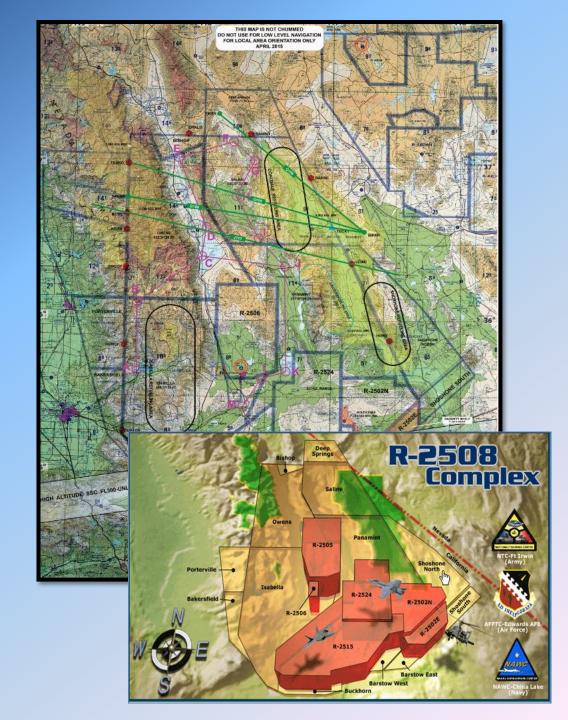


R-2508
Annual User's
Briefing
20 March 2019

WELCOME!

- Airspace Layout
- Concept of Operations
- Overflight Restrictions
- Low level Procedures
- Standard Op Procedures
- Special Activities/Areas
- Scheduling/Flt Plans
- SITREPS
- On Line Info







Restricted Areas:

• Schedule R-2508 with CCF

• Schedule Internal Restricted Areas with Using Agency and CCF To Transit MOA/ATCAA Airspace

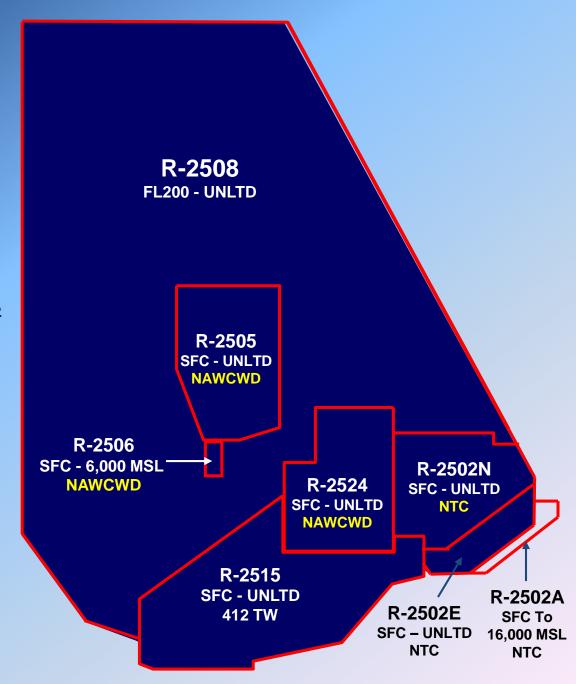
Using Agencies:

R-2505, R-2506, R-2524: NAWCWD

R-2515: 412TW

R-2502N, R2502E, R-2502A: NTC







MOA & ATCAA Airspace

Military Operations Areas & Air Traffic Control Assigned Airspace

JOSHUA APPROACH

Frequencies:

Joshua Primary ATC: 348.7/133.65

Isabella: 335.6/134.05

Owens: 322.3/126.55

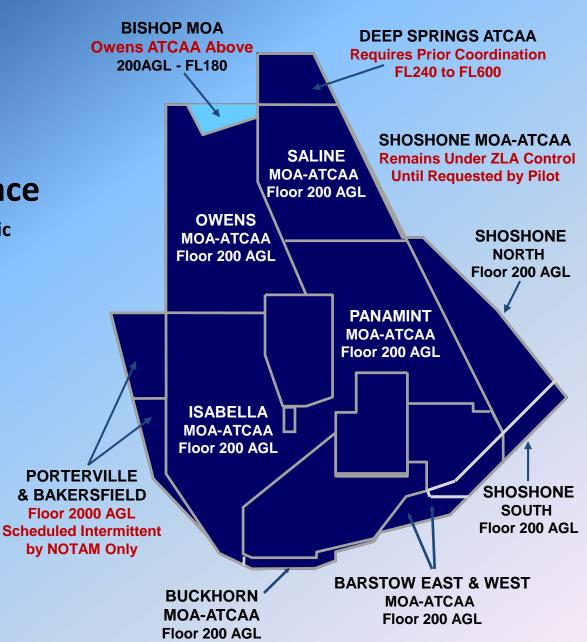
Saline: 256.8/123.95

Panamint: 291.6/120.25











Concept of Operations

When the SUA is Activated

- VFR
- See and Avoid
- Non-Exclusive Use
 - Transponder Mode C
 - Accept Advisory Service
 - Active vs. Inactive Monitoring











IFR Procedures

Not Authorized when SUA is Active

What to do if you encounter an IMC Condition...

- Advise Joshua Approach
- Expect IFR Clearance
 - On Top or Vectors to VMC
 - IFR Separation applied between IFR Aircraft only











R-2508 Annual Users Briefing







- Joshua Control Facility, "Joshua Approach"
 - -Traffic & boundary advisories, mission support
 - VFR and IFR Services as applicable within MOAs, ATCAAs, R-2508, and Released Internal Restricted Areas
- China Control & SPORT MRU's
 - -Traffic & boundary calls and mission support services for China Lake (R-2505, R-2506 & R-2524)
 - Edwards (R-2515 Barstow & Buckhorn MOA/ATCAA)
- Desert Radio, Airspace Information Center
 -Mission support in R-2502N, R-2502E & R-2502A









Check in Procedures & Situational Awareness



- Receive Clearance: Contact Joshua Approach prior to Complex entry and exit. Initial contact shall include a request for a Complex Clearance and Altitudes.
- Provide SA to ATC: During check-in, pilots should state their intentions and planned work area using plain language.
- <u>Receive SA from ATC</u>: Joshua Approach should respond with Work Area Clearance, relevant Traffic Information, and, workload permitting, work area saturation information.
- <u>ATC traffic calls</u> are based on observed aircraft positions, headings, altitudes and radar limitations. Rapid changes in heading or altitude may not be observed by ATC in time for the information to be issued in a timely manner. Aircrews are encouraged to Alert ATC when conducting rapid heading and/or altitude changes.



