

Airspace

Lesson 4: Special Airspace

Objective

Identify special use airspace on a chart and describe their limitations and entry requirements. Also understand chart publication frequencies and effective dates.

Motivation

There is a large collection of special-use airspace (SUA), which supplements the basic classes of airspace. This airspace is used to protect special activities on the ground or in the air. Pilots need to know which airspace they are allowed to operate in or through.

Overview

- Prohibited Areas
- Restricted Areas
- Warning Areas
- Military Operation Areas (MOAs)
- Alert Areas
- Controlled Firing Areas (CFAs)
- National Security Areas
- Military training routes
- Temporary Flight Restrictions (TFRs)
- Parachute, Glider, Ultralights
- Terminal Radar Service Area (TRSA)
- Special Flight Rules Area
- Currency of Publications

Special-Use Airspace Information

SPECIAL USE AIRSPACE ON SEATTLE TERMINAL AREA CHART

Unless otherwise noted altitudes are MSL and in feet. Time is local.
 "TO" on altitude means "To and including."
 FL = Flight Level
 NO A/G = No air to ground communications.
 Contact Flight Service for information.

† Other times by NOTAM.
 NOTAM = Use of this term in Restricted Areas indicates FAA and DoD NOTAM systems. Use of this term in all other Special Use areas indicates the DoD NOTAM system.

U.S. P-PROHIBITED, R-RESTRICTED, W-WARNING, A-ALERT, MOA-MILITARY OPERATIONS AREA

NUMBER	ALTITUDE	TIME OF USE	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
P-51	TO BUT NOT INCL 2500	CONTINUOUS	NO A/G	
R-6703 A, B, C, D, E	TO 14,000	0700-2300 MON-FRI †2 HRS IN ADVANCE	SEATTLE TRACON	
R-6703 F, G, H, I, J	TO 5000	0700-2300 MON-FRI †2 HRS IN ADVANCE	SEATTLE TRACON	

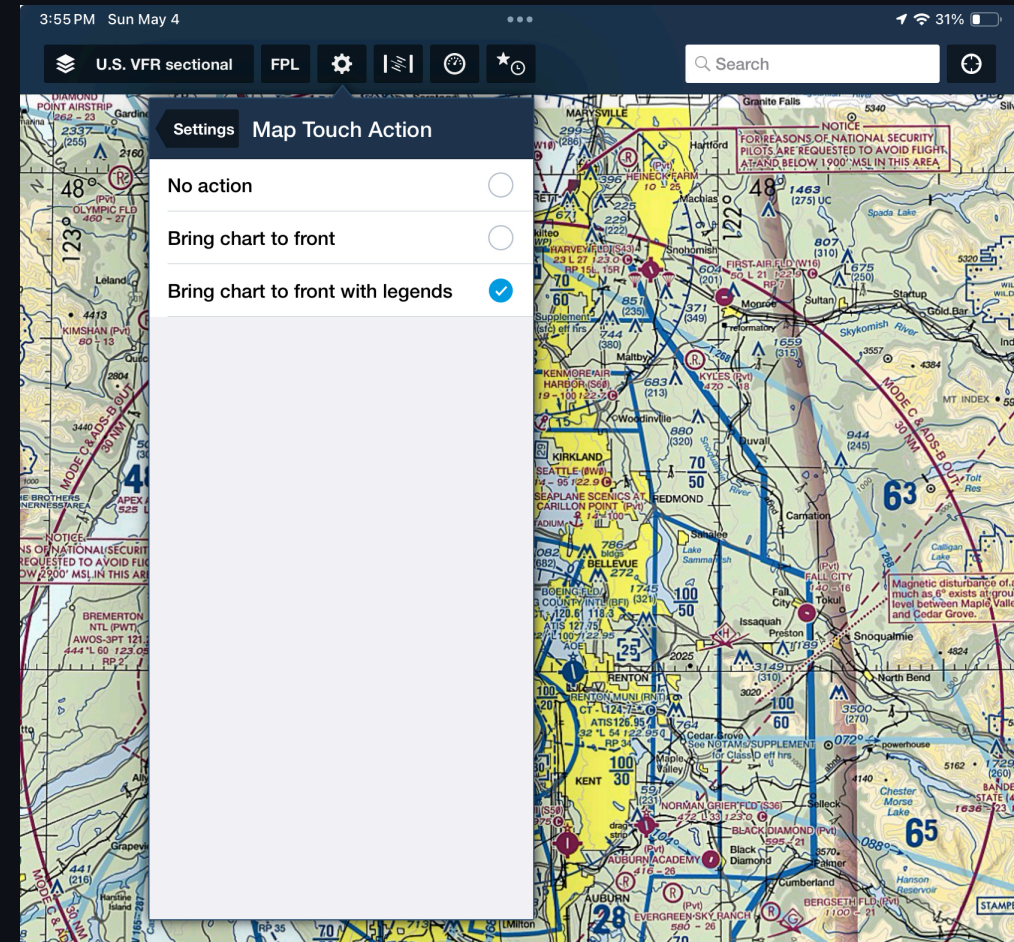
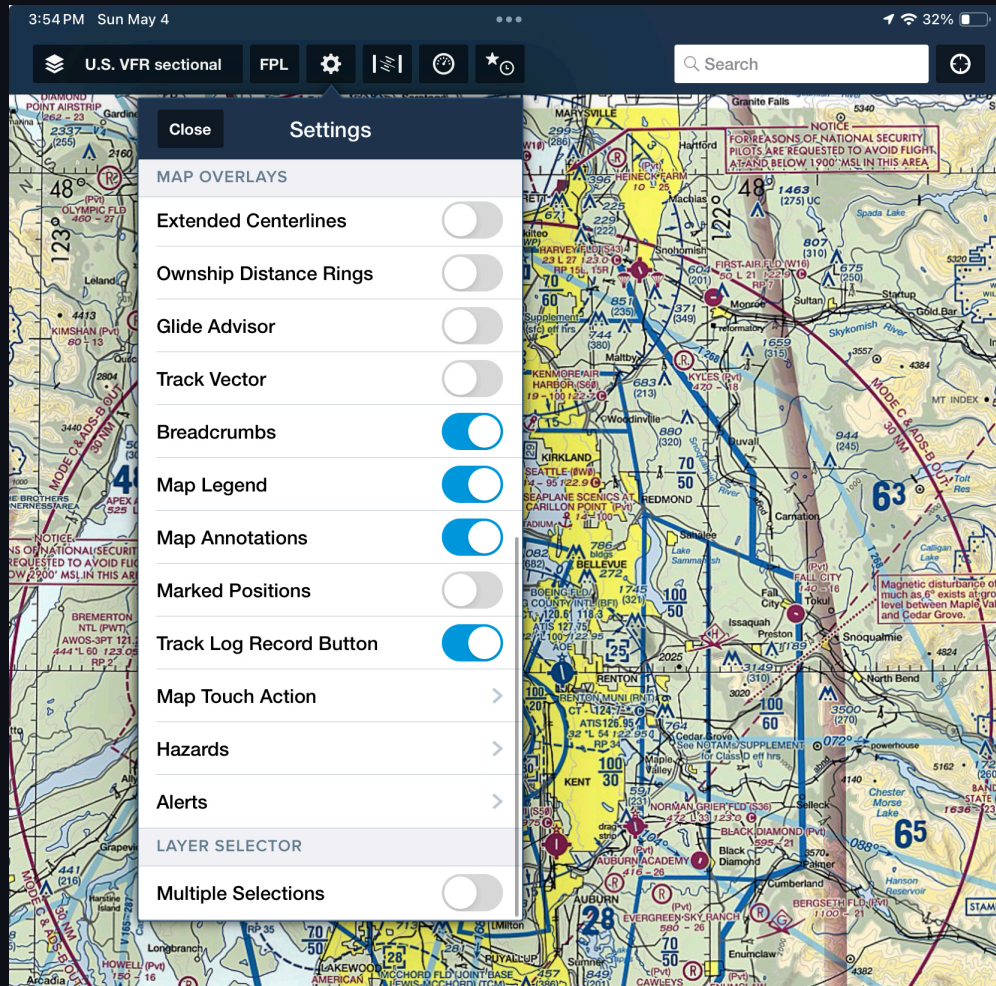
MOA NAME	ALTITUDE*	TIME OF USE†	CONTROLLING AGENCY/ CONTACT FACILITY	FREQUENCIES
CHINOOK A, B	300 TO 5000	INTERMITTENT 2 HRS IN ADVANCE BY NOTAM SR-SS	WHIDBEY ISLAND NAS APP	118.2 285.65
RAINIER 1, 2	2000 TO 9000	INTERMITTENT BY NOTAM	SEATTLE TRACON	

