

# ***Davis-Monthan Composite Squadron***

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## **Davis-Monthan AFB Local Area Orientation**

**Lt Col Mark “Mango” Malan**

**1 June 2023**





# General Airfield Procedures

- Airfield and Tower is operational 24/7
  - Closed last Saturday of month for maintenance
- Airfield Management Operations (AM Ops) Operating Hours
  - Monday – Friday: 0500-0000 (Not including Holidays)
  - Weekends and Holidays: 0800-1700
- Weather Shop is located at Base Ops and is open 24/7
- Hats (with exception of protective gear) will not be worn on the airfield
- Smoking is prohibited on the flight line
- Photography on the flight line must be coordinated with Unit Security Manager and Airfield Manager
- CAP aircraft will not conduct practice approaches at KDMA
  - Expectation for CAP aircraft is one approach to a full-stop landing unless directed to Go-Around or executing a Go-Around for safety



# Exception to Policy

## Operations Outside Airfield Mgt Business Hours

- Approved to operate outside of Airfield Management business hours without runway/taxiway sweeps
- Primarily applies to weekends and holidays
- Restricted to Day VFR conditions only



DAVIS-MONTHAN COMPOSITE SQUADRON (AZ-334)  
CIVIL AIR PATROL  
UNITED STATES AIR FORCE AUXILIARY  
DAVIS-MONTHAN AFB, ARIZONA



25 February 2023

MEMORANDUM FOR 355 OG/CC

FROM: DMCS/CC (AZ-334)

SUBJECT: Exception to Policy to Operate Outside of Airfield Management Business Hours

1. Civil Air Patrol (CAP) is requesting an exception to policy that will allow their aircraft to operate outside of Airfield Management normal business hours on the weekends, holidays, and during min-manning holidays. On these days, Airfield Management is open 0800-1700 (or not open during min-manning periods) although the Air Traffic Control Tower is open and manned 24-hours a day. This exception to policy will allow CAP to take-off prior to the arrival of Base Operations personnel and land after their departure. CAP will accept the risk associated with operating outside of these hours and will limit these operations to Day VFR conditions to mitigate the increased level of risk. CAP will also submit DD Form 1801 24-hours prior and call to verify receipt and ensure that a flight plan is on file.

2. Questions or concerns regarding this exception to policy can be addressed to Lt Col Mark Malan at commercial 520-204-7147 or [mmalan@dmcs334.org](mailto:mmalan@dmcs334.org).

MARK A. MALAN, Lt Col, CAP  
Commander

1<sup>st</sup> Ind, 355 OG/CC

MEMORANDUM FOR 355 WG/CC

Approve / ~~Disapprove~~

RADOESCU.RAZV Digitally signed by  
AN.N.1094134559  
DN: c=US, o=355 OG, ou=355 OG, cn=RAZVAN N. RADOESCU

RAZVAN N. RADOESCU, Col, USAF  
Commander, 355 OG



# Lightning Procedures

- Watch – predicted lightning within 5 NM of the airfield
- Advisory – observed lightning within 10 NM but greater than 5 NM of the airfield
- Warning – observed lightning within 5 NM of the airfield
  - Refueling operations will cease
  - Aircrews will not step to the aircraft, but may depart aircraft and return to the building
  - Aircraft in the midst of startup may continue
  - Aircraft may taxi to and from the runway
  - The supervisor of flying (SOF) will determine if aircraft may take-off/land
  - AM Ops will not conduct airfield checks during the Warning, but will conduct a post-weather check





# Airfield Description

- Single runway oriented 125° / 305° (**RWY 12/30**) – 13,643' x 200'
  - Trend: High flares
- Taxiways are 75' wide
  - TWY C is 100' (TWY A to West Ramp) and 50' (along West Ramp)
- **Arresting Systems** – two (2) BAK-12s for each RWY
  - In the overrun and **1200' down the runway**
  - IAW CAPR 70-1, Para 9.11.7.8.2. **Do not** roll over any exposed or deployed cables or arresting gear during taxi, takeoff, or landing
- DM Airfield is considered a Controlled Area with Permanent and Temporary Restricted Areas
  - CAP Personnel without a Restricted Area Badge (RAB) must stay outside of **ACTIVE** Restricted Areas (as denoted by a **Bold RED Line**) unless with an authorized escort



# Davis-Monthan AFB



**PILOTS MUST ENSURE TO LAND BEYOND BAK-12 BARRIERS 1200' FROM LANDING THRESHOLD**

**BAK 12 CABLE BARRIER – 1200' FROM LANDING THRESHOLD**

**BAK 12 CABLE BARRIER – 125' (RWY 12) AND 70' (RWY 30) INTO OVERRUN**

**RWY 12/30 OVERRUNS -- 1000' x 200' (ASPHALT)**





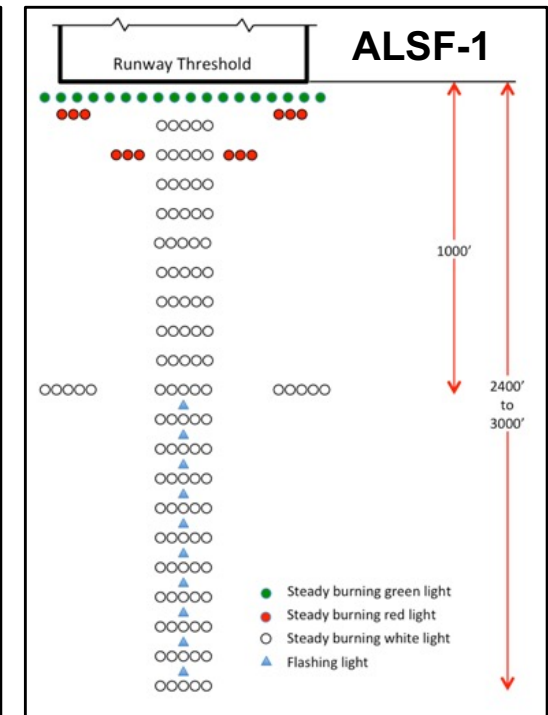
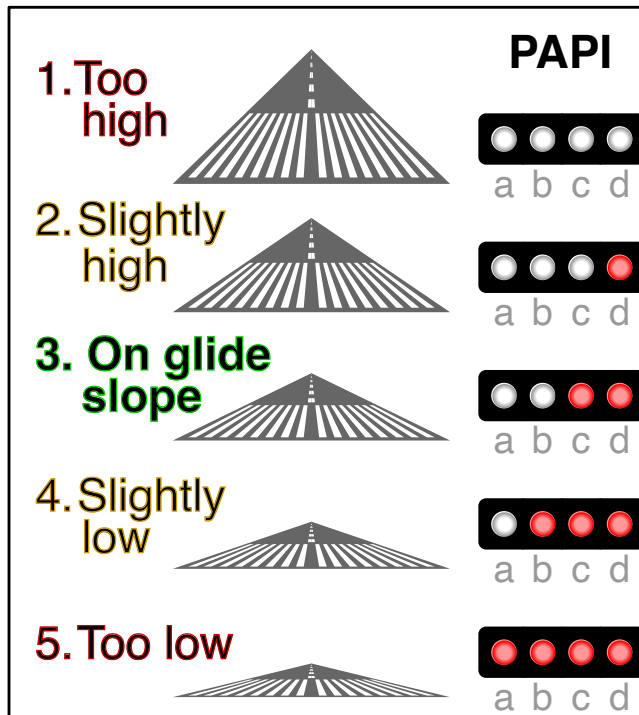
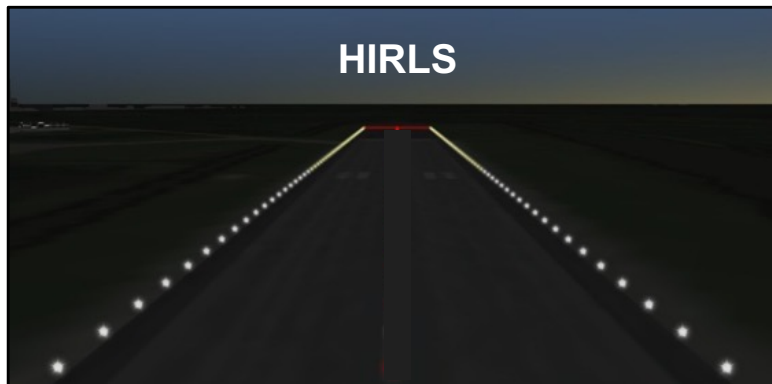
# Runway Lighting

## RWY 12

- No Approach Lighting
- High Intensity Runway Lights (HIRLS)
- Runway End Identifier Lights (REILS)
- Precision Approach Path Indicator (PAPI)

## RWY 30

- Approach Lighting System and Sequence Flashing Lights, Cat 1 (ALSF-1)
- High Intensity Runway Lights (HIRLS)
- Runway End Identifier Lights (REILS)
- Precision Approach Path Indicator (PAPI)