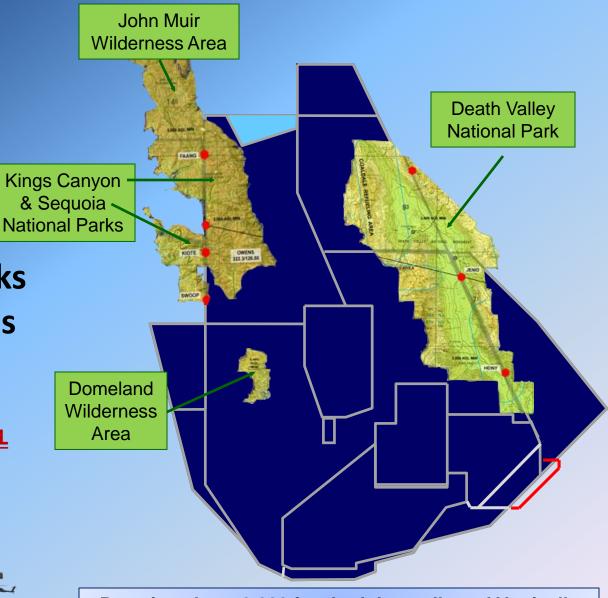


Overflight Restrictions of Parks & Wilderness Areas

Floor of MOA over National Parks and Wilderness Areas Published Altitude: 3,000 AGL

- FLIP AP1 California
- FAA JO 7400.8





Remain at least 3,000 feet both Laterally and Vertically from National Parks and Wilderness Areas...
3,000 feet from Canyon Walls and Saddles







Sequoia and Kings Canyon National Parks (SEKI)

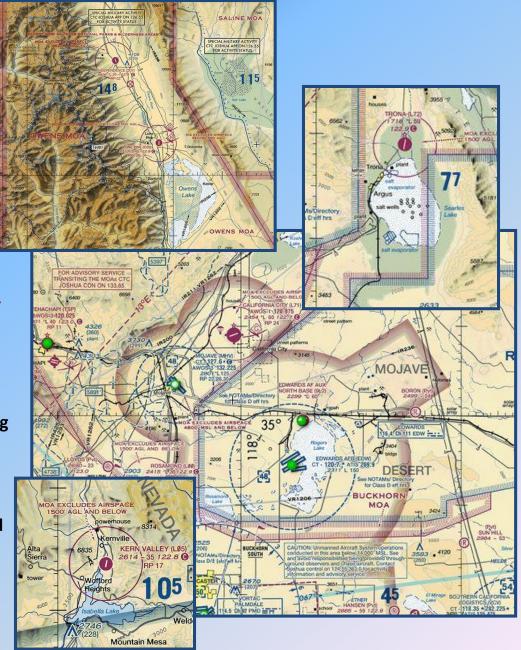
- All participating aircrews maintain an altitude of 18,000 feet or above over SEKI <u>unless specifically scheduled lower</u> <u>through CCF</u>.
 - Annotate "SEKI" in Remarks Section of R-2508 Complex Airspace request Form.
- Unscheduled operations below FL180 over SEKI are authorized only for safety of flight considerations.
- At no time will any participating aircraft descend below 3,000 feet AGL within the boundaries of SEKI except in an emergency situation. Lateral separation from SEKI is 3000 feet.



Overflight Restrictions

- Published Civil Airports:
- 1,500' AGL or 3 NM
- Mojave Air & Space Port Class D Airspace:
- 4,800' MSL and below
- National Test Pilot's School
- Aircraft & Space Systems development/testing
- Airborne Tow operations
- Community Overflights:
- 3,000' AGL unless operating on an approved test plan







Low Level Procedures

For sustained flight below 1,500' AGL

- Requires notification/check-in with JOSHUA Approach
- Operating frequency 315.9 MHz, NOT Monitored by ATC/MRU
 - Use as Unicom for <u>blind transmissions</u>, <u>pilot to pilot only</u>
- State Call sign, type aircraft, location and intentions
- Provides cross frequency communication capability with Land Management Agencies



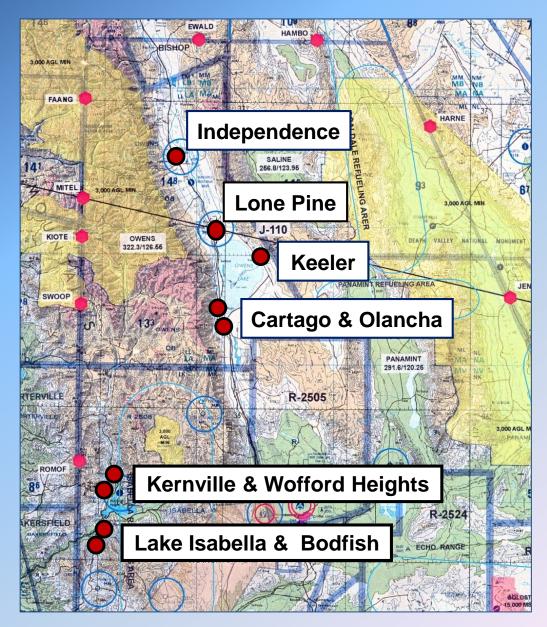


Noise Sensitive Areas

All Communities within

the R-2508 Complex are considered "noise sensitive areas". Noise sensitive areas must be avoided by 3000' AGL. The only exception to the 3000' restriction is while operating on an approved test plan.







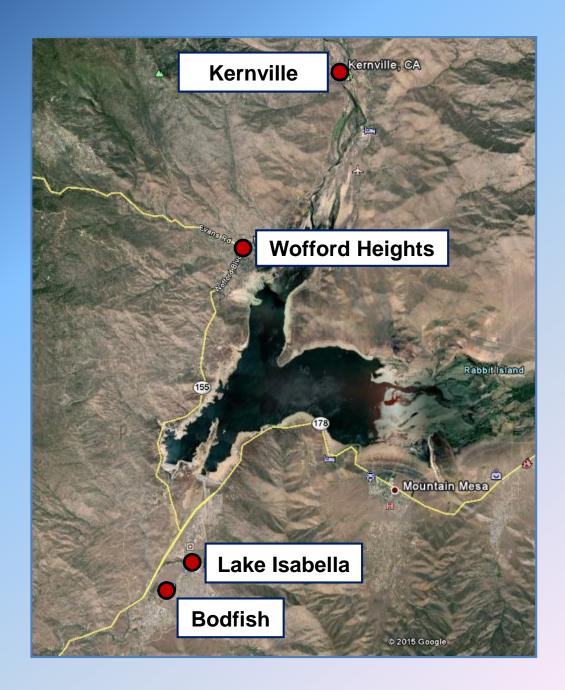
Noise & Low Level Complaints

Areas of Highest Concern:

- Kernville
- Wofford Heights
- Lake Isabella
- Bodfish

Source of most Sidewinder LL Noise Complains





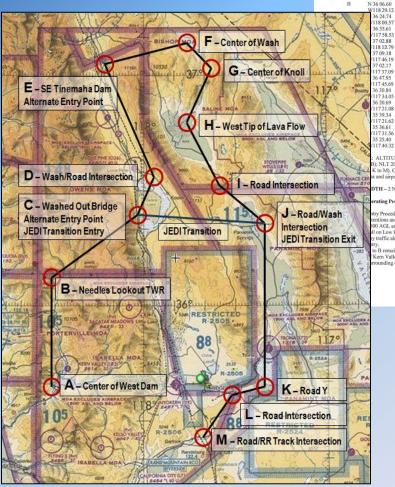


Sidewinder

Low Level with JEDI transition

- All points must be flown in a clockwise direction, sequentially i.e. A, B, C... M, or C, D, E... O, etc. Opposite Direction Flight Prohibited
- Preferred alternate entry via points C or E
- JEDI Transition: Proceed East from Point C to Point J
- Annotate "Sidewinder" in remarks section of R-2508 Airspace Request Form.





SIDEWINDER LOW LEVEL (Rev 2) 11 Feb 2015

<u>CAUTION:</u> 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.