*Altitudes indicate floor of MOA. All MOAs extend to but do not include FL 180 unless otherwise indicated in tabulation or on chart.

†Other times by DoD NOTAM.

- Listed on chart margins
- Airspace controlling agency
- Airspace regular hours
- Some will be activated via NOTAM
- "2 HRS IN ADVANCE": NOTAM will be published 2 hours prior

Accessing Chart Legends in Foreflight



- ## SPECIAL USE AIRSPACE ON SEATTLE TERMINAL AREA CHART

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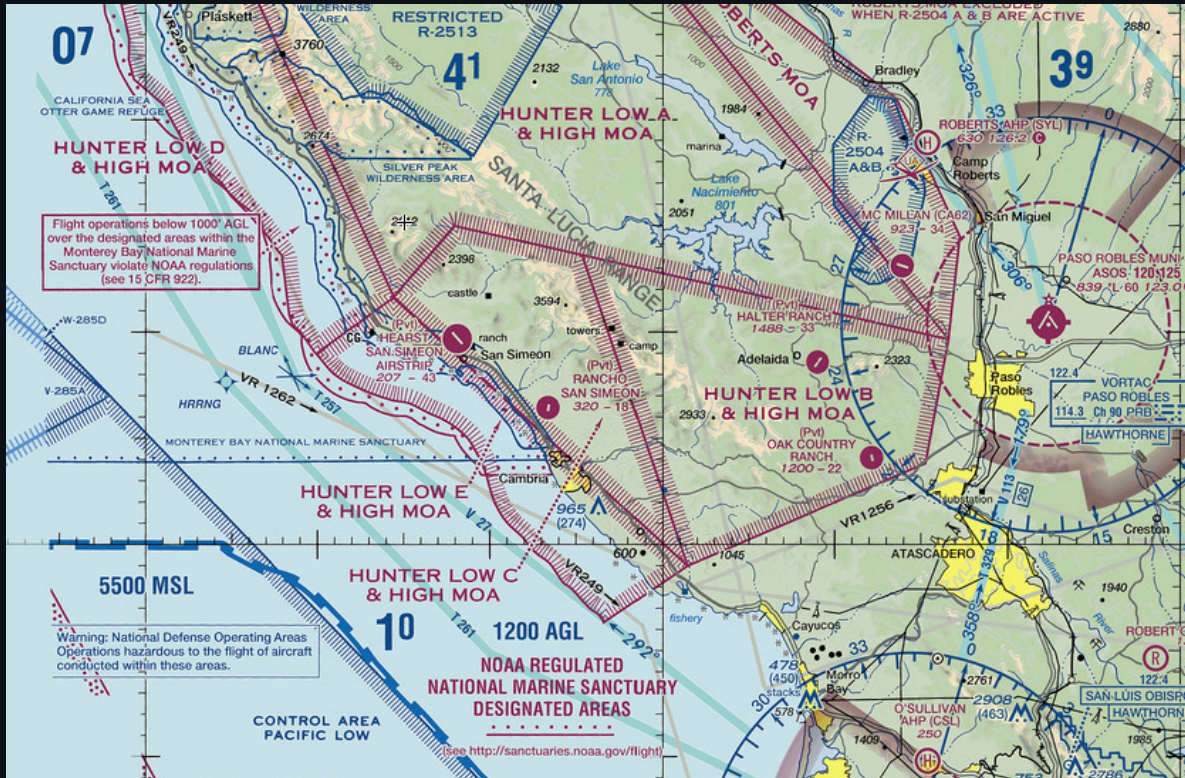
- Permission needed from controlling agency to fly through
- Controlling agency listed on margin
- Contains unusual, often invisible, hazards to aircraft (artillery firing, aerial gunnery, or guided missiles)