# BAK-12 Arresting Cable System

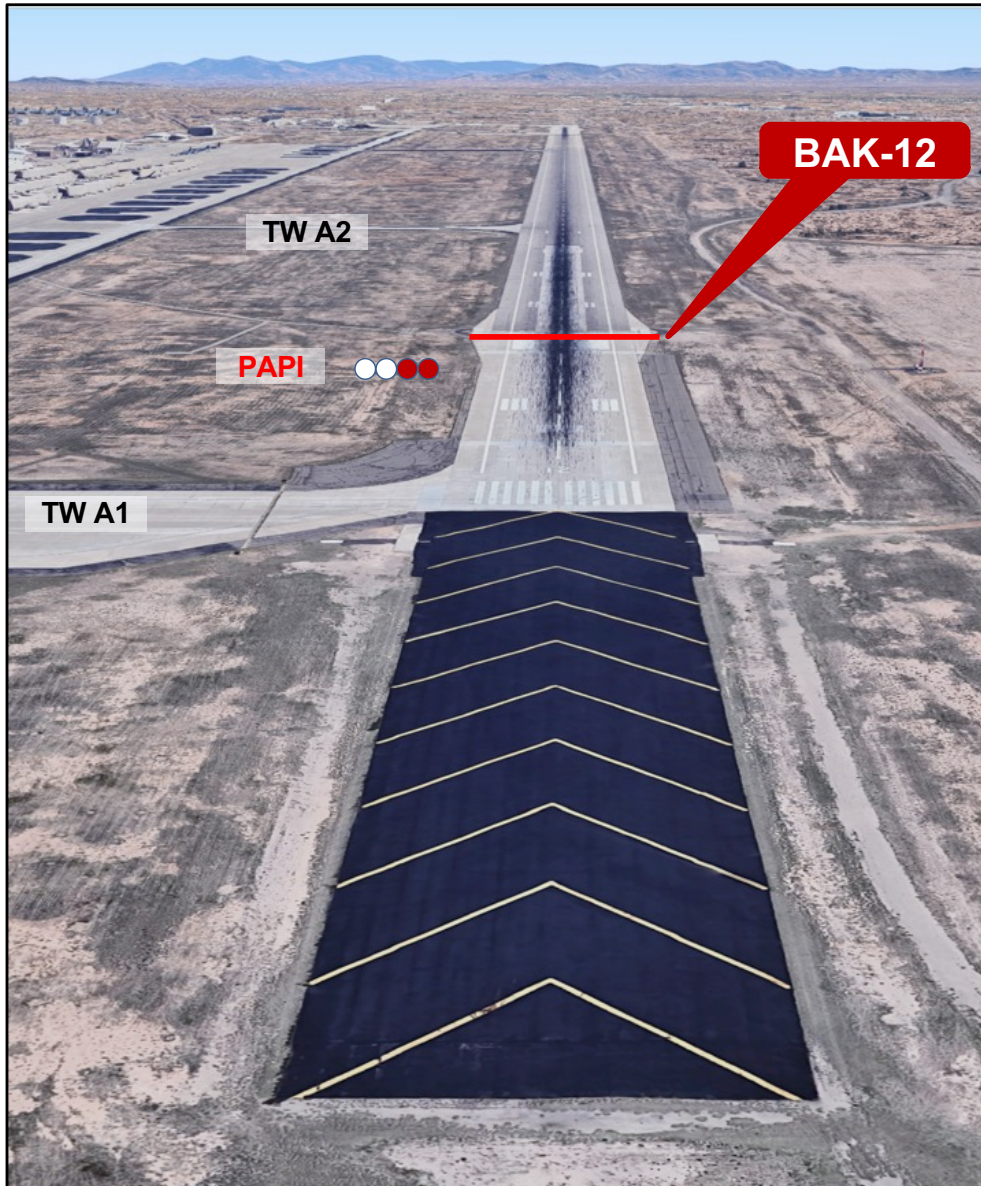






# BAK-12 Arresting Cable System

RWY 12



RWY 30





# Mission Planning

- Flight Plans (DD Form 1801) **must** be filed directly with AM Ops in person or via e-mail for departures only (ForeFlight will generate one)
  - Pre-filled out forms will be available in the Operations Office
  - Email: 355OSS.OSAA@us.af.mil
  - Comm: 520-228-4315
- Flight Plans may be filed up to 24 hours in advance
  - Always follow-up with a phone call to ensure that AM Ops received your flight plan, forwarded to the Control Tower, and entered in to Aeronautical Info Services (AIS)
- PPRs are not required for Homestation aircraft (N331CP), however PPRs are recommended after returning from an extended off-station deployment (greater than 48 hours)
- Local radio channelization

CHANNEL	AGENCY	FREQUENCY
2	Ground	121.800
3	Tower	118.850
4	TUS Departure	125.100
5	TUS Arrival	119.400
6	TUS TRACON	124.000





# DD Form 1801

Used by Base Ops to enter into computer system

9. Wake Turbulence  
L – Light Aircraft

13. Departure Aerodrome  
ICAO Identifier

Time  
In ZULU 24-Hour Format

15. Cruising Speed  
N – True Airspeed in Knots  
M – Mach

Level  
A – Altitude  
F – Flight Level

Route  
DCT – Direct to a point

19. Endurance  
Total Fuel On Board

POB – # Persons on Board

Don't forget to sign!  
(if hand carry only)

PRIORITY FF	ADDRESSEE(S) KDMAYXX
ORIGINATOR	
SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND/OR ORIGINATOR	
3. MESSAGE TYPE (FPL)	7. AIRCRAFT IDENTIFICATION CAP231
9. NUMBER 1	8. FLIGHT RULES V
13. DEPARTURE AERODROME KDMA	10. EQUIPMENT SGR/B2E
15. CRUISING SPEED N100	WAKE TURBULENCE CAT. L
LEVEL A065	TIME 1730
ROUTE DCT DMA 180020 DCT	
16. DESTINATION AERODROME KRYN	TOTAL EET HR/MIN 1+30
ALT N AERODROME	2ND ALT N AERODROME
18. OTHER INFORMATION PBN/B2C2D202 SUR/260B DOF/210925 REG/N331CP CODE/A41F12 RMK	
NOT FOR TRANSMISSION SUPPLEMENTARY INFORMATION	
19. ENDURANCE FUEL/ 3+30	PERSONS ON BOARD POB/ 2
EMERGENCY AND SURVIVAL EQUIPMENT 121.5 → 2 → 5 → 8 → 4	
TYPE OF EQUIPMENT POAR → DEWET → MAR → JUNGLE → GL → JAC → LIT → FLUOR → SCEIN →	
DINGHIES → COVER → RMK/	
REMARKS SAR CONTACT MARK MALAN 5202047147	
AIRCRAFT SERIAL NUMBERS AND TYPE OF AIRCRAFT IN FLIGHT N331CP	
CREW LIST ATTACHED LOCATED AT: CAP Ops (KDMA)	
PASSENGER MANIFEST ATTACHED LOCATED AT: CAP Ops (KDMA)	
NAME OF PILOT IN COMMAND Your Name Here	
SIGNATURE OF APPROVING AUTHORITY	
AIRCRAFT HOME STATION OR ORGANIZATION Civil Air Patrol Arizona Wing	

DD Form 1801, MAY 87 Previous edition is obsolete. Reset DOD INTERNATIONAL FLIGHT PLAN

8. Flight Rules  
V – VFR  
I – IFR

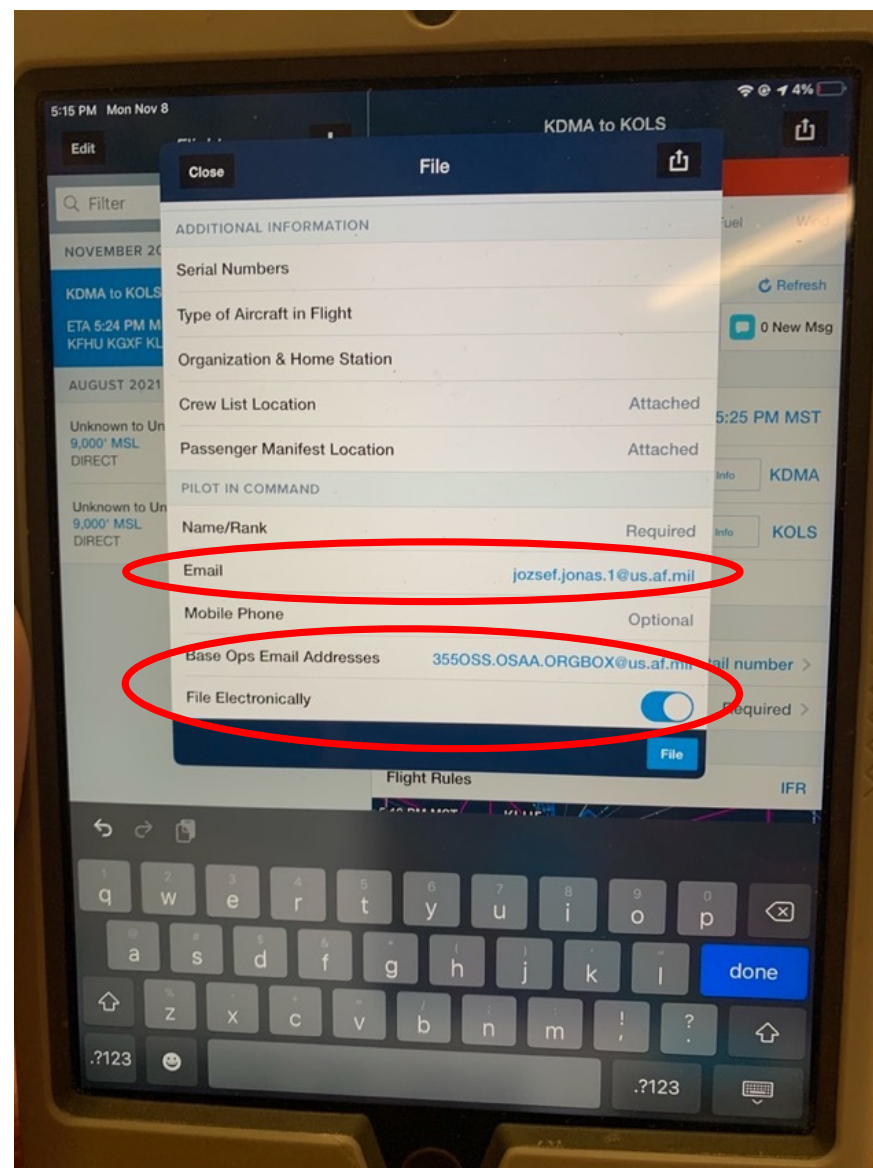
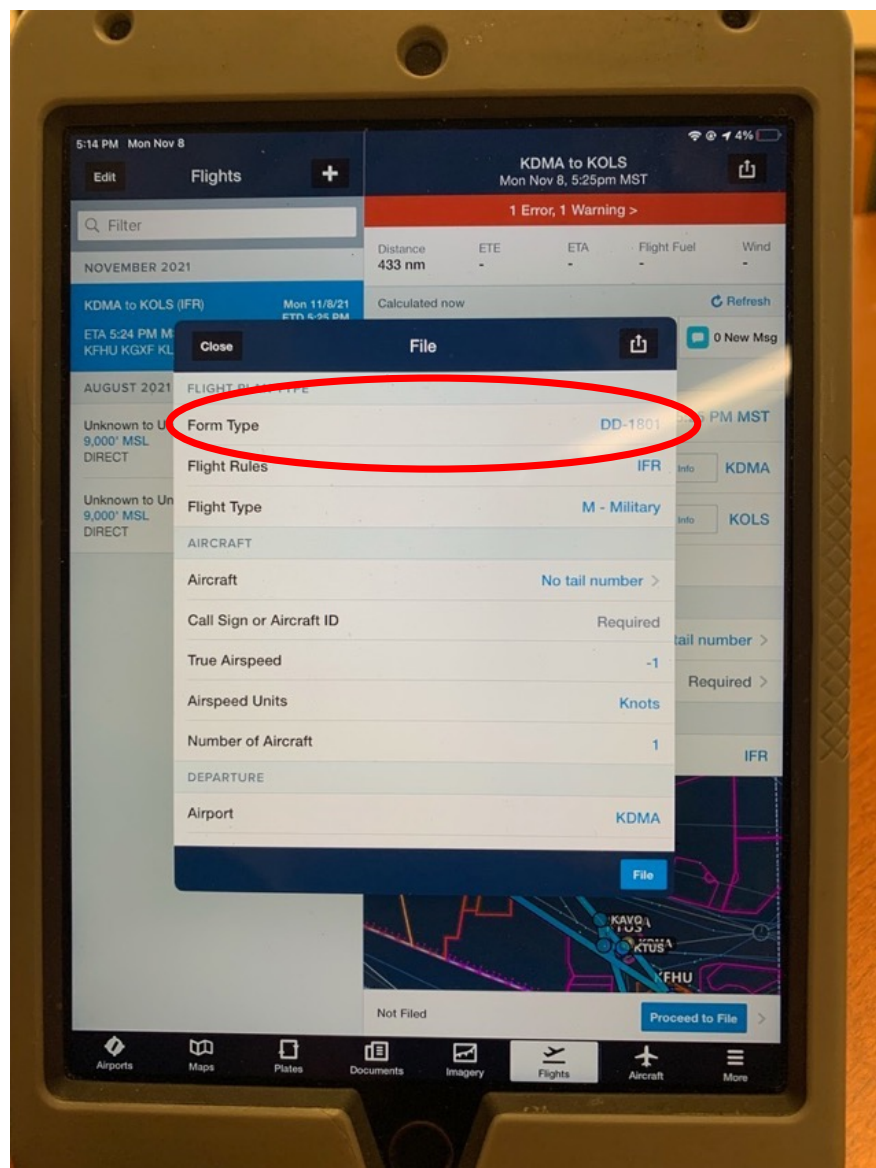
Type of Flight  
M – Military  
G – General Aviation