Needles Lookout Twr/8107

Washed Out Bridge/3615

Wash/Road Int/3635 SE Tinemaha Dam/3894

Center of Wash/2956

Center of Knoll/4738

West Tip Lava Flow/1352

.....

Road Int/6109

Road/Wash Int/2093

Road Y/1624

15 36.61 Road Int/2480 117 31.56 15 25.40 Road/RR Int/2785

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

DTH = 2 NM either side of centerline

rating Procedures:

ntry Procedure: Prior to entry notify Joshua of tentions and planned Entry/Exit point. Above 000 AGL and prior to route entry make intentions dll on Low Level Common (315.9). Give way to 19 traffic already established on the route prior to try.

to B remain above 3000 AGL until 3 NM North Kern Valley Airport to avoid Lake Isabella and trounding communities.

- 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.
 - All aircraft operating on the Sidewinder/Jedi Transition will utilize the A-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. Monito 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 advisor; calls.
- (8) Avoid all noise sensitive areas by 3000' AGL or 3000' laterally. Avoid all airports along route by 1500' AGL or 3 NM.
- Point B to C, avoid the extremely noise sensitive areas of Olancha and Cartago.
- 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.
- Caution: high migratory bird activity between F and H during daylight hours.
 CAUTION: Possible merging traffic from aircraft.
- (12) CAUTION: Possible merging traffic from aircraft on ledi 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
- Point J to K. 198' multi unlit towers N35°53.797
 W117°17.558. Avoid Trona Airport by 1500' AGL or 3 NM.
- Point K to M. Watch for traffic northbound to China Lake initial at 4000' MSL.
- Point L to M, route transits underneath instrument procedure at NID (are and final approach). Use caution if exiting route prior to point M. Conflicts: A to L: IR-236; B to D: VR-1255; E to I:
- (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. Ledi users offset west of Point J for deconfliction. Jedi users make mandatory radio call approaching Point J "Call sign, Jedi Transition, approaching Point Julier," Make calls on 315.9.

Route Map, Route
Description, and Standard
Operating Procedures
Published in
R-2508 User Handbook



Noise & Low Level Complaints

Sidewinder Low Level
Point Alpha to Descent Point

Remain above 3000 AGL until 3 NM North of Kern Valley Airport to avoid Lake Isabella and surrounding Communities







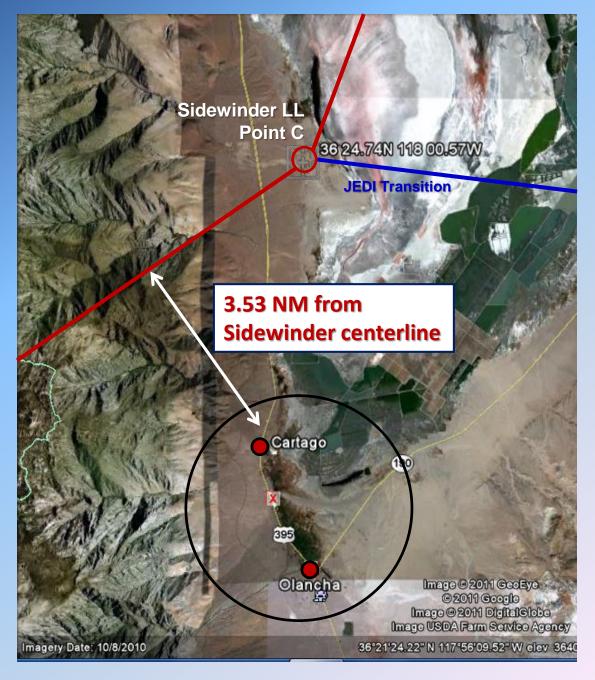
Noise & Low Level Complaints

Areas of Highest Concern:

- Cartago
- Olancha

Source of most Owens Lake area noise complaints 3.53 NM from Sidewinder LL centerline







Noise & Low Level Complaints

Other Owens Valley areas of Concern...

- Lone Pine
- Keeler



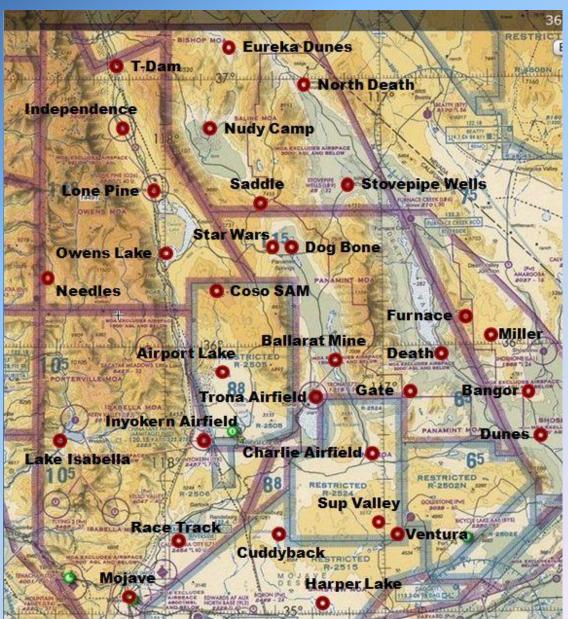




GEO Reference Points

- Easily identifiable ground reference points used to describe aircraft position during low level flight operations on frequency 315.9
- Detailed list of these locations, names and latitude/longitude position listed in R2508 Users Handbook paragraph 5.2.1







•<u>Temporary Flight</u> <u>Restrictions</u> (TFRs)

- Land Management Activity
- Fire-fighting Support ACFT

SMOKE FROM FIRES STAY

AWAY!

Check NOTAMS Prior to Step

Check NOTAMS Prior to Step Check R-2508 Daily Brief Sheet





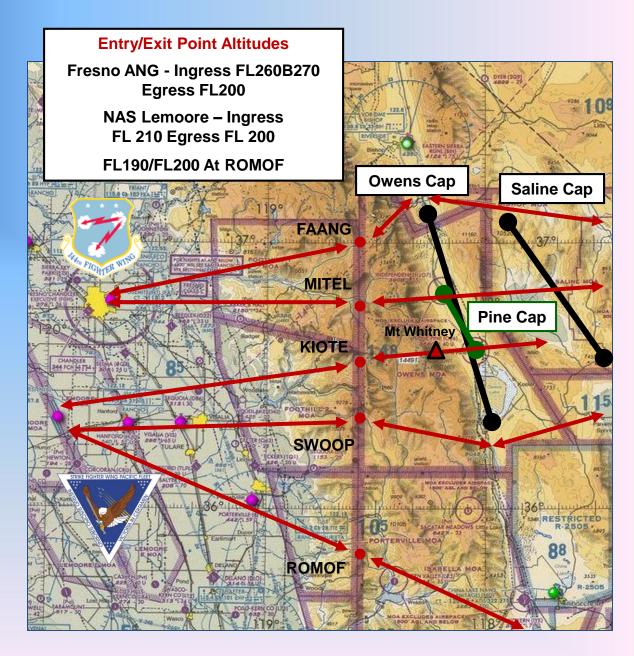


NAS Lemoore/Fresno ANG

Ingress/Egress Routes

- NAS Lemoore
 - Entry/Exit via KIOTE & SWOOP
 - Entry/Exit via ROMOF for Superior Valley at FL190/200 to avoid Isabella AR (ARISB)
- Fresno ANG
 - Entry/Exit via FAANG & MITEL
 - Use FAANG to avoid Cap Points when active
- Other Uses
 - Be aware of heavy East/West traffic flow across Owen Valley
 - Avoid Mt Whitney area