Warning Areas



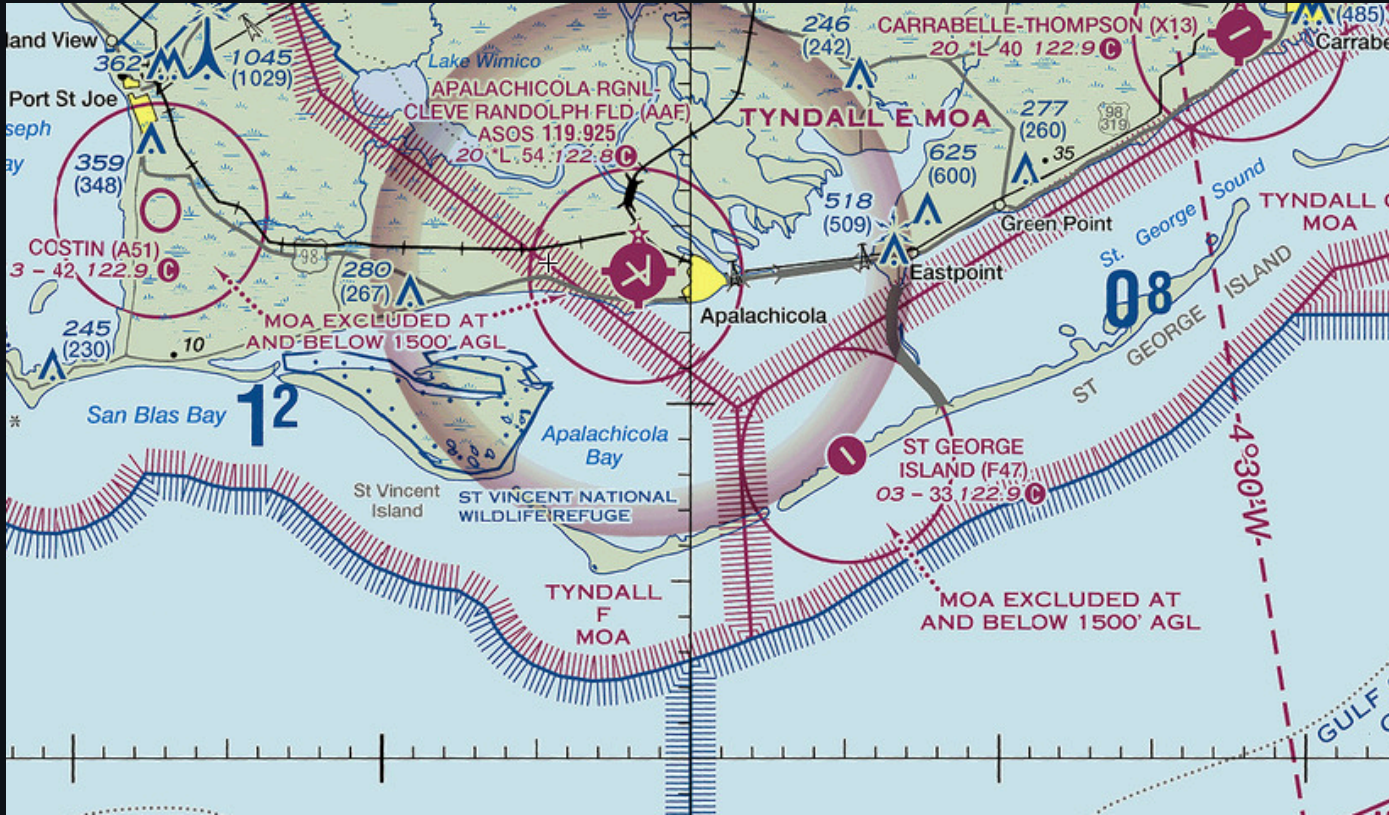
- Similar hazards as restricted areas
- Located 3 s.m. offshore
- Doesn't require permission to enter, but be very cautious

Military Operation Areas (MOAs)



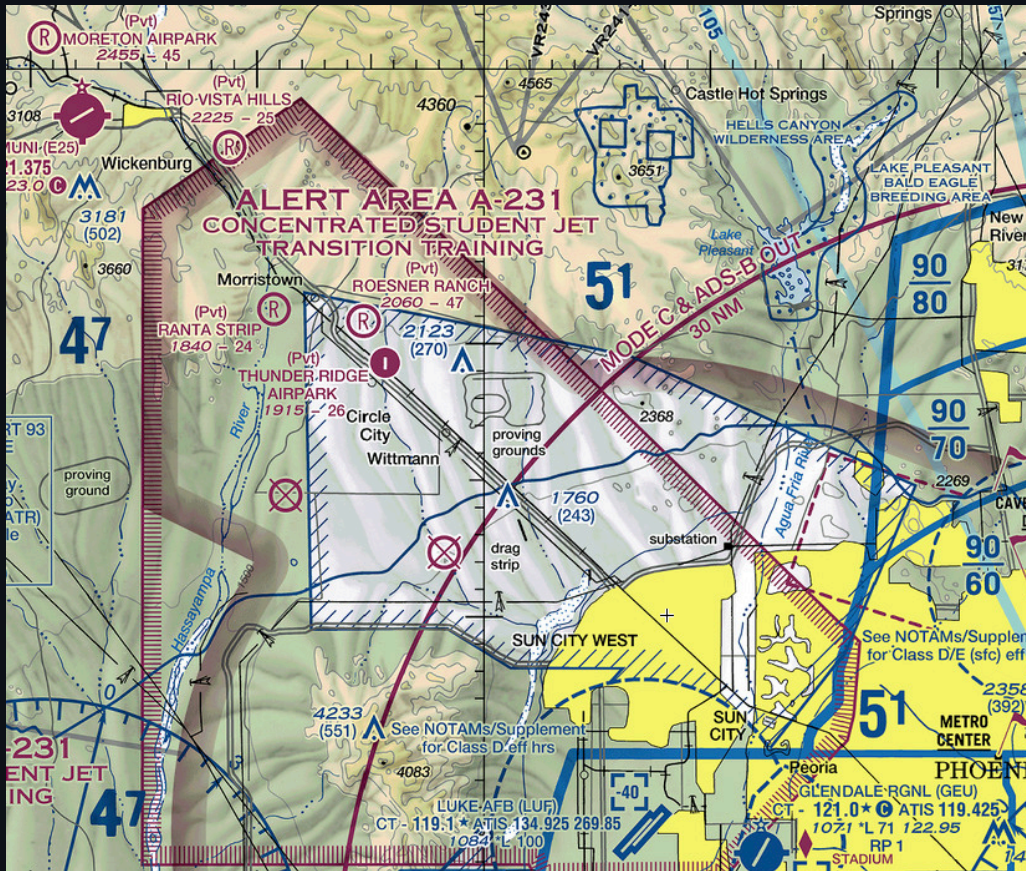
- Doesn't require permission to enter
- Be extremely cautious if flying through when one is active
- See and avoid aircraft