10. Equipment  
S – VHF, VOR, and ILS  
G – GNSS augmentation  
R – performance-based navigation  
B2 – ADS-B “out” and “in” capability  
E – Transponder with Mode S

18. Other Information  
PBN/B2C2D202 –  
RNAV/GPS/Navigation performance  
SUR/260B –  
compliant with RTCA DO-260B  
DOF – Date of Flight (YYMMDD)  
REG – A/C Registration Number  
CODE – A/C hexadecimal address  
PPR – Prior Permission Required #  
RMK – Plain language remarks



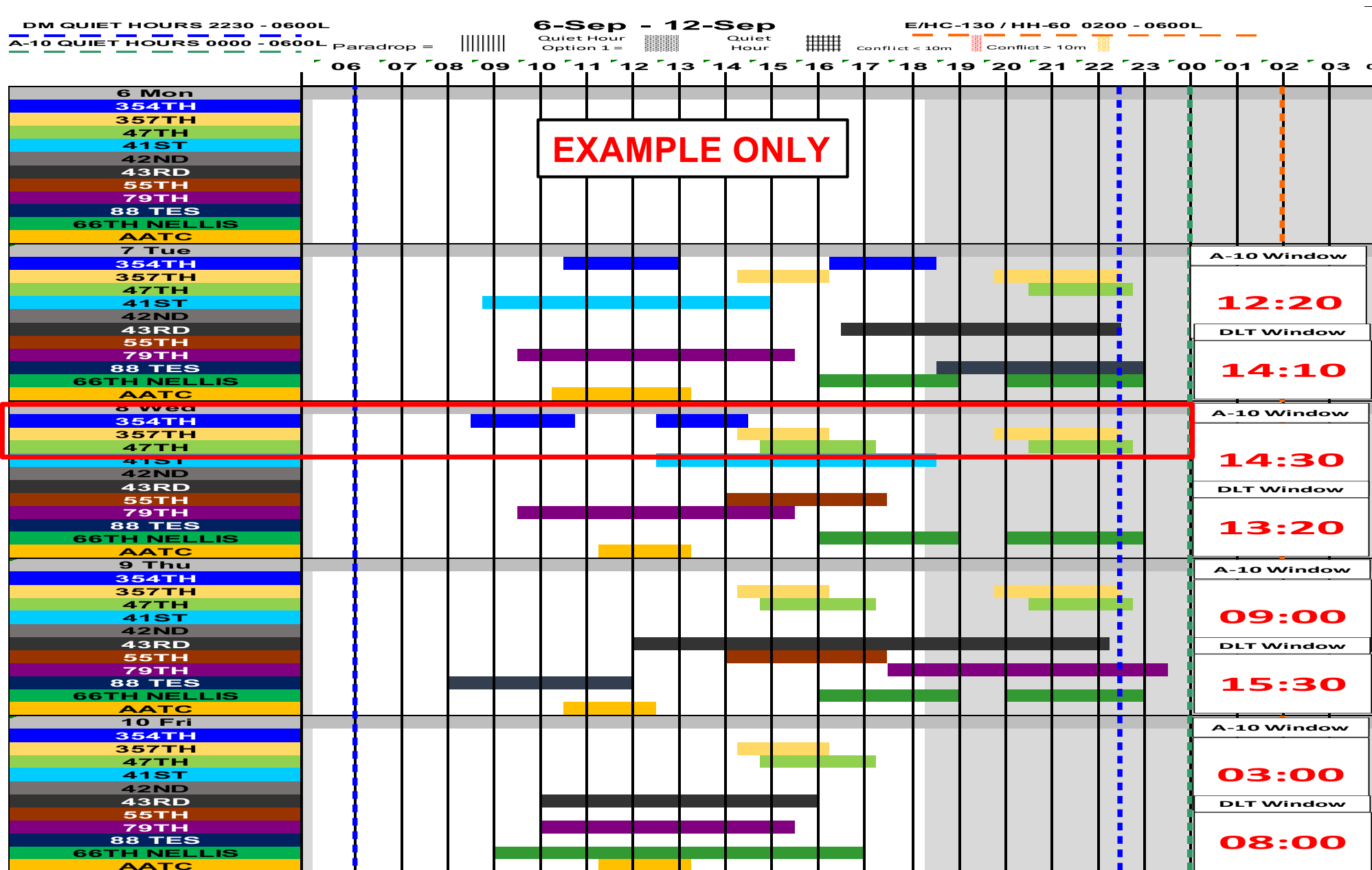
# Filing 1801 via ForeFlight







# DM AFB Flying Window





# Ground Operations

- VHF ATIS is not available
  - Call Tower (228-9448) prior to Step
  - Monitor UHF ATIS (270.100) in Lightning Ops prior to Step
  - Call "Negative ATIS" when ready to taxi
- No Clearance Delivery and no clearance required for engine start
- Monitor Ground CH 2 (121.800) during engine start
- When requesting taxi, notify Ground Control of desired clearance and ATIS Code if acquired
- Expect taxi and departure clearance, departure frequency, and Mode 3

"Ground – CAP 231, Taxi to RWY 12 at A2 / 30 at A3, VFR north/south/east/west [w/ altitude], Negative ATIS / Information November"	"CAP 231 – Ground, Taxi to RWY 12 at A2 / 30 at A3, Cleared on course, Departure frequency Local CH 4 [125.1], Squawk 1234"
"CAP 231, Taxi to RWY 12 at A2 / 30 at A3, Squawk 1234"	"CAP 231 – Readback correct"

- Use caution for RW aircraft departing from North Ramp and the Customs Throat
- Always give way to emergency vehicles

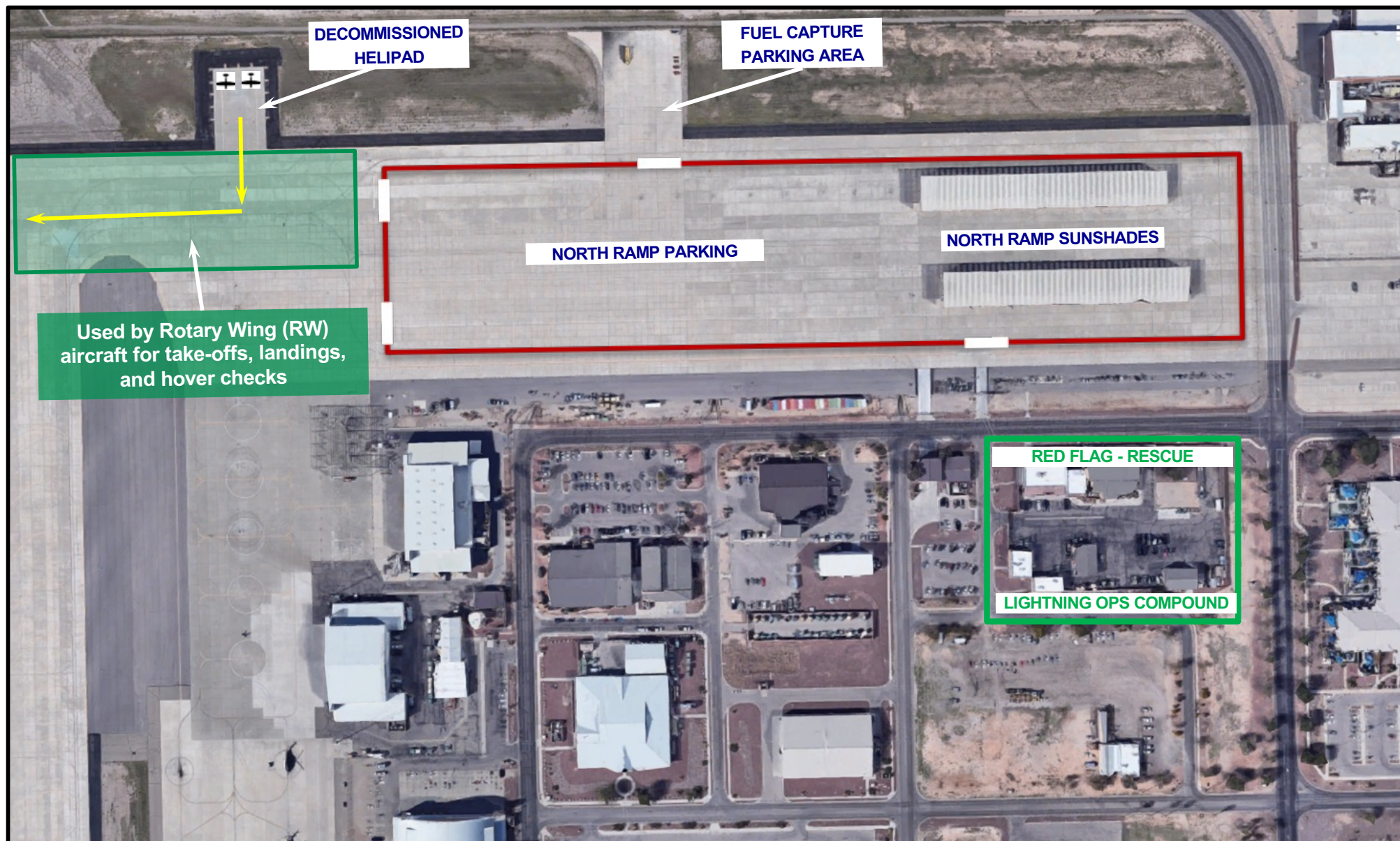


# Night Operations and Refueling

- The North Ramp is NOT illuminated
- Wear reflective vests at night
- Take a powerful flashlight and headlamp
  
- 100LL at DM AFB is currently unavailable for use
  - In coordination with CBP and Senegy to develop a plan
- Refuel at satellite airfields prior to RTB
  - Coordinate with DMCS/DO to help close out WMIRS missions



# RED FLAG – Rescue Lightning Ops and North Ramp







# North Ramp Taxi Procedures





# Departure Procedures

- CAP aircraft may use RWY 12 / A2 and RWY 30 / A3 for departure

	RWY 12 / A2	RWY 30 / A3	RWY 30 / A4
Distance Remaining	10,400	8,300	11,500
Distance to BAK-12	9,200	7,100	10,300

- Tucson International Airport establishes the direction of traffic flow
  - RWY 12 is preferred (and primary) runway for take-off
  - RWY 30 is preferred runway for landing with up to 10 knot tailwind
- Opposite direction operations
  - Authorized when mission requirements dictate
  - Approved by Tower following coordination with TRACON
- Contact Tower CH 3 (118.850) for take-off clearance
- Expect push to Tucson Departure CH 4 (125.100) after airborne
- Maintain 3,700' MSL or below until 1 NM past departure end of runway unless coordinating with Tower