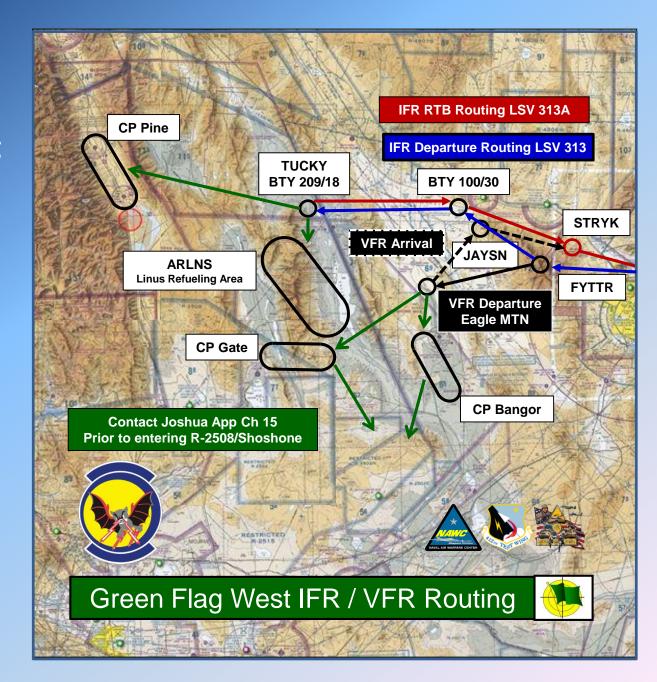






Green Flag West

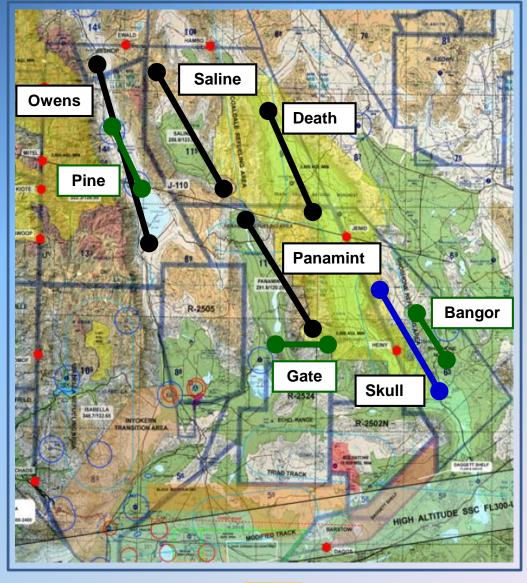
- IFR Departure Routing... via FYTTR..BTY 100/30..TUCKY
- IFR RTB Routing... via TUCKY..BTY 100/30...STRYK
- LSV VFR Departure Routing FYTTR..Eagle Mountain
- LSV VFR RTB Routing Eagle Mountain...JAYSN...STRYK
- Refueling Area LINUS (ARLNS) 22K'
- Lone Pine CAS Orbit Hold at 21K' then operate 20K' to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





Caps Points

- Used for staging and mission deconfliction.
- Aircraft transiting across working areas shall avoid aircraft actively conducting test or training whenever possible.
- NAS Lemoore SFWP
 - Owens, Saline, Death, Panamint
- LSV Green Flag West
 - Pine, Gate, Bangor
- 412 Test Wing
 - Skull





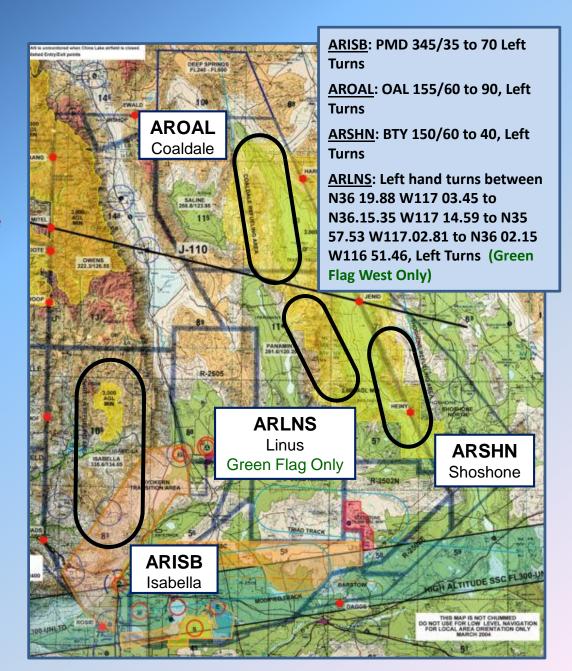


Air-Refueling Operations:

- Refueling areas NOT exclusive-use airspace and NOT PROTECTED from other Complex aircraft operating in the area.
- Avoid observed tanking operations by a minimum of 2,000 feet vertically and 5 miles laterally.
- Standard ARISB Alt Blocks:
 FL210B230 / FL240B260 / FL270B290
- Tanker discrete squawks:
 0051-0057 (assigned by SPORT)
 5253-5257 (assigned by JOSHUA)
- 412 TW assigned/sponsored TNKRS:

Mode 1: Squawk 02 Mode 2: Squawk 7210







Special Activity Areas...Weather Areas

Area 1: Eastern Half of R-2515 Divided by Highway 395

Western Half of R-2515 Divided by Highway 395

Area 3: Isabella MOA/ATCAA West of the PMD 330° Radial

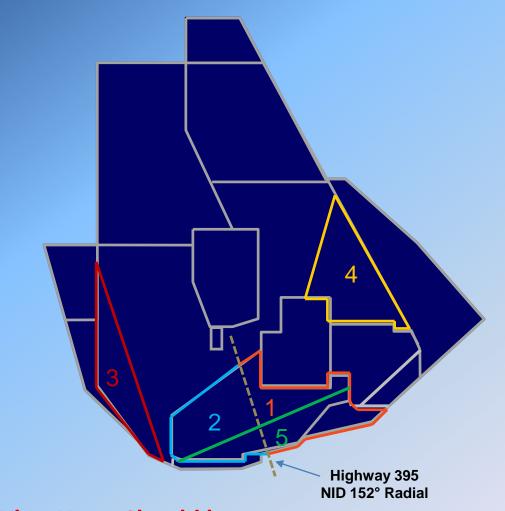
Area 4: Panamint MOA/ATCAA East of the BTY 182° Radial

Area 5: R-2515 South of the FIM 049°
Radial & Barstow MOA/ATCAA









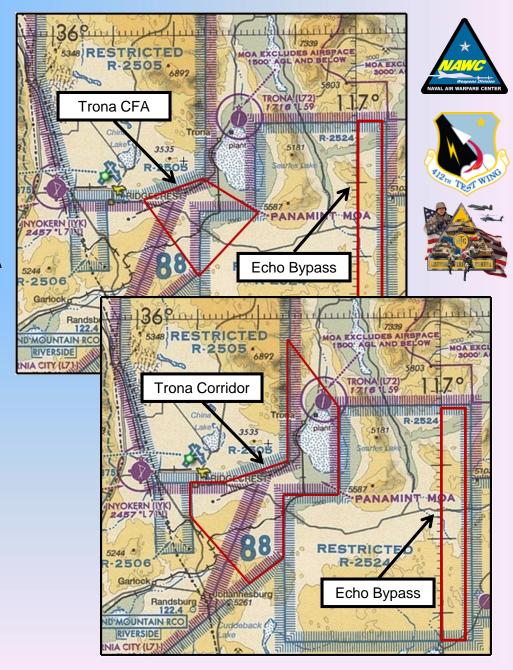
What Users Should know...