MOA Exclusion Areas



Lists airspace which is excluded from the MOA for an airport

Alert Areas

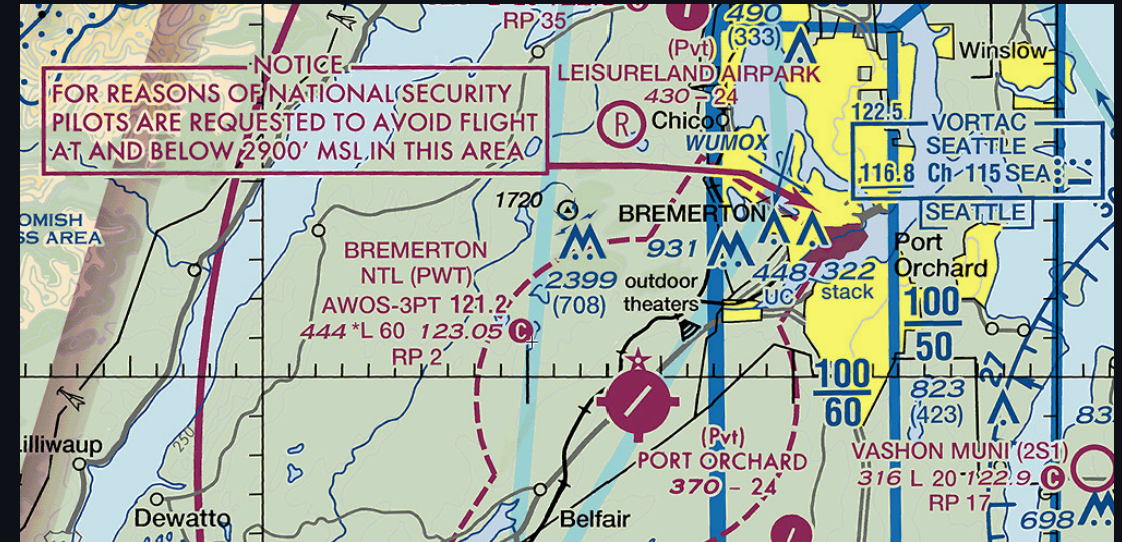
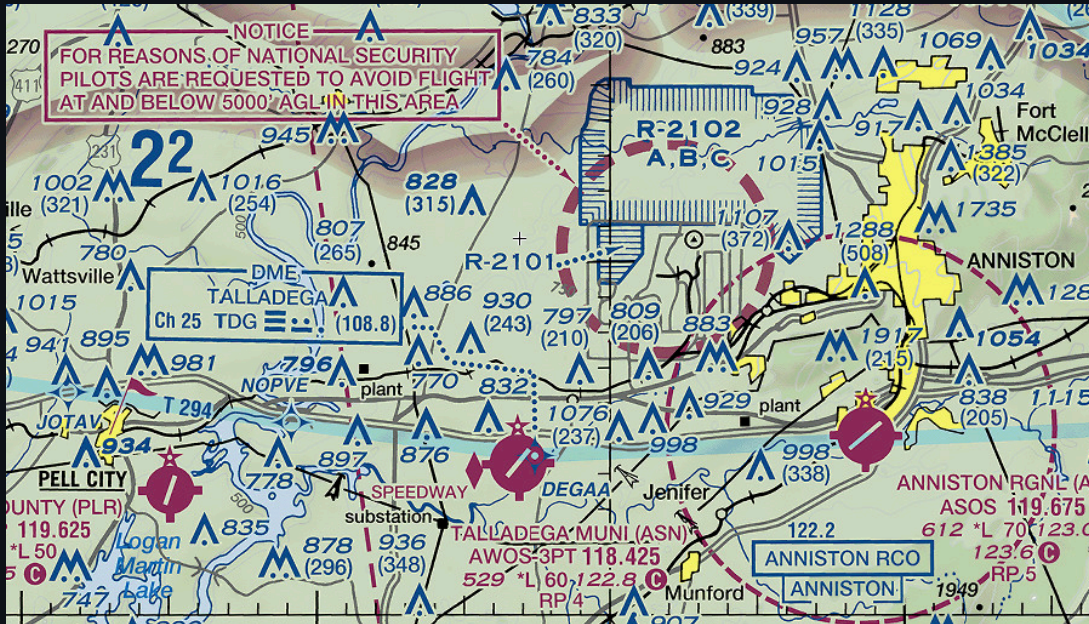


- Areas of unusual flight activity or large amounts of flight training
- Does not require permission to enter
- Exercise caution to see and avoid other aircraft