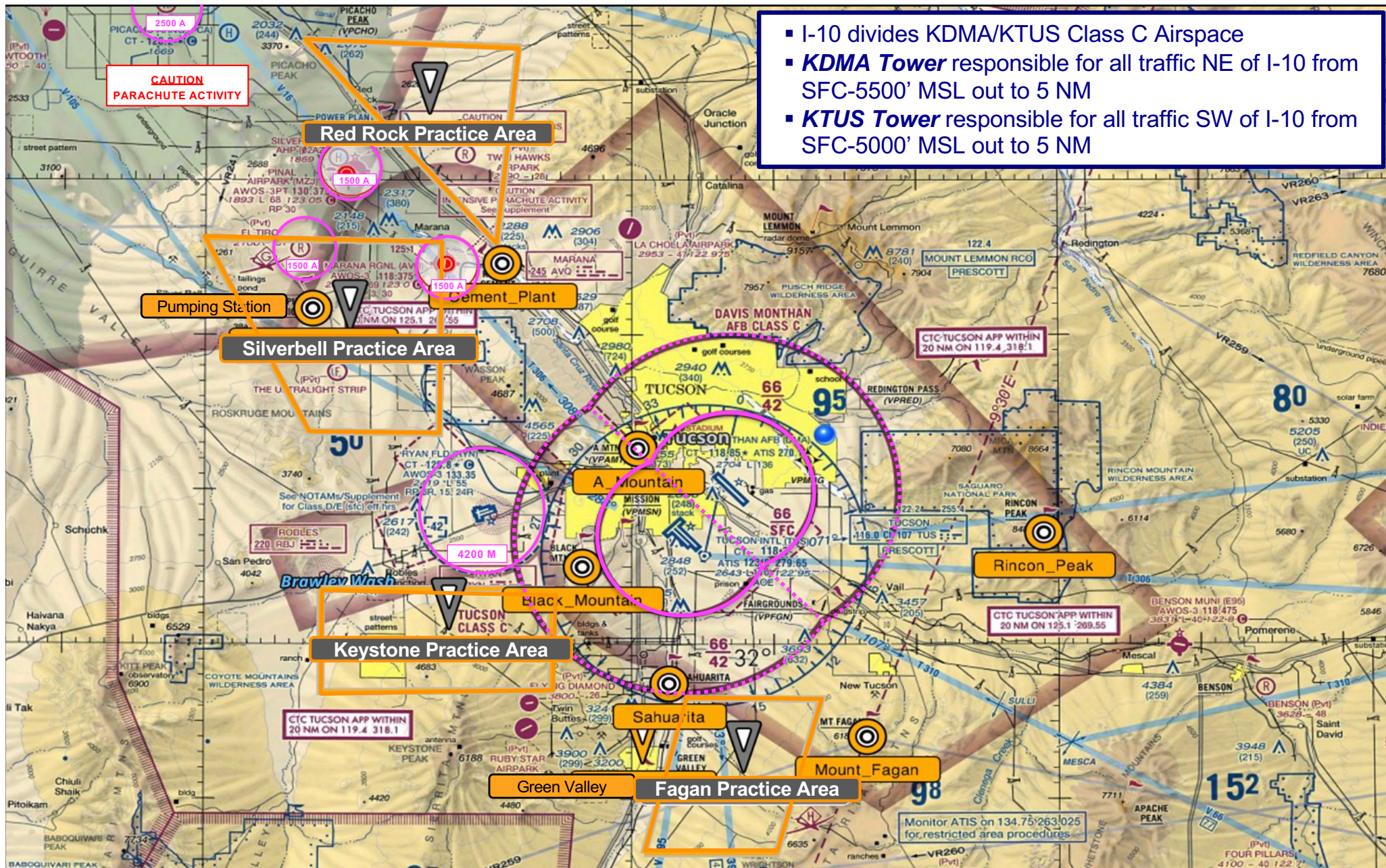




# Local Traffic Area

- Below 18,000 Tucson Radar Control (TRACON) controls
  - 20 NM north
  - 30 NM west
  - 40 NM east
  - 50 NM south
- Tucson International Airport (KTUS) and KDMA are Class C
- VFR Practice Areas
  - Not formally defined
  - Are recognized by Tucson Air Traffic Control
  - Used by consensus of local flight schools and FBOs
- Military Operating Areas (MOAs)
  - Tombstone
  - Ruby/Fuzzy
  - Outlaw/Jackal/Morenci
  - Sells
- Barry M. Goldwater Range (BMGR) Complex (R-2301, 2304, and 2305)