- WX Areas exist in the Southern Portion of the Complex
- WX Areas are Released to ZLA for Air Carrier WX Avoidance
- Joshua/SPORT will keep users updated on areas activated
- If you're unfamiliar with WX Area locations advise Joshua or SPORT and request assistance in WX Area avoidance.



Special Activity Areas

- Trona Controlled Firing Area CFA
- Altitudes: 3,000 AGL to 20,000 MSL
- Trona Corridor
- Altitudes: 20,000' MSL to Infinity
- Used to Protect Path of Free Flight
 Weapons Across Trona Gap
- May Be Used in Conjunction
- Echo Bypass may be available for transitions

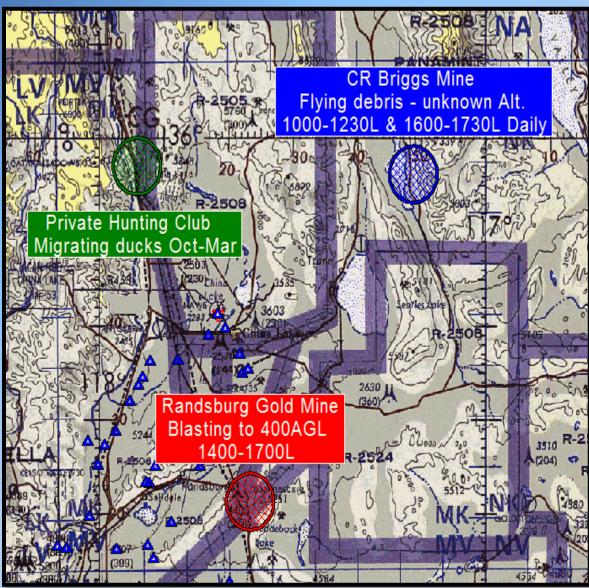




Special Activity Areas

- CR Briggs Mine "Blasting"
 35°56'17"N/117°11'09"W
- Randsburg Gold Mine 35°21'30"N/117°36'45"W
- Flying Rock to Unknown Altitudes
- Little Lake Duck migratory stop/hunting season: Oct-Jan
- Bird Strike Hazard





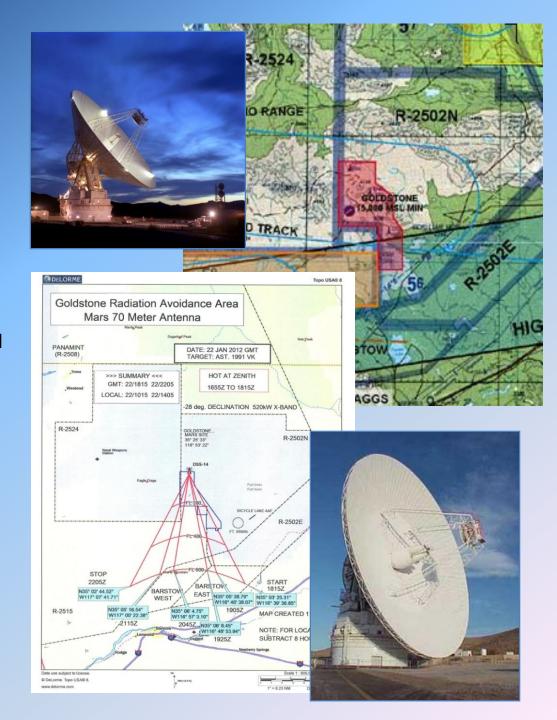


Special Activity Areas

NASA Goldstone Facility

- Overflight Restriction
 - 10,000 MSL or Higher as Scheduled
 - Goldstone provides ATC/MRU with radiation map to identify affected area, altitudes, and times when 70 meter dish is radiating
- Joshua, SPORT, China Control and Desert Radio will advise Users of Affected Areas







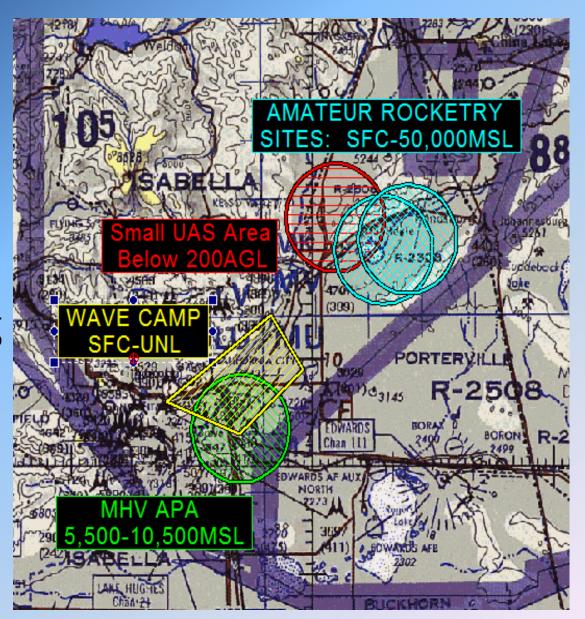
SPECIAL ACTIVITY AREAS

- Small UAS Work Area
 - Below 200' AGL
 - Underlies IR211 and VR1262
- Koehn Dry Lake: Launch Site
 - Launch Altitudes up to 50,000 MSL
 - sUAS 200AGL M-F / 400AGL WKND
- Wave Camp Area: Concentrated
 Glider Activity All altitudes
 - Transponder Equipped above FL180
- MHV Aerobatic Practice Area
 - 5,500 to 10,500 MSL
 - W/I lateral confines MHV Class D
 - Activated real-time by JOSHUA





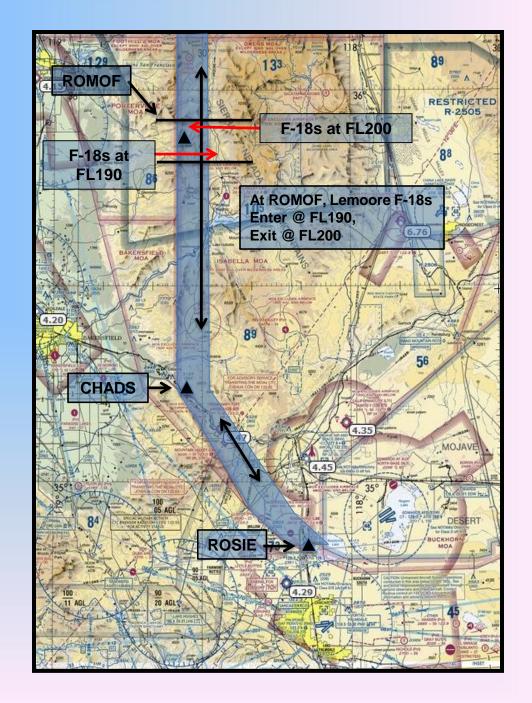






Dragon Transition (DT)

- Suggested route for U-2/ER-2s transiting Isabella
 - De-conflicts U-2/ER-2s from refueling ops
- When feasible, not mandatory, during AR ISB ops
- Dimensions:
 - Oriented N-S, 5 miles wide, 74 miles long
- Caution:
- DT traffic will remain at or above FL210 or at or below FL180 within 5 miles of ROMOF
- NOTE: The DT does not provide separtion from other traffic. R-2508 is non-exclusive use, VFR, and See and Avoid.