Controlled Firing Areas (CFAs)

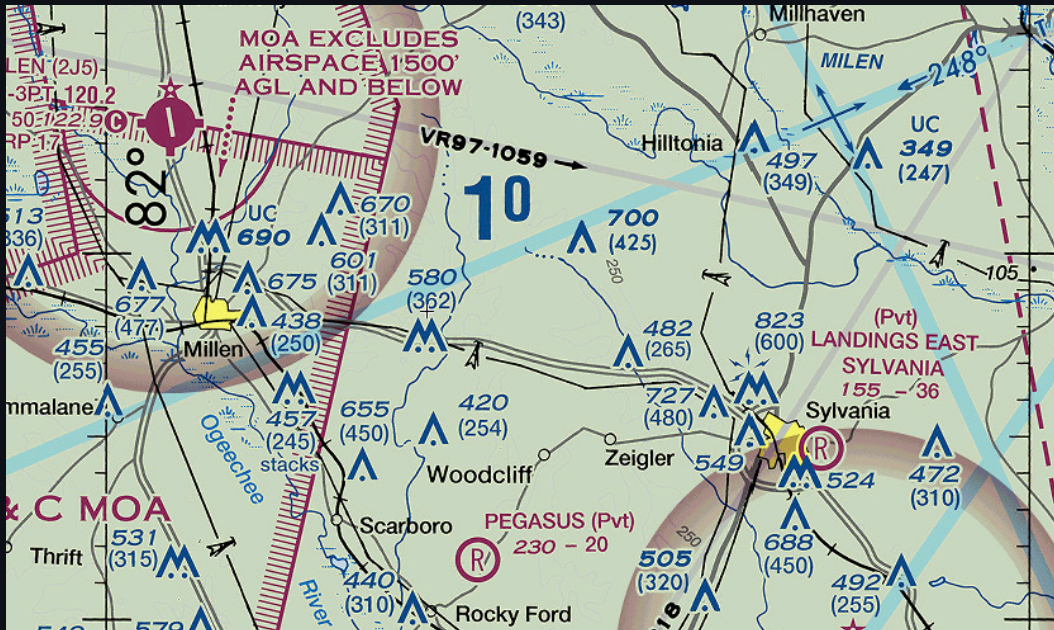
- Areas of operations which would be hazardous to non-participating aircraft
- Spotter aircraft are used to watch for incoming aircraft
- Not charted

National Security Areas



Aircraft are asked to avoid due to the sensitivity of national security.

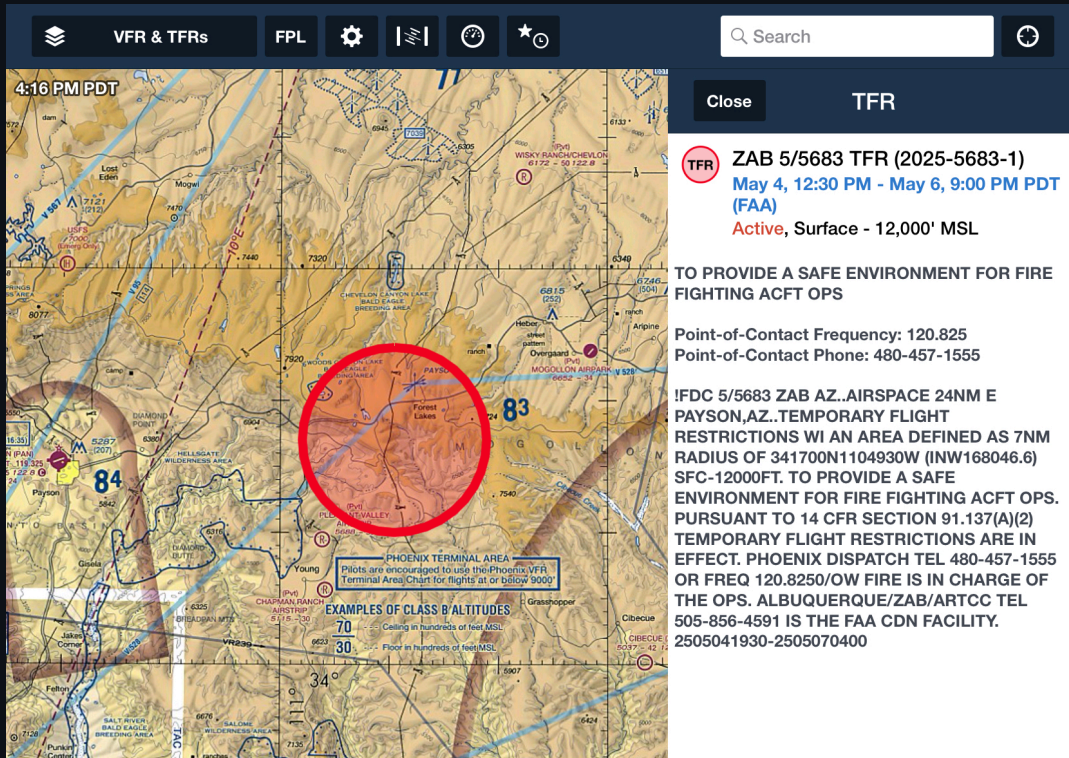
Military Training Routes



- Special military routes where aircraft speeds can be in excess of 250 knots
- IR routes: Training in any weather conditions
- VR routes: Training conducted in basic VFR weather

- Numbering system
 - IR1206: Four digits, no segment above 1,500' AGL
 - IR207: Three digits, one or more segments above 1,500' AGL
 - Alternates end in A or B (IR206A, VR10007B)

Temporary Flight Restrictions (TFRs)



- A NOTAM closing a certain radius of airspace for prohibited, airspace, national security
- Reason for a TFR
 - Airshows
 - NFL/MLB stadiums during games
 - Firefighting
 - Presidential visits
- Use an EFB map overlay or NOTAM briefing