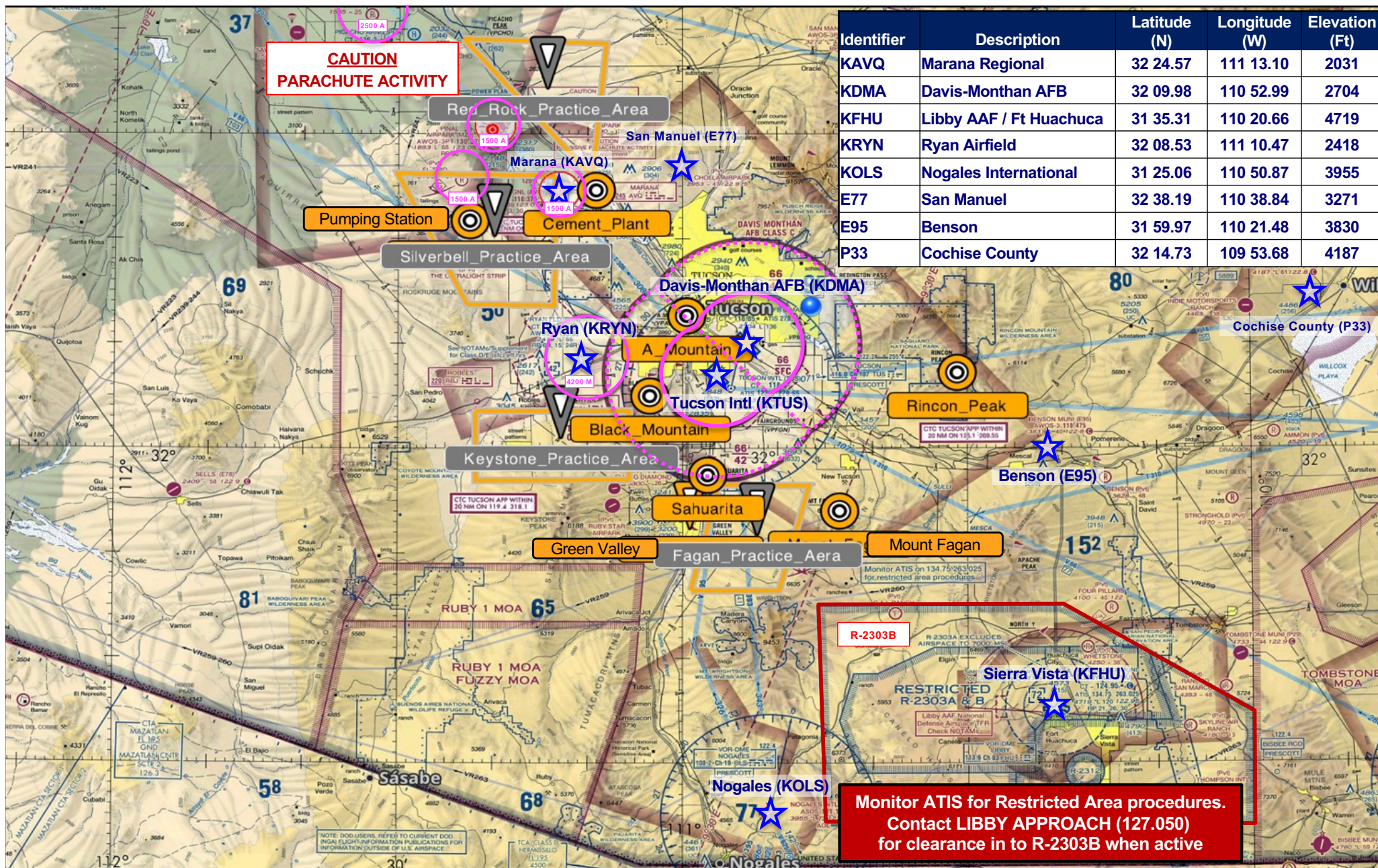








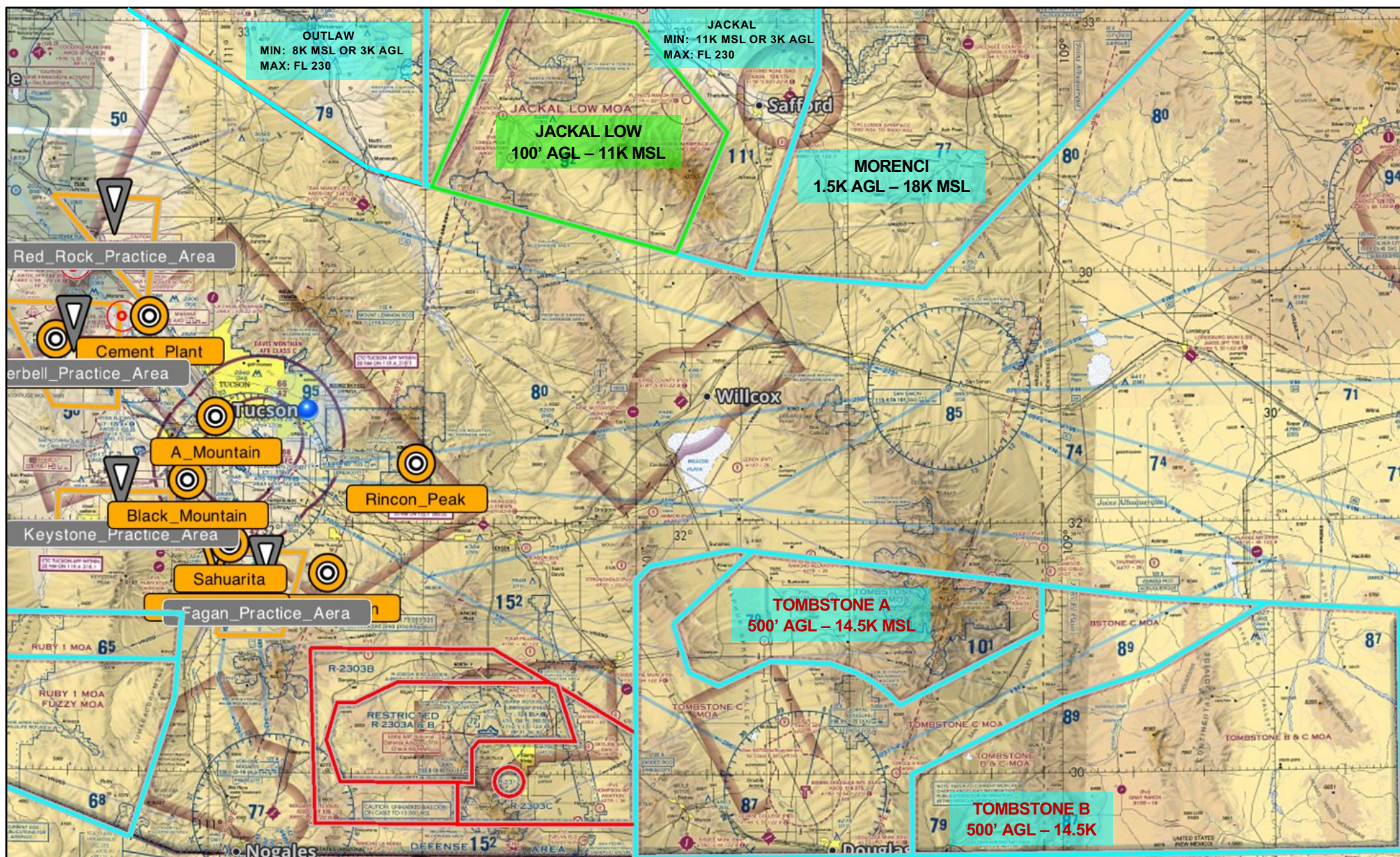
# Local Airfields







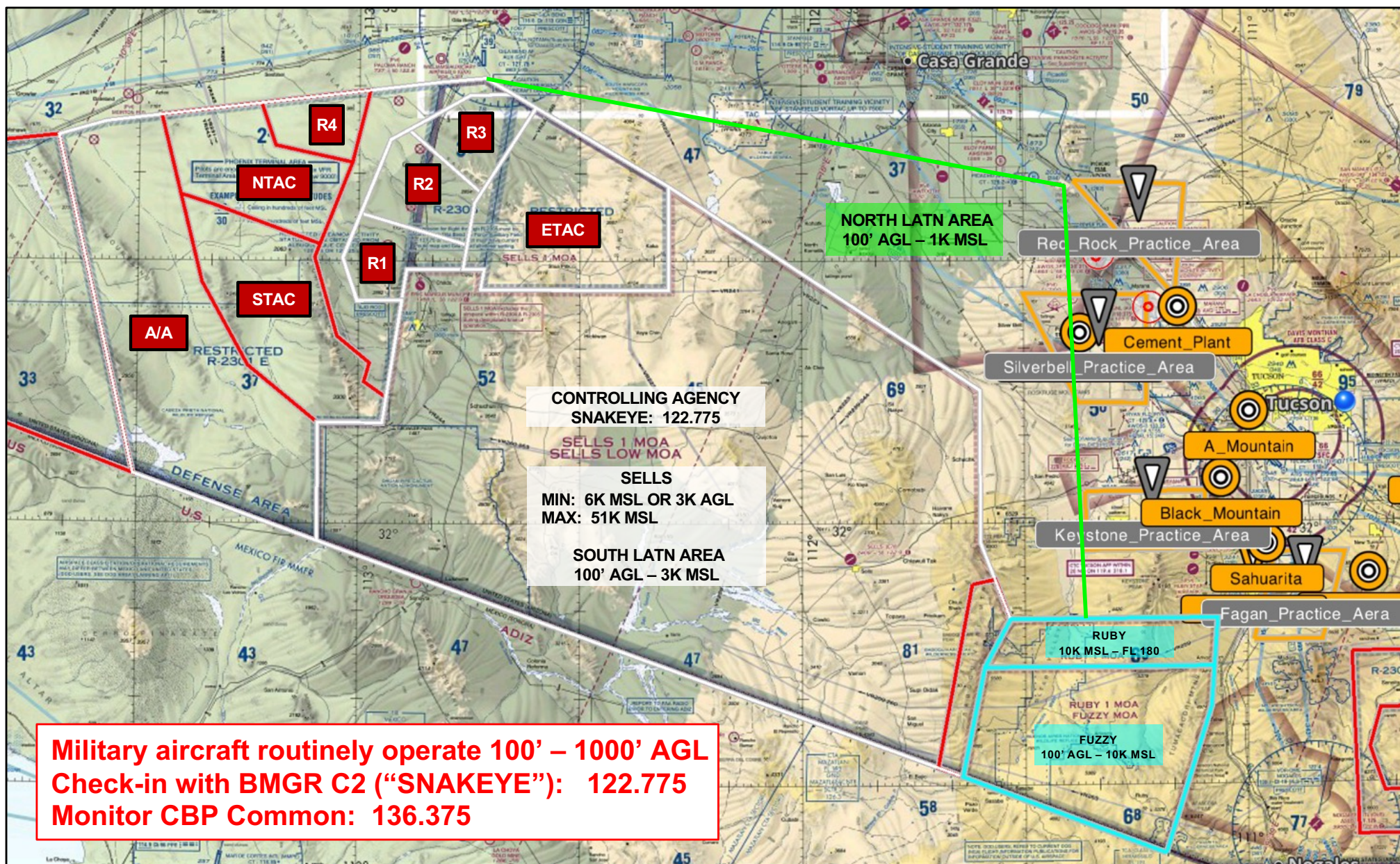
# East MOAs



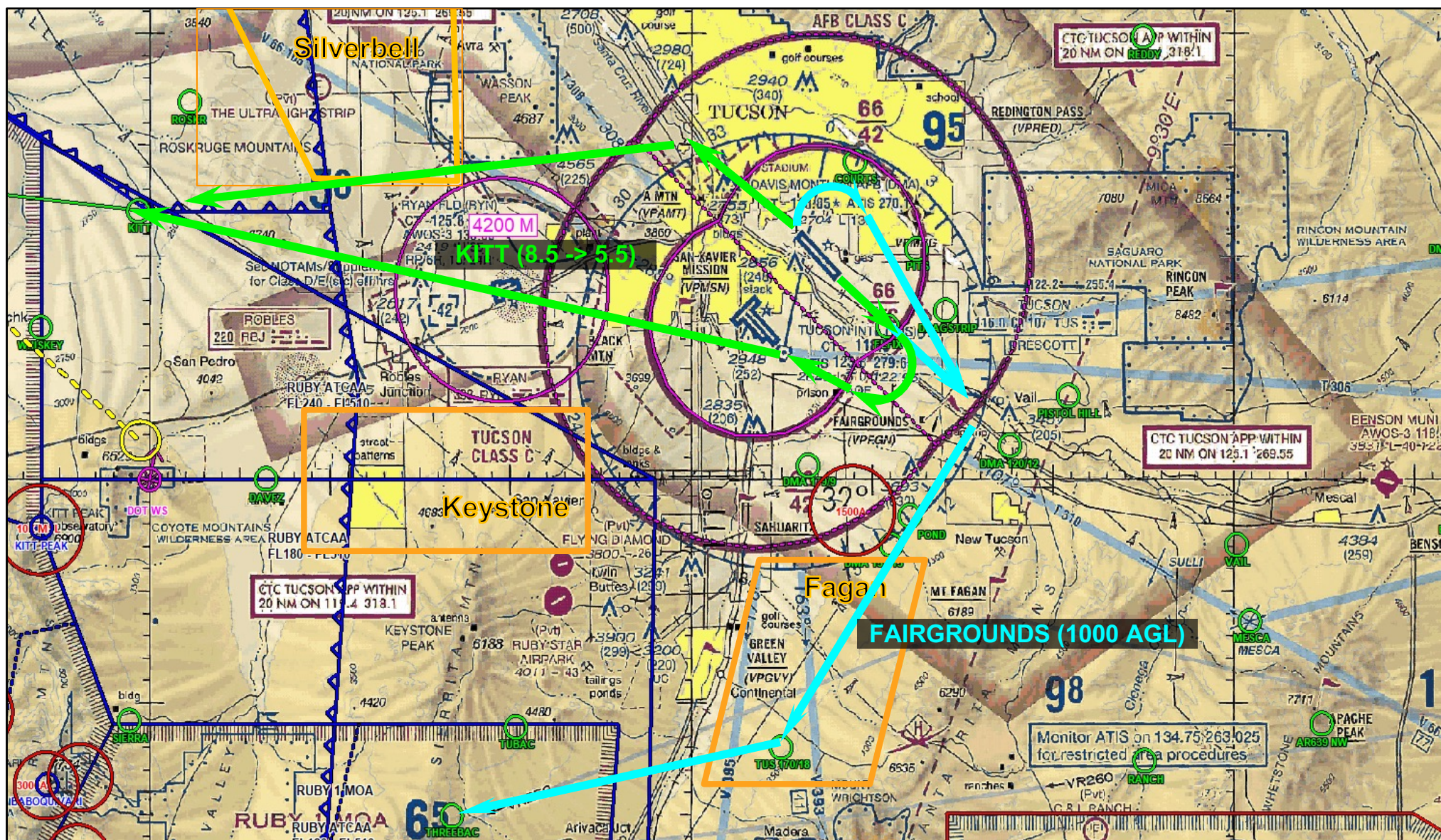




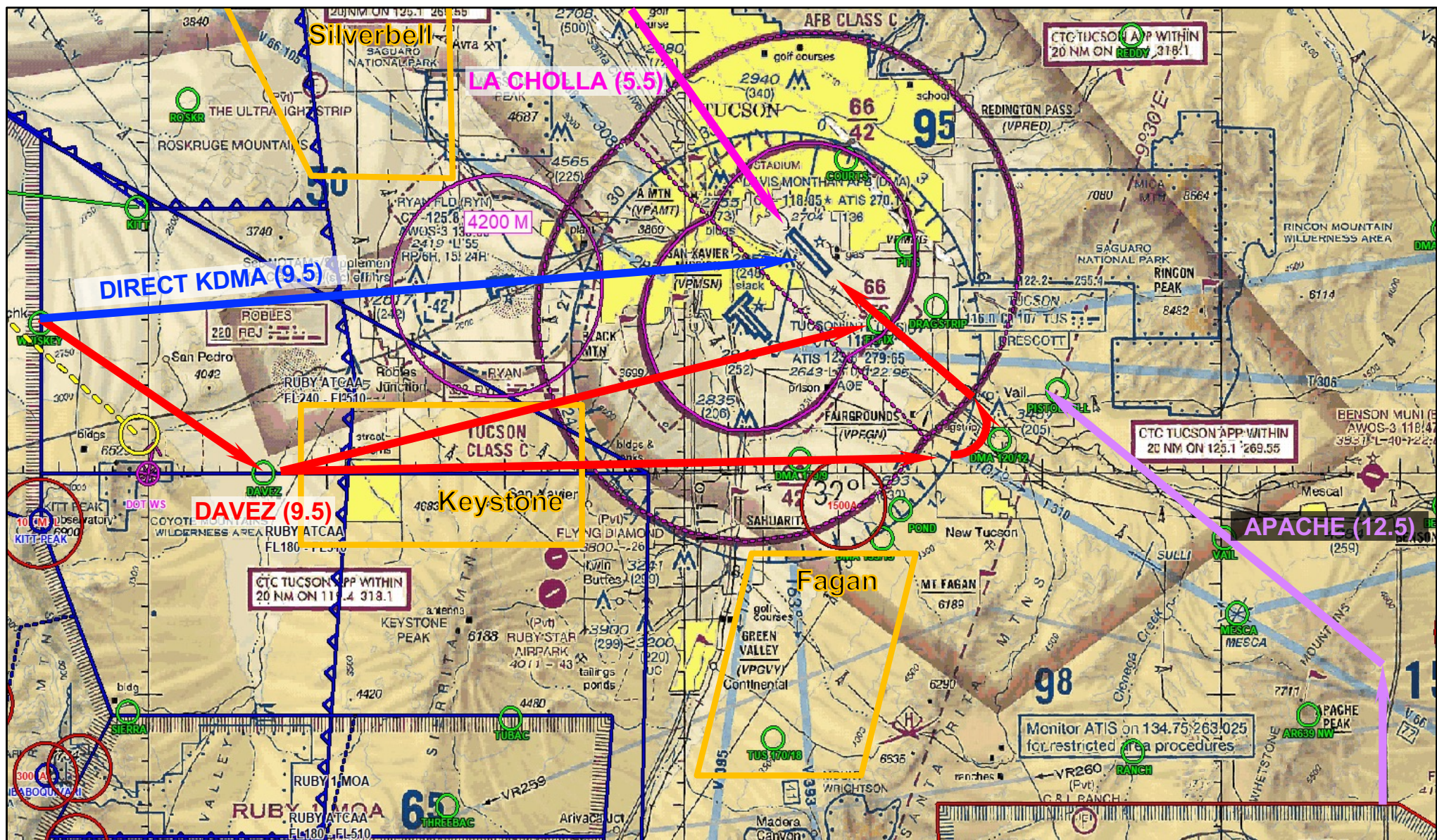
# West MOAs and BMGR















# DM Arrival Procedures

- No KDMA VHF ATIS
  - Get Tucson ATIS on 123.800
  - Or check-in "Negative DM ATIS" and controller will pass it to you
- Contact Tucson Approach prior to 20 NM for clearance into Class C airspace
- KDMA Primary Landing RWY 12 / Alternate Landing RWY 30
  - Tucson International Airport establishes traffic flow
- Use caution for helicopters in the training area (HTA)