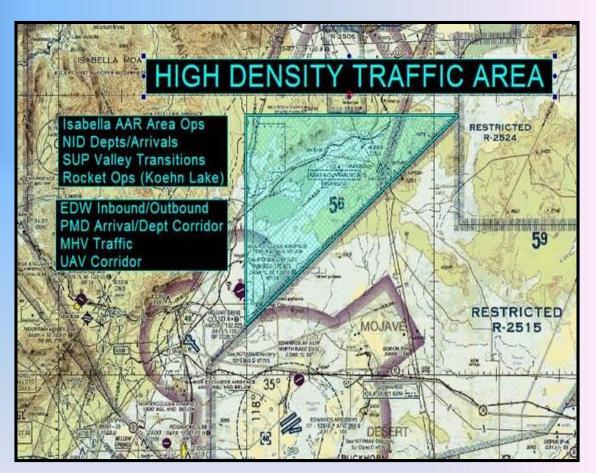
High Density Traffic Area

- Defined by: 118 line on west, extended southern boundary of R-2506 on north, boundary of R-2515 on southeast
- Confluence of large variety of activities, missions, platforms
- Majority of Incident Reports occur in this area
- Aircrews should expect numerous traffic calls and request updates as needed







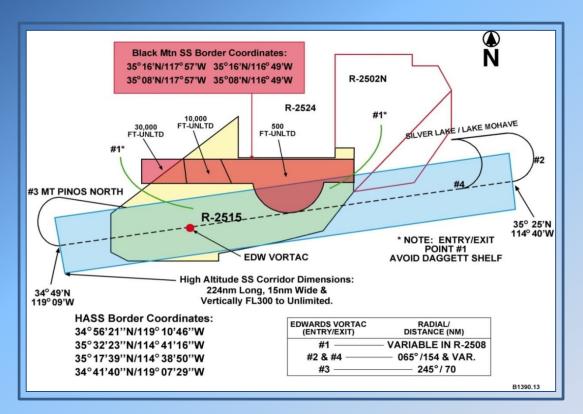




Special Activity Areas

- Supersonic Areas
- Black Mountain Supersonic
 - Tiered Bottom
 - SPORT must be open
- High Altitude Supersonic
 - At or Above FL300
 - Entry/Exit 1 within R-2515
 - Other Entry/Exit Point usage requires prior coordination with SPORT and LA Center





Supersonic operations

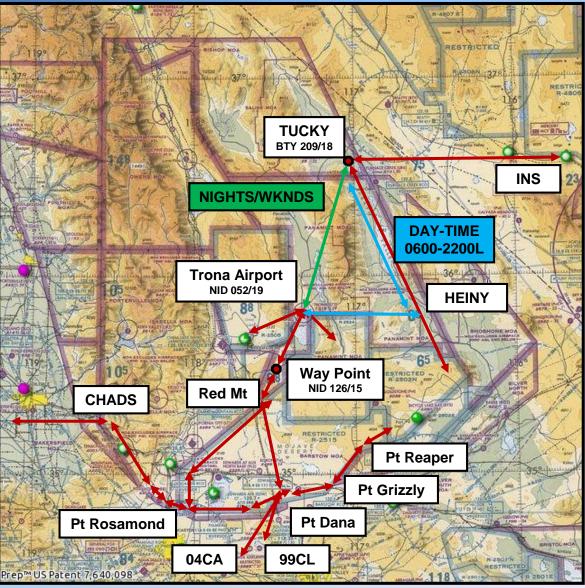
- Only in authorized supersonic areas
- Refer to R-2515 in-flight procedures (412TW 13-100)
 regarding use of High Altitude and Black Mountain areas,
 additional information available through the Edwards
 Airspace Management Office DSN 527-2515 or 277-2515
- Schedule Supersonic Operations with 412TW Center Scheduling. Same Day: DSN 527-3940 next day or beyond DSN 527-4110. Include in Remarks Section of CCF Airspace Request Form.



UAS/RPA Transition Routes

- All Transitions flown at FL190 or FL200 Correct Alt/Direction of Flt
- GREEN RTE: Authorized only after normal flying complete Mon-Fri, weekends, or FL400 and above.
- BLUE RTE: For use during normal
 Flt Ops Mon-Fri
- R-2505 R-2524 Transitions:
- Authorized directly across Trona Corridor (no loitering)
- Min Alt: FL180
- Mode 3 & ATC com required







Chaff & Flares

Chaff/ECM

- Requires specific frequency management approvals (usually via unit)
- Notify CCF of Chaff/ECM activity when scheduling airspace (remarks section)
- Additional (internal) range rules may apply

Flares

 Internal restricted areas <u>ONLY</u> & requires specific Using Agency approval











Lights Out &Targets of Opportunity

Lights-Out Operations

- May be conducted within <u>internal</u> restricted areas
- Within R-2508 IAW Unit/CCB LOP

Do Not Select Targets of Opportunity

 Highlighting test aircraft may result in a security violation or interruption of an expensive test







R-2508 Complex Daily Brief Sheet

- What's going on the next day
- Link 16 & SADL Status Advisories
- AAR Activity/UAS Transitions
- TFRs/LFEs/small UAS Activity
- Unusual/Special Operations
- Future Operations







R-2508 COMPLEX DAILY BRIEF SHEET DOES NOT INCLUDE ACTIVITIES SCHEDULED WITHIN

INTERNAL RESTRICTED AREAS R-2508 Website http://www.edwards.af.mil/r-2508.asp

1-2-3 FEBRUARY 2014

Edwards US	LINK 16 and SADL STATUS 3 FEB 14	-
Link 16: Operational	Edwards Allied Link 16: Operational	Rogers Peak US Link 16: Down
nail: 412th ilea	After Hours Requests: DSN: 525- f.mil. Operating Hours: M-F 0806	2011

SCHEDULED REFUELING OPERATIONS

DATE/TIME (Z)		101	10
011745Z - 012000Z	AREA	ALTITUDES FL180 - FL210	UNIT

SPECIAL ACTIVITIES/OPERATIONS

Multiple unmanned rocket launches on Saturday, February 1st. Launch operations are from 8:00 am to 5:00 pm PST (1600Z to 0100Z), to a maximum altitude of 30,000 feet MSL. The launch location is North-East of Koehn Dry Lake, Edwards VOR EDW 336° Radial 23 NM (EDW336023), Latitude 35° 21' 12" North, Longitude 117° 48' 25.80" West, and 3 nautical mile radius.

FUTURE OPERATIONS



** INDICATES CHANGES

For more detailed information concerning any of the above information, contact the R-2508 Central Coordinating Facility at DSN: 527-2508, COMM: (661) 277-2508.

For more detailed information concerning any of the above information, contact the for more detailed information concerning any of the above information, contact the R-2508 Central Coordinating Facility at DSN: 527-2508, COMM: (661) 277-2508.