Parachute, Glider, Ultralights

Aerobatic Practice Area



Glider Operations



Hang Glider Activity



Ultralight Activity



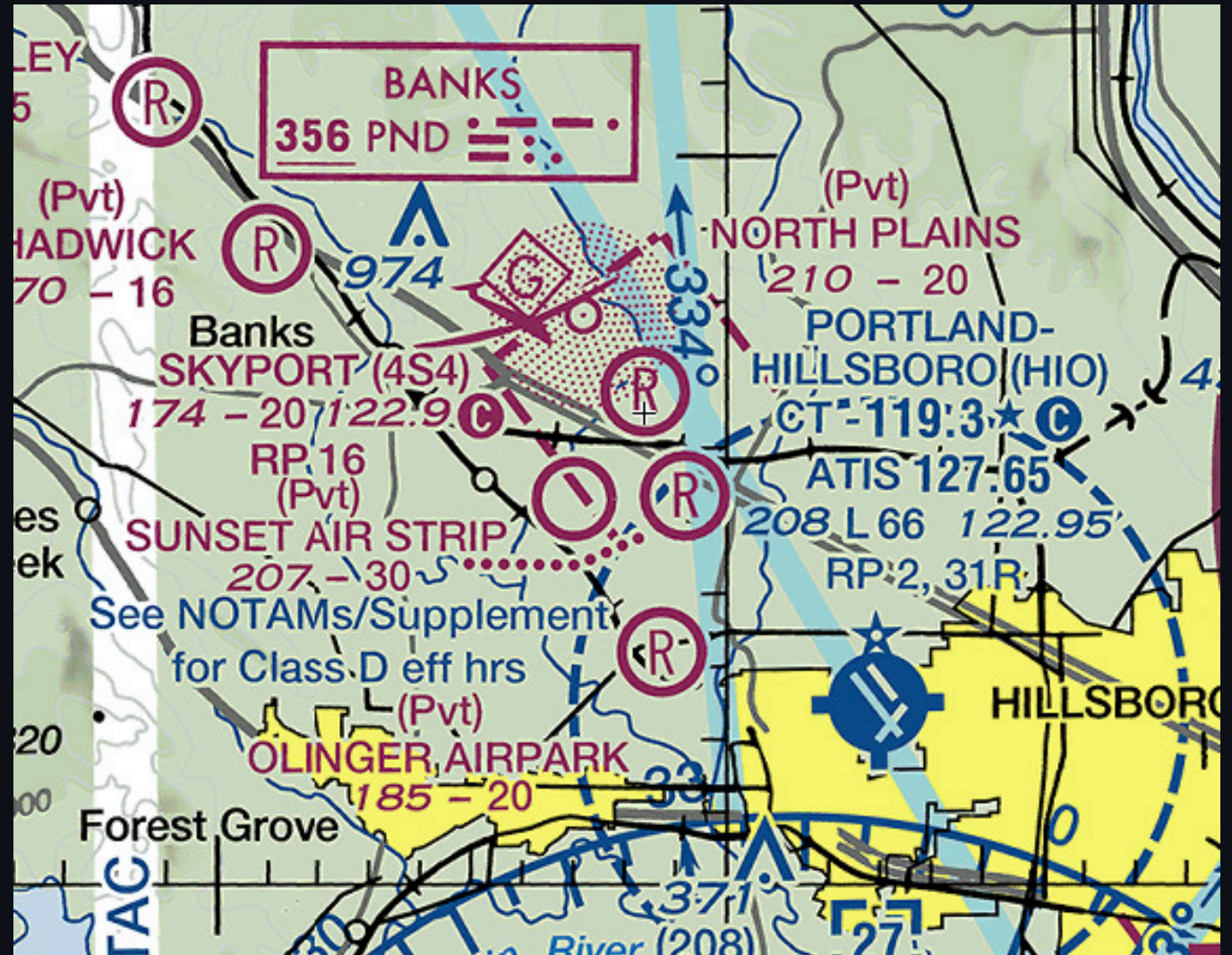
Unmanned Aircraft Activity