- **Ensure to land past BAK-12 barrier 1200' feet down the runway**
- RWY 12 exit at A2 if able, A3, or request back-taxi to A2
- RWY 30 exit at A3
- Contact Ground CH 3 (118.850) for taxi clearance

"Ground – CAP 231, Request taxi to North Ramp"	"CAP 231, taxi to park"
"CAP 231, taxi to park"	





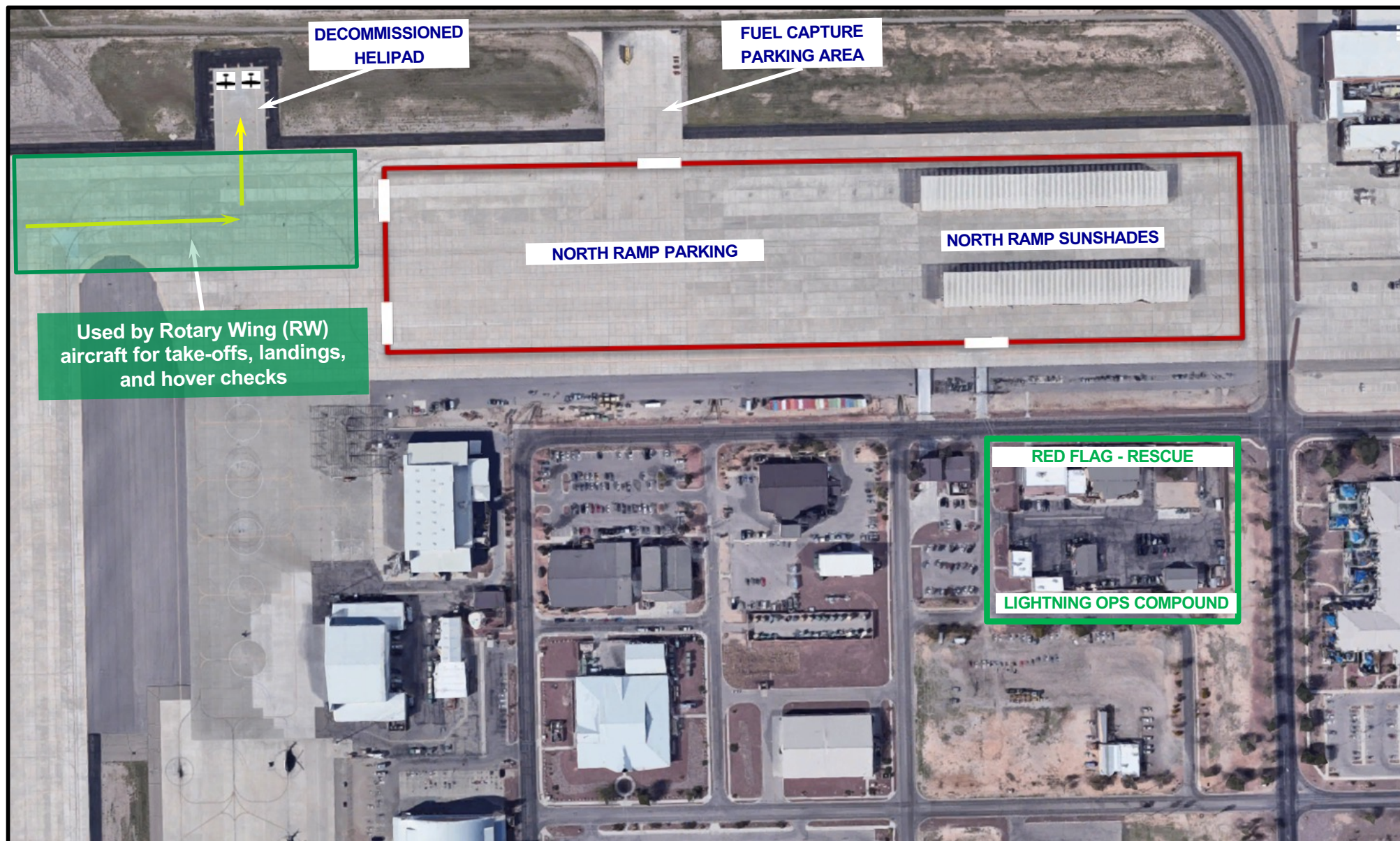
# Taxi to North Ramp







# Lightning Operations North Ramp





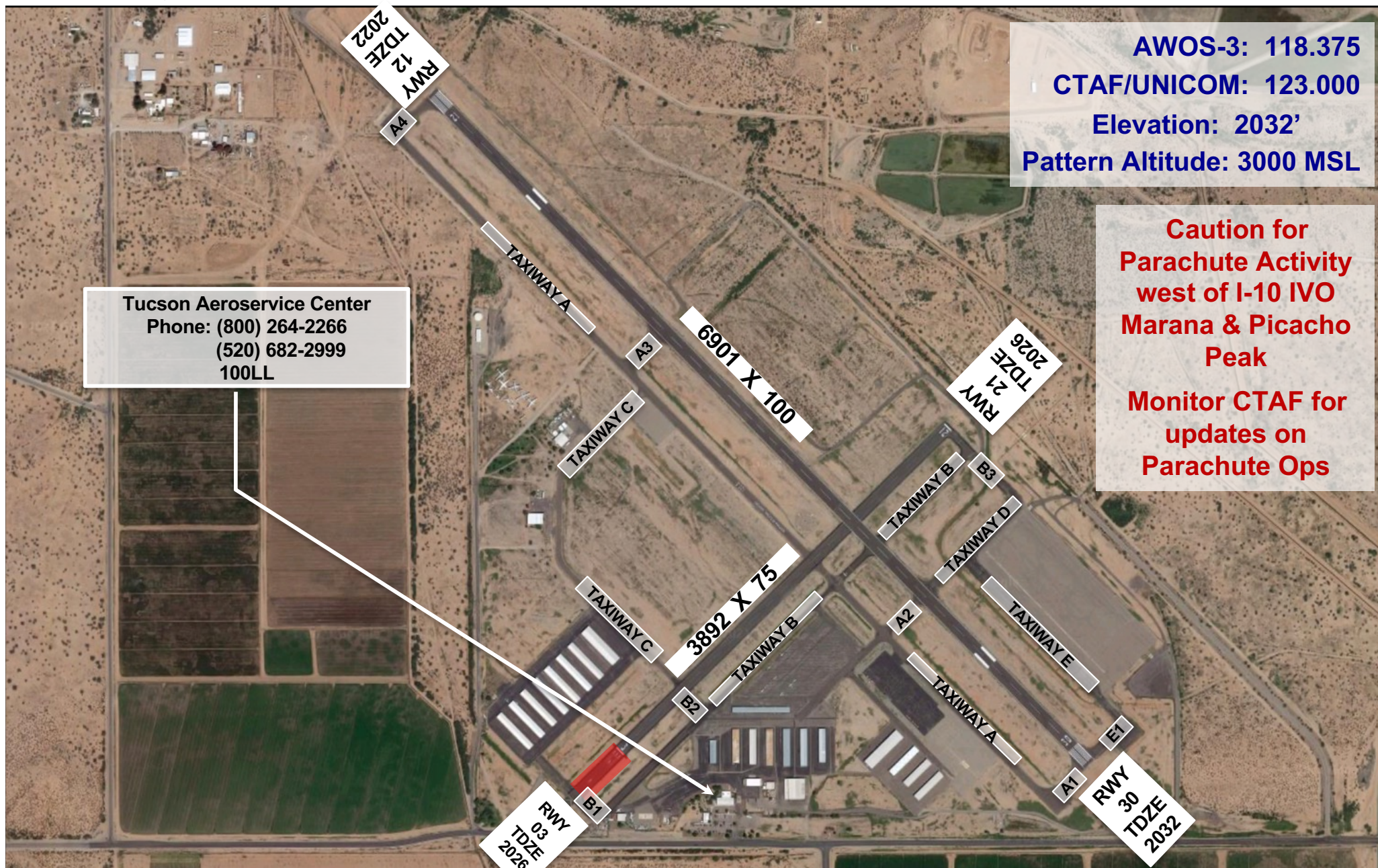


# Marana Regional (KAVQ)

AWOS-3: 118.375  
CTAF/UNICOM: 123.000  
Elevation: 2032'  
Pattern Altitude: 3000 MSL

**Caution for  
Parachute Activity  
west of I-10 IVO  
Marana & Picacho  
Peak**  
**Monitor CTAF for  
updates on  
Parachute Ops**