R-2508 COMPLEX DAI

R-2508 Complex ALTITUDE

050300Z - 050445Z 110130Z - 110315Z

120130Z - 120315Z 130130Z - 130330Z

R-2508 Website http://www.ed

LARGE FORCE E

		CALL SIGIS		
T	ALTITUDE	RETURN	ALTITUDE FL190	REAPER I
CREECH TO 02N	FL200	040200Z-040230Z	FL190	GRIM 1
031730Z-031800Z	FL200	040500Z-040530Z	FL190	REAPER 1
031530Z-031600Z	FL200	050200Z-050230Z 050500Z-050530Z	FL190	REAPER
041730Z-041800Z	FL200	050500Z-050330Z 060200Z-060230Z	FL190	GRIM 1
041530Z-041600Z 051730Z-051800Z	FL200	060500Z-060530Z	FL190	GRIST.

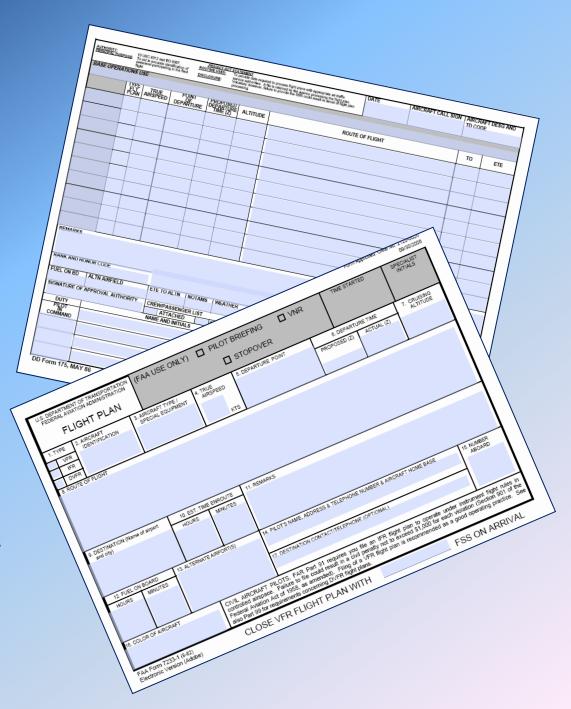
For more detailed information concerning any of the above information, contact the ror more detailed information concerning any of the above information, confact in R-2508 Central Coordinating Facility at DSN; 527-2508, COMM; (661) 277-2508.



IFR Flight Planning

- Flight Plans should be filed with 2 separate legs...
- Leg 1: Departure point, route of flight, R-2508 entry point, R-2508 as destination.
- Leg 2: R-2508, R-2508 exit point, flight route, destination airport/fix
- Do not file a delay in the Complex
- Filing a delay may result in the loss of the second half of your flight plan
- May result in extensive delay in receiving IFR Clearance out of area



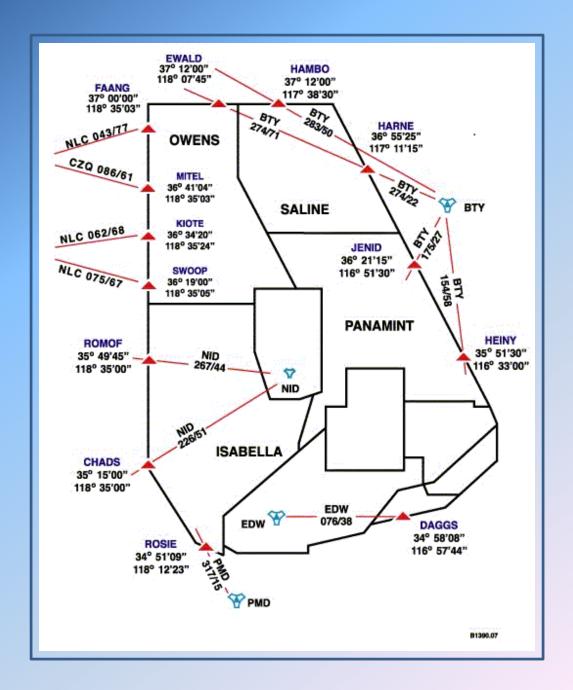




Entry/Exit Points Flight Plan Entries...

- Use Complex entry/exit points during flight planning to alert Joshua/Center of your intentions.
- FAANG/MITEL/KIOTE/SWOOP ROSIE/DAGGS can be filed by name (others by coords or RAD/DME)
- *NID TACAN is unmonitored when China Lake airfield is closed.





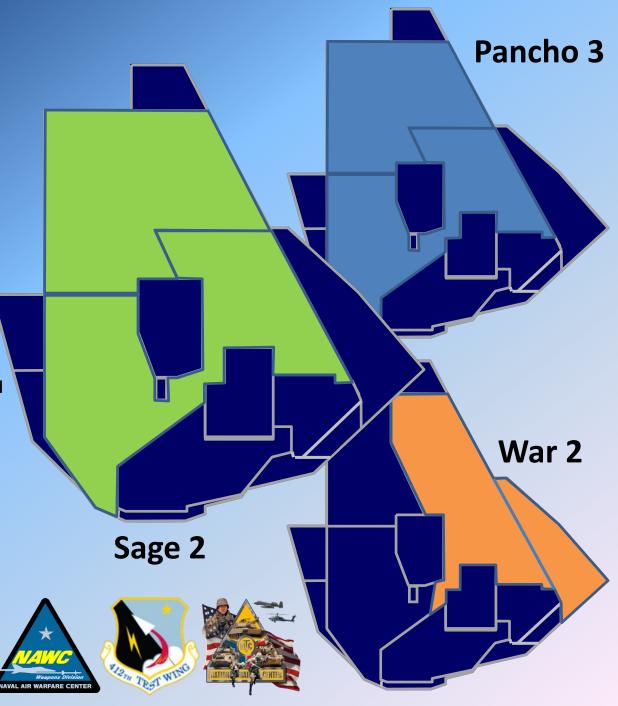


Complex Clearances

SAGE 2: Isabella, Owens, Saline, and Panamint, FL290 and below.

PANCHO 3: Clearance to operate within Isabella and Panamint work areas at and below FL500, and Owens and Saline work areas at and below FL290... Only EDW, NID, PMD, and NLC based aircraft are authorized a PANCHO 3.

WAR 2 Clearance: Clearance to operate in the Saline and Panamint Work Areas at and below FL290, Shoshone MOA, and Shoshone North and South ATCAA's at and belowFL230.