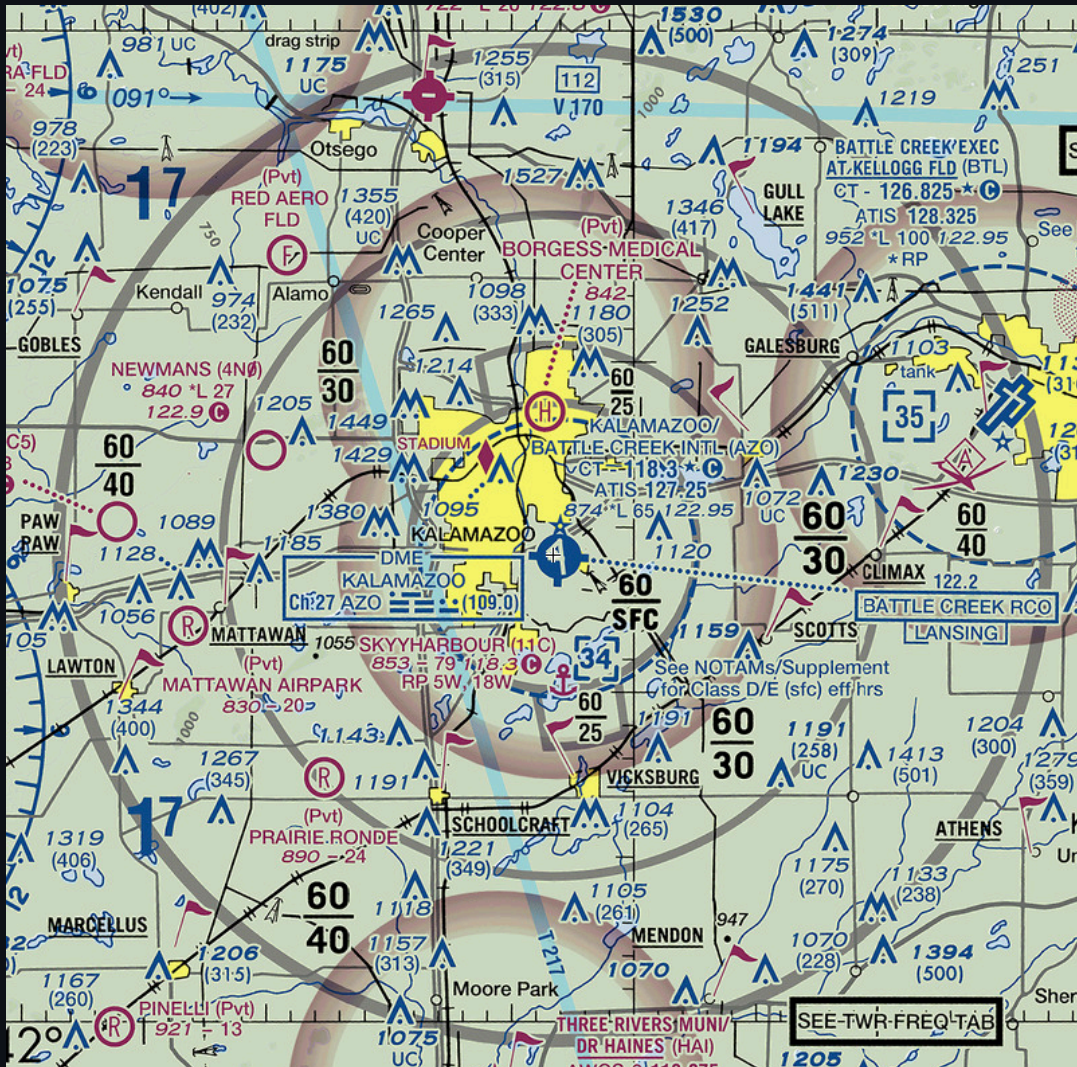
Parachute Jumping Area with Frequency



Space Launch Activity Area

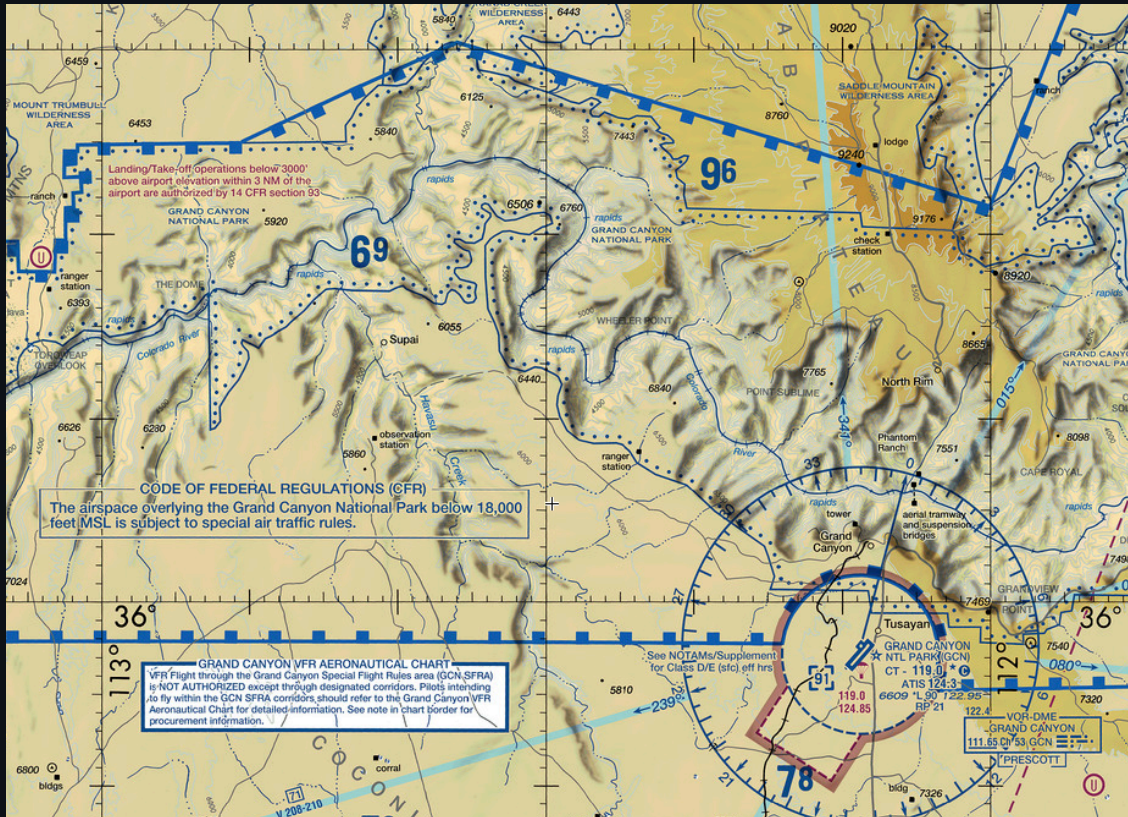


Terminal Radar Service Area (TRSA)