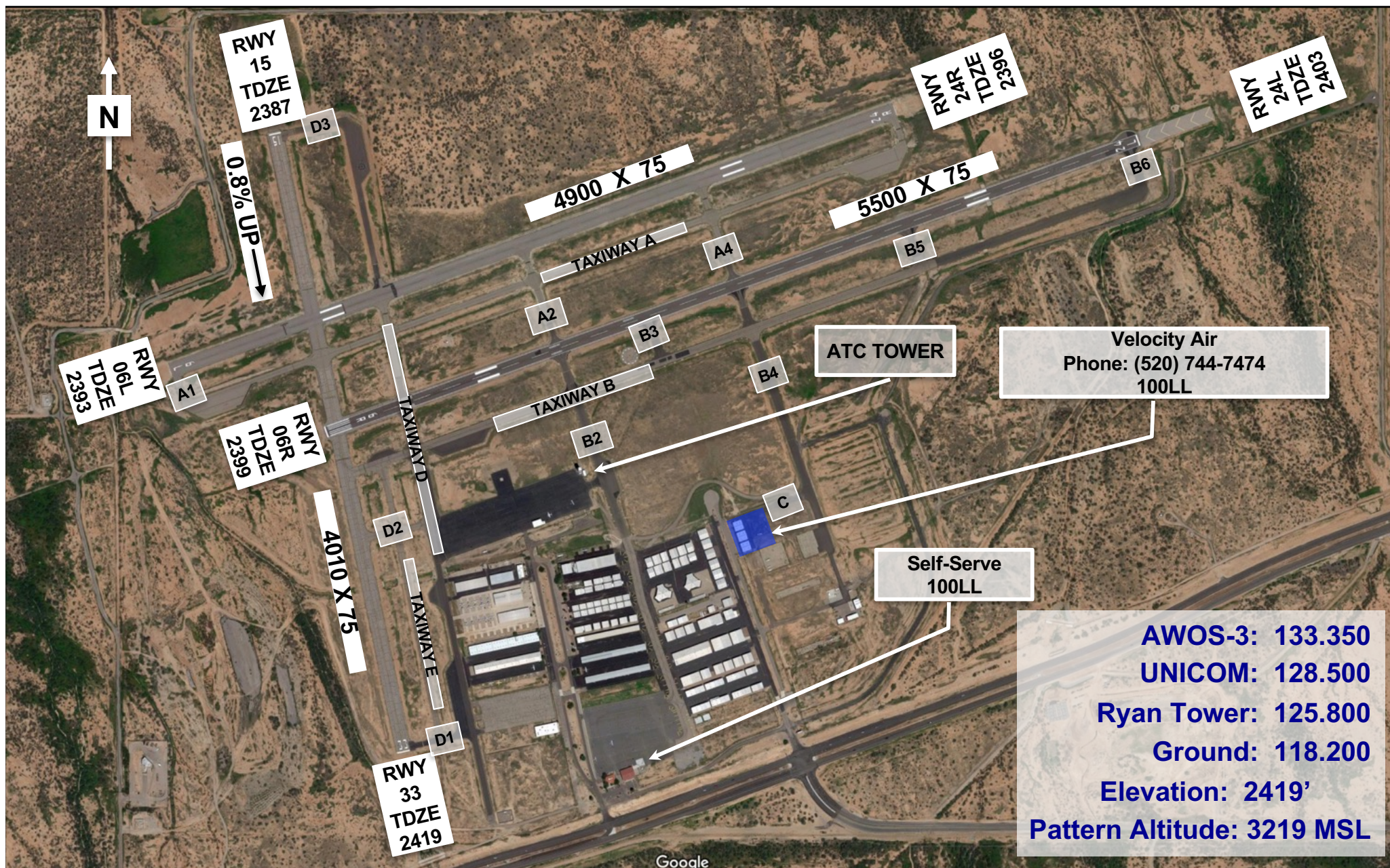
Tucson Aeroservice Center  
Phone: (800) 264-2266  
(520) 682-2999  
100LL







# Ryan Airfield (KRYN)







# Sierra Vista / Libby AAF (KFHU)

Monitor ATIS for Restricted Area procedures.  
Contact LIBBY APPROACH (127.050)  
for clearance in to R-2303B when active

City of Sierra Vista  
Phone: (520) 452-7091  
100LL

Cochise Composite Squadron



RWY  
08  
TDZE  
4719

A

B

C

D

G

RWY  
26  
TDZE  
4629

RWY  
30  
TDZE  
4620

ATC TOWER

ATIS: 134.750

CTAF: 124.950

UNICOM: 122.950

Libby Approach: 127.050

Libby Tower: 124.950

Ground: 121.700

Elevation: 4719'

Pattern Altitude: 5719 MSL

12,000' X 150' ← 1.0% UP

TAXIWAY P

TAXIWAY J

5366' X 100'

3032' X 75' ← 2% UP

RWY  
03  
TDZE  
4648

RWY  
12  
TDZE  
4619

RWY  
21  
TDZE  
4647





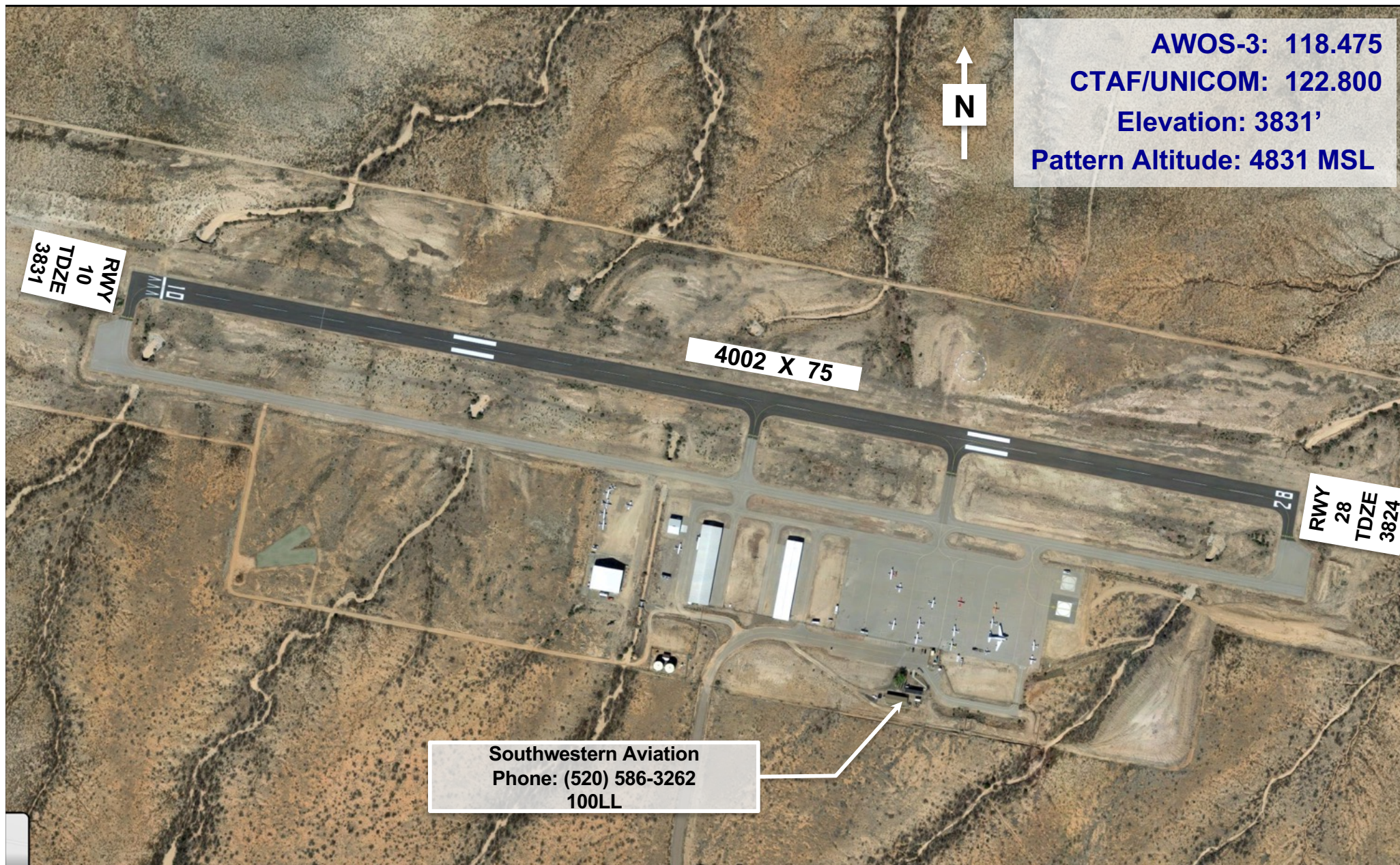
# Tucson International (KTUS)







# Benson Municipal (E95)







# Nogales International (KOLS)

ASOS: 121.125

CTAF/UNICOM: 122.800

TRACON: 118.750

Elevation: 3955'

