do not place anchor points in areas of concentrated activities such as Owens Dry Lake, Saltdale, or the Trona Corridor.

**B.1.3.2. Your 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 4-3).
- Expect transit corridor restrictions to be imposed to allow other users access to the work areas without conflicting with exercise ACM activity.

**B.1.3.3. 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.

**NOTE: 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:** 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:**

- Finalize the exercise plan by defining operational requirements in the R-2508 Complex. Coordinate this plan with CCF and request any additional assistance needed.
- Brief representatives from each participating unit on exercise procedures prior to their strike/tactics planning.
- 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.

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



**Attachment 1: R-2508 Situation Report**

<b>R-2508 SITUATION REPORT</b>		<b>DATE RECEIVED:</b>
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:
<p><b>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.</b></p>		
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:
<p><b>NARRATIVE: Be as complete as possible. Include recommendations to prevent reoccurrence. Add additional sheets as necessary.</b></p>		

**Attachment 2 – Example Airspace Request Form**



**R-2508 COMPLEX AIRSPACE REQUEST**

SQUADRON: \_\_\_\_\_ SQUADRON/COMPANY NAME  
 PHONE #: \_\_\_\_\_ OPS/PILOTS CELL/MANNED PHONE

\*CCF USE ONLY\*  
 CCF ACKNOWLEDGEMENT OF RECEIPT  
 CCF INITIALS

AIRCRAFT CALLSIGN	NUMBER & TYPE A/C	DATE (m/D/YR)	EIA R-2508 (m/ZULU)	EST DELAY (m R-2508)	REQUESTED ALTITUDE	DEPT AIRPORT	ARRIVAL AIRPORT	AIRSPACE REQUESTED	TYPE MISSION / REMARKS
TOTAL 7 DIGITS	2/F16	MO/DY/YR	4 DIGIT Z	0+30	3 DIGITS	EDW	04CA	SAGE 2 OR S2 = L,O,S,T	AR ALTITUDE BLOCK / LIGHTS OUT / FLARES / COMMENTS
TALON 25	1/F18	12/14/16	1500	1+00	350	NID	NYL	S2 / AROAL	180 - 200
SHUTR 01	1/B747	12/14/16	1700	1+30	290	NZY	PSP	WAR 2 OR W2 / ARLNS	200 - 240
CAM 23	1/C12	12/14/16	1900	2+00	180	TNP	SLI	S2 / SHN / SHS / SH / ARLNS	200 - 240
BLHD 45	4/A4	12/14/16	2030	2+30	500	TNX	NJK	PANCHO 3 OR P3 / 24 / GT	LIGHTS OUT
GRHWK 12	1/RQ4	12/14/16	2345	3+00	010	BYS	DAG	P3 / 05	FLARES
PSWRD 01	1/MQ9	12/15/16	0000	0+15	400	99CL	BFL	P3 / SHN / SH / ARSHN	180 - 200
GNSTR 51	1/H60	12/15/16	0100	0+45	300	FAT	NUW	P3 / BAW / BAE / BA / BH	CHAFF
FE 45	1/CH53	12/15/16	0130	5+00	250	NUQ	ABQ	P3 / 15 / BAW / BMSS / ARISB	270 - 290
WRBAT 01	1/E8	12/15/16	0545	18+00	050	COS	7CL4	P3 / 15 / BAW / SS	

### Attachment 3 – Example CCF 24-HR Schedule

CCF Schedule for 12/15/2016 1400 thru 12/16/2016 1400

Date	Callsign	Aircraft # Type	Dep	Arr	From	To	Lo	High	Airspace	Type Msn	Remarks
	DOGS1	1 F15	FAT	FAT	1730	1930	000	180	SH		
					1730	1930	000	500	SHN, I, T, O, S		
	RAZOR2	1 F15	FAT	FAT	1730	1930	000	180	SH		w/RAZOR1
					1730	1930	000	500	SHN, I, T, O, S		
	VAMPR52	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		w/VAMPR51
	VAMPR62	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		w/VAMPR61
	VAMPR64	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		w/VAMPR61
	VAMPR51	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		
	VAMPR63	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		w/VAMPR61
	VAMPR61	1 F18	NID	NID	1730	1900	000	400	I, T, O, S		
	VAMPR95	1 F35	EDW	EDW	1730	1900	000	390	I, T, 15, O, S		
	COSO41	1 F18	NID	NID	1730	1900	000	350	I, T, O, S		
	ARRIS88	1 C17	EDW	EDW	1800	2100	000	180	BA		
					1800	2100	000	230	BAE		
					1800	2100	000	300	BAW, BH, I, T, 15, O, S		
	SPECTR66	1 AC130	LSV	LSV	1800	2100	000	290	I, GT, T, O, 24, S		
	COACH11	1 C130	NTD	NTD	1800	2030	000	180	BH, I, 15		
	COACH12	1 C130	NTD	NTD	1800	2030	000	180	BH, I, 15		w/COACH11
	COSO51	1 F18	NID	NID	1800	2000	000	180	SH		
					1800	2000	000	350	SHN, I, T, O, S		
	SUNDOG1	1 F15	PMD	PMD	1800	2000	000	180	BA		
					1800	2000	000	230	BAE		
					1800	2000	000	450	BAW, I, T, 15, O, S		
	COSO71	1 F18	NID	NID	1800	2000	000	350	I, T, O, S		
	VEGAS02	1 MQ1	04CA	04CA	1800	1930	000	130	15		
	XPERT81	1 F18	NLC	NLC	1800	1930	000	290	I, T, O, S		
	XPERT71	1 F18	NLC	NLC	1800	1930	000	290	I, T, O, S		
	NASA865	1 T34	EDW	EDW	1800	1900	000	290	I, 15		
	NASA806	1 ER2	PMD	PMD	1800	1845	000	650	I, O		OUT/BACK @2130Z
	COSO61	1 F18	NID	TPH	1800	1815	000	290	I, T, O, S		
	SHUTR05	1 F18	NKX	NKX	1815	1915	000	290	I, T, O, S		SIDEWINDER
	SHUTR06	1 F18	NKX	NKX	1815	1915	000	290	I, T, O, S		w/SHUTR05
	BLKNT11	1 F35	EDW	EDW	1900	2030	000	390	I, T, 15, O, S		
	BLKNT12	1 F35	EDW	EDW	1900	2030	000	390	I, T, 15, O, S		w/BLKNT11
	ARCHR01	1 F35	EDW	EDW	1900	2030	000	390	I, T, 15, O, S		
	ARCHR02	1 F35	EDW	EDW	1900	2030	000	390	I, 15, T, O, S		w/ARCHR01
	STORM51	1 F35	EDW	EDW	1900	2030	000	390	I, T, 15, O, S		
	XPERT35	1 F18	NLC	NLC	1900	2030	000	290	I, T, O, S		
	VADER12	1 F18	LSV	NUQ	1900	2000	000	290	I, T, O, S		w/VADER11

The schedule is uploaded each morning between 0600 – 0730L and available for view/download at <https://cs3.eis.af.mil/sites/MC-OP-00-08> The weekend and early Monday operations are available Friday after 1730L.