R-2508 Scheduling

CCF Office Hours - Monday thru Friday **0600-1800L**, excluding holidays

- Schedule NLT 1600L Day Prior
- Schedule NLT 1600L Friday for Weekend Operations
- After hours schedule changes: Call CCF
 After Hours Number 1-866-805-2851
- Include internal restricted areas scheduled with applicable Using Agency







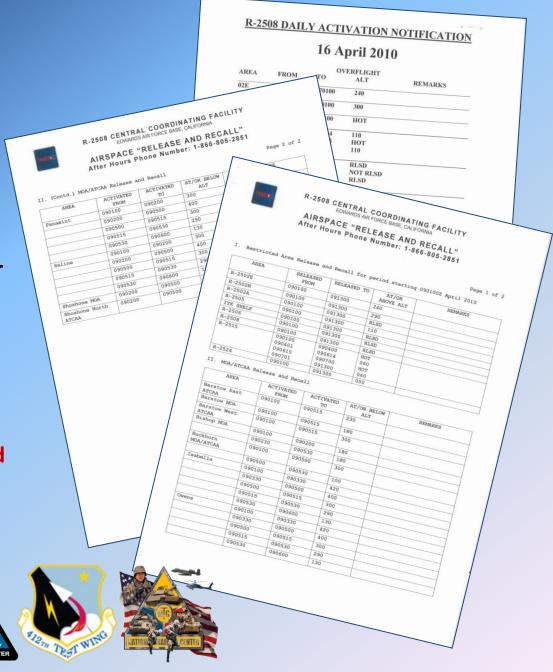
Scheduling

Why CCF Needs your Airspace Request Form NLT 1600L Day Prior (Friday for Weekends)

Airspace Activation, Release and Recall Information is sent to Los Angeles Center NLT 1700L

Off Station Users "Must be briefed & schedule R-2508 through CCF"

Late scheduling could result in Mission Loss or Delay



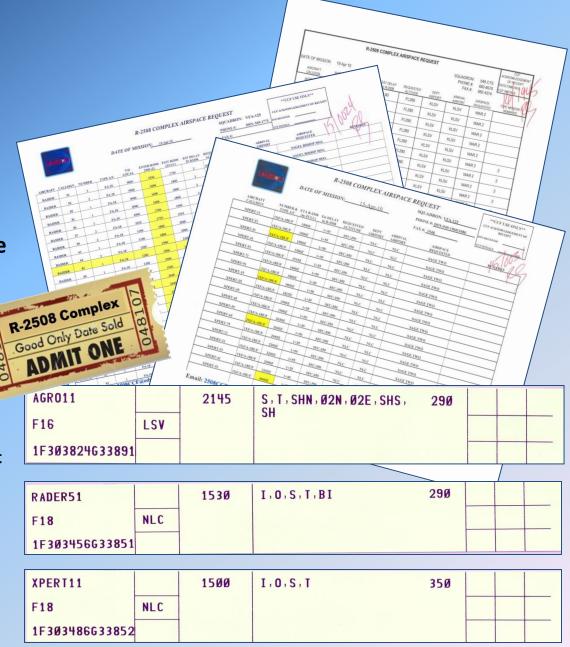


Scheduling

 Scheduling data used to Generate ATC Flight Plan Information and Flight Progress Strip for Joshua

- Flight Strip is <u>Your Ticket</u> for entry into the Complex
- Use R-2508 Complex Airspace Request
 Form and Submit via Email (no fax please)
- Units will receive return acknowledgement
- Changes to received schedules MUST be called in, emailed to CCF





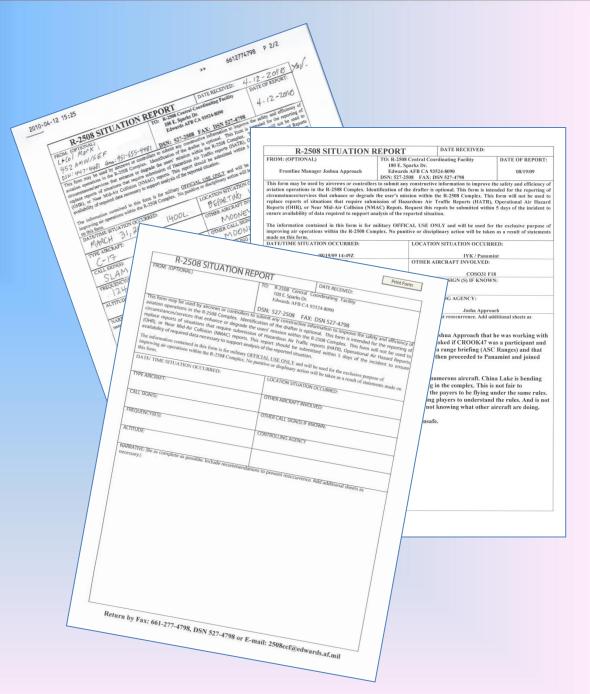


SITREP

(R-2508 Situation Report)

- Official Communication
- Official Response
- Don't wait too long...





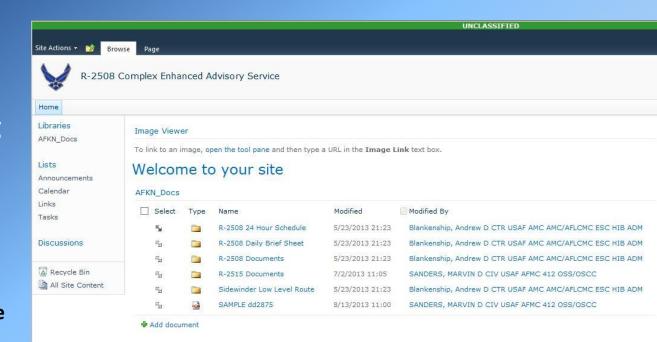


What's Available

Online...

- R-2508 Daily Flying Schedule posted online Monday Thru Friday at 0700L
- Includes Work Areas and Mission Profiles as provided on R-2508 Airspace Request Form
- Access requires .mil email address and CAC log on





AFNET EIS SharePoint Account for CCF Online Information - 24 Hour Schedule & Daily Brief Sheet:

https://USAF.DPS.MIL/TEAMS/12162

Non-USAF agencies must setup an AFNET EIS Sharepoint Account.

- Contact the 412th OSS IAO at DSN: 525-4269 or COMM: (661) 525-4269.
- Requirements: A current Information Awareness training certificate
- Complete DD Form 2875.

Privacy Notice | WFE005



What's Available

Online...

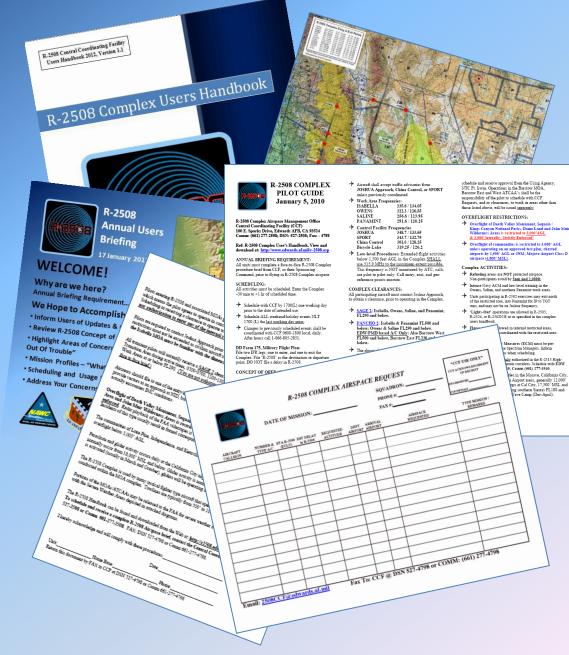
- Users Handbook
- This Briefing
- Airspace Request Form
- Situation Report (SITREP)
- Pilot Guide & Map
- NID Transient Pilot Brief
- Where?

http://www.edwards.af.mil/Home/R-2508











R-2508 Central Coordinating Facility



Questions?

- Co-Located with Joshua Approach
- Here to Support your Operations
 - DSN 527-2508 or Commercial 661-277-2508
 - <u>2508ccf@us.af.mil</u>
 - Online Information
 - http://www.edwards.af.mil/Home/R-2508
 - https://USAF.DPS.MIL/TEAMS/12162