Pattern Altitude: 5000 MSL

Tiffin Aviation Services  
Phone: (520) 287-9120  
100LL

7200 X 100

DISPLACED  
THRESHOLD

RWY  
22  
TDZE  
3941



RWY  
04  
TDZE  
3884

Tiffin Aviation Services  
Phone: (520) 287-9120  
100LL

General Aviation (GA) Parking

CBP

Customs

DO NOT SHUTDOWN IN CBP AND CUSTOMS PARKING AREA





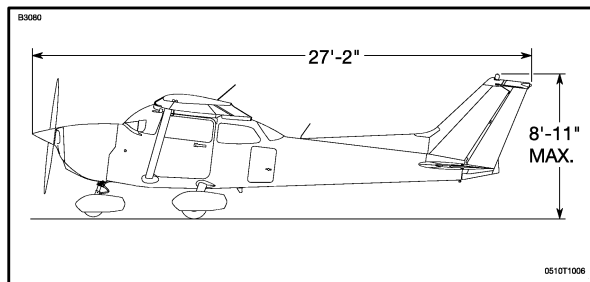
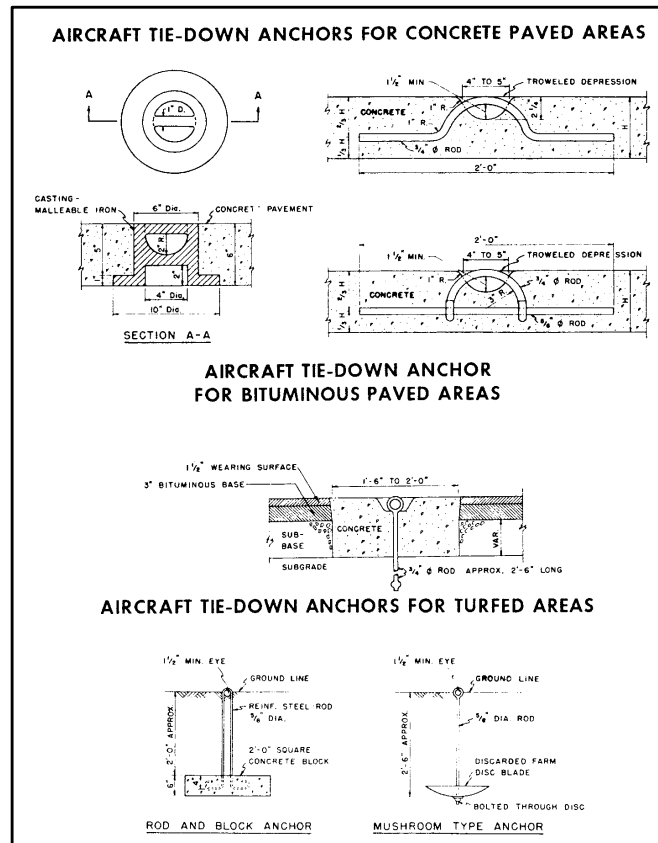
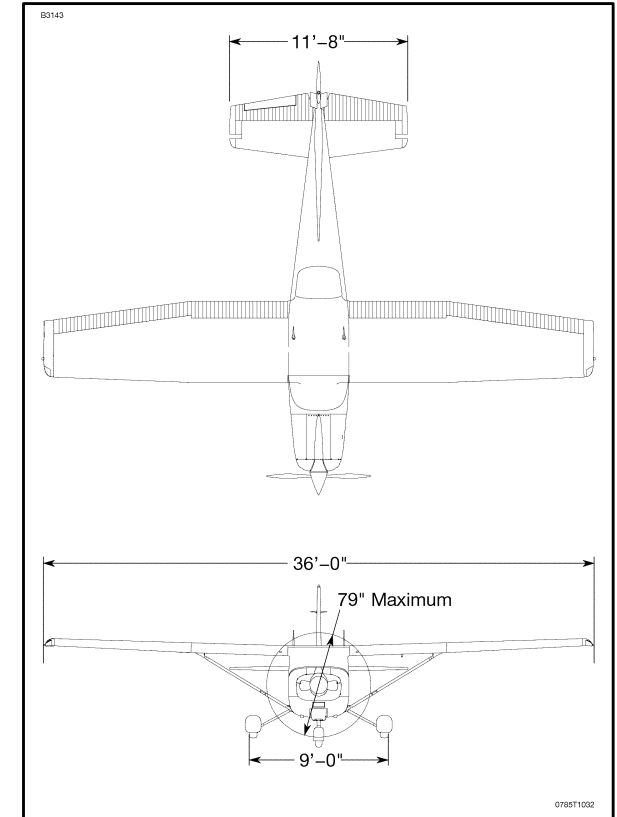
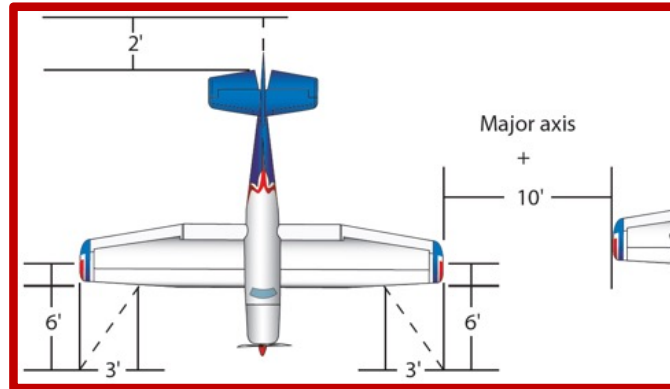
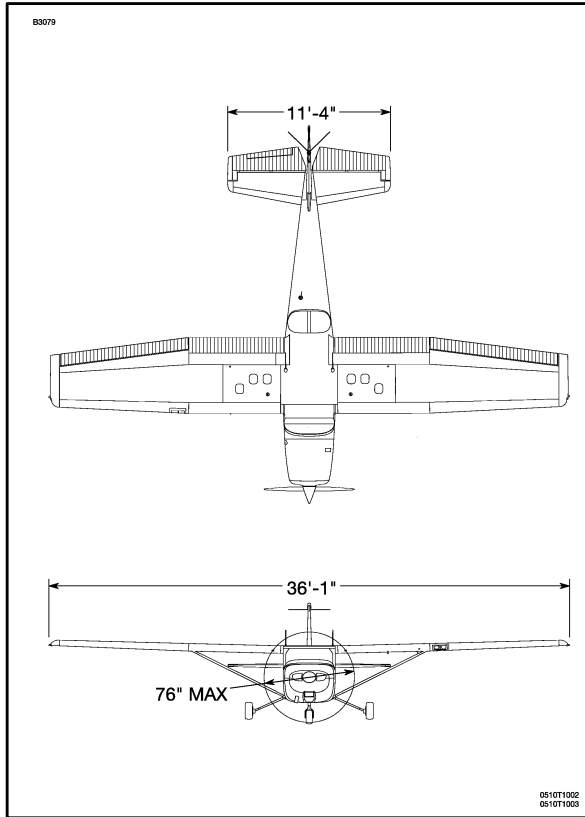
# Securing the Aircraft

## CAPR 130-2 Requirements

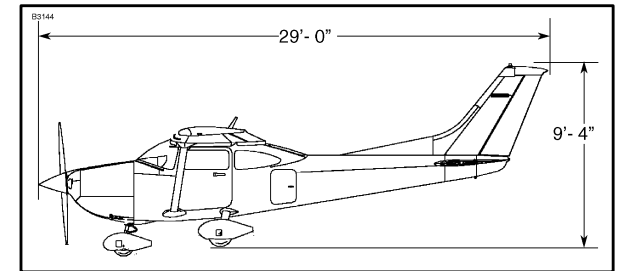
- Aircraft parked in the open shall be **tied down** IAW the applicable aircraft maintenance manual at the **three approved tie-down points (wings and tail)** and **securely chocked** to prevent wind damage
- Where applicable, the **control lock** shall be installed
- **Parking brakes** shall not be used in excess of 1 hour
- **Chains** shall not be used directly from aircraft mooring **points** to an anchor point because of excessive impact loads on wing spars
- Tie-down ropes and straps with **tensile strength of 3,000 pounds or greater** shall be used. Nylon or Dacron tie-down ropes are recommended



# Aircraft and Tie-Down Anchors



**Cessna 172S**



**Cessna 182T**





# Securing the Aircraft

**Align nose wheel and tail of the aircraft  
with aft tie-down anchor**



**Push back aircraft with aircraft wing moorings  
behind forward tie-down anchors**







# Securing the Aircraft

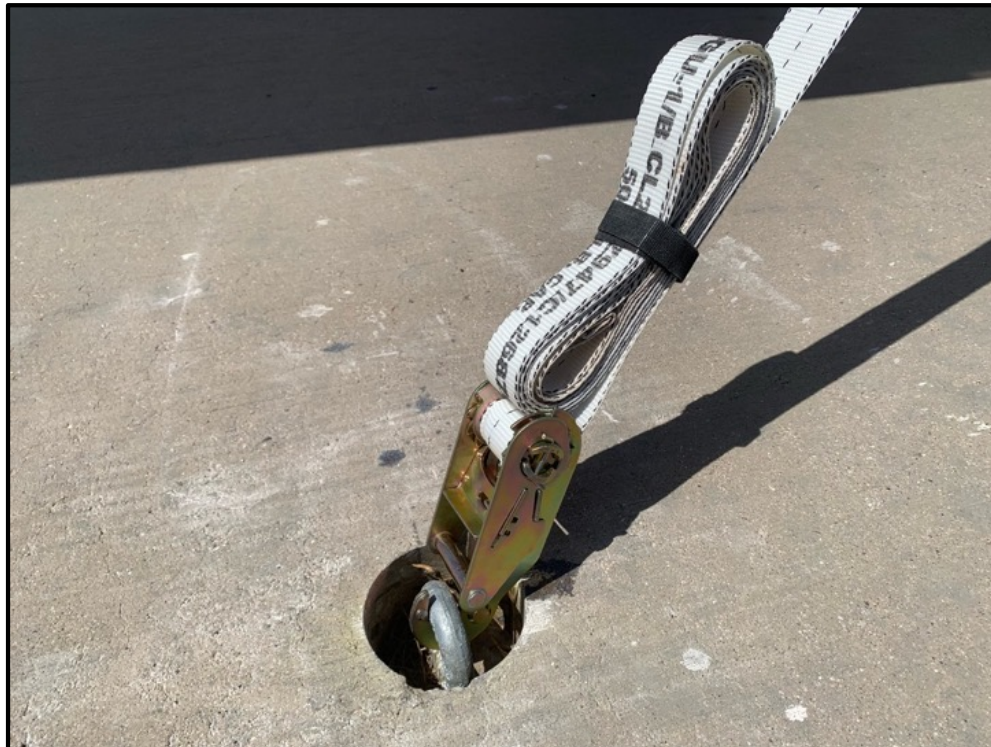
Secure Hook and Ratchet to tie-down anchor

Use ratchet to tighten strap to a snug fit

Do not over tighten strap

Roll up and tightly secure excess strap with velcro wrap

Leave wheel chocks in place







# Aircraft Jobox and Ops Whiteboard

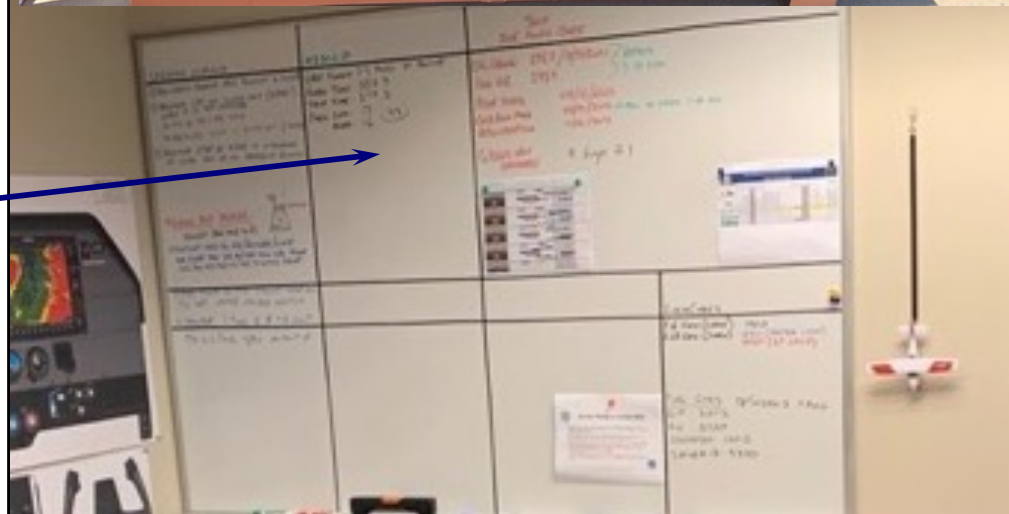


Aircraft Jobox can be used to store cleaning supplies and aircraft covers

After sortie completion, please update whiteboard with

- Date Last Flown
- Pilot Name
- Hobbs Time
- Tach Time
- Fuel Onboard (Left, Right, & Total)
- Any other notes for the next pilot/crew

Not required by regulation – requested for DMCS SOPs and courtesy to next pilot





# Jobox Contents

Clean Rags

Leather Cleaner

Acrylic Cleaner

White Rags

Spray Bottles on Lower Shelf

- 1) Pure Water
- 2) Carbon-X Cleaning Solution

Leading Edge Scrubber

Garbage

Oil

Ladder





# Threats/LIMFACs to CAP Operations

- ATIS UHF Only
- Night Operations on North Ramp
- BAK-12 Barriers at KDMA
- 200' Wide Runway at KDMA resulting in high flares
- Traffic Congestion and Pattern Airspeed 250 – 300 KIAS
  - Transition Phase of A-10 Training
  - Mid-Air Collision is commonly indicated threat on ORM
- A-10 Demonstration Team Practice
- Parajump Activity on DM AFB
- Parajump Activity IVO Pinal Air Park and Marana
- Summer Monsoon Activity
- Winter Icing Conditions