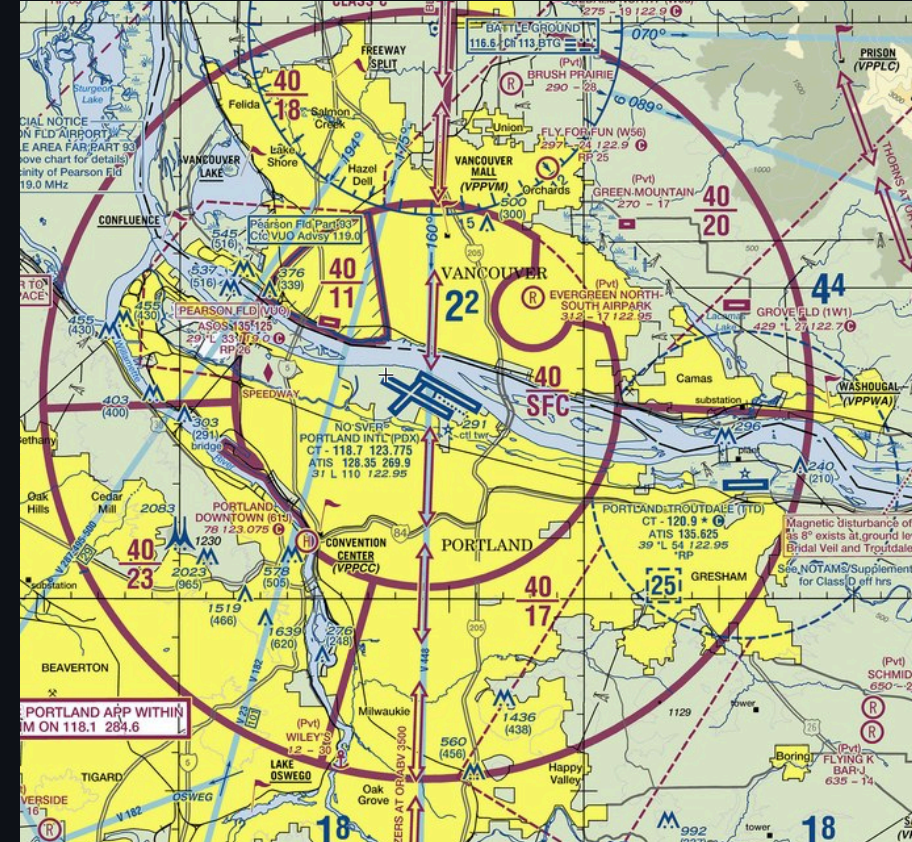
- Precursors to Class C airspace, and some still exist
- Provides same ATC services as a Class C, but participation is voluntary
- Surrounds a busy Class D airport
- Charted vertical extents
 - Black **60/30** = 3000-6000 ft. MSL

Special Flight Rules Area (SFRAs)



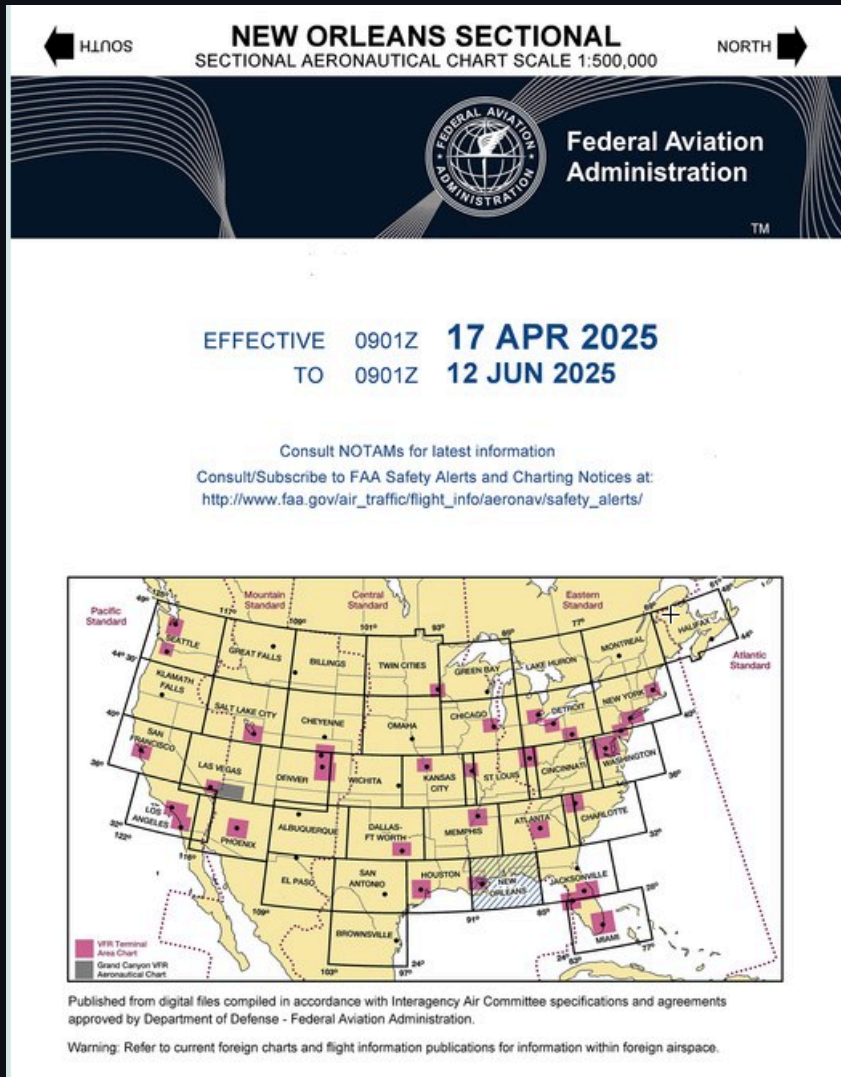
- Areas with unique characteristics that require special rules
- Specific information in 14 CFR Part 93
- Examples
 - Grand Canyon
 - Niagara Falls
 - Washington DC
 - Pearson Airport

Example SFRAs



- Pearson Airport: Proximity to PDX has special rules
- Washington D.C.: Inner ring and outer ring

Currency of Publications



- Aeronautical charts are published every 56 days
- Effective and expiration days are listed on the chart

Special Airspace Summary	Entry Requirements
Prohibited Areas	No entry
Restricted Areas	With permission only
Warning Areas	Entry allowed, use caution when active
MOAs	Entry allowed, use caution when active
Alert Areas	Entry allowed
Controlled Firing Areas (CFAs)	Not charted
National Security Areas	Avoid should avoid
Military training routes	Use caution when in use
Temporary Flight Restrictions (TFRs)	No entry
Parachute, Glider, Ultralights	Use caution for activity
Terminal Radar Service Area (TRSA)	Class C services, voluntary participation
Special Flight Rules Area	Part 93 lists special rules

Knowledge Check

Your flight plan will take you over a military operation area (MOA).

Where can you find information about whether it's active? If it is active, can you still fly through it?

Knowledge Check

You hear on the news that the president is visiting town on Saturday, the same day you were planning to fly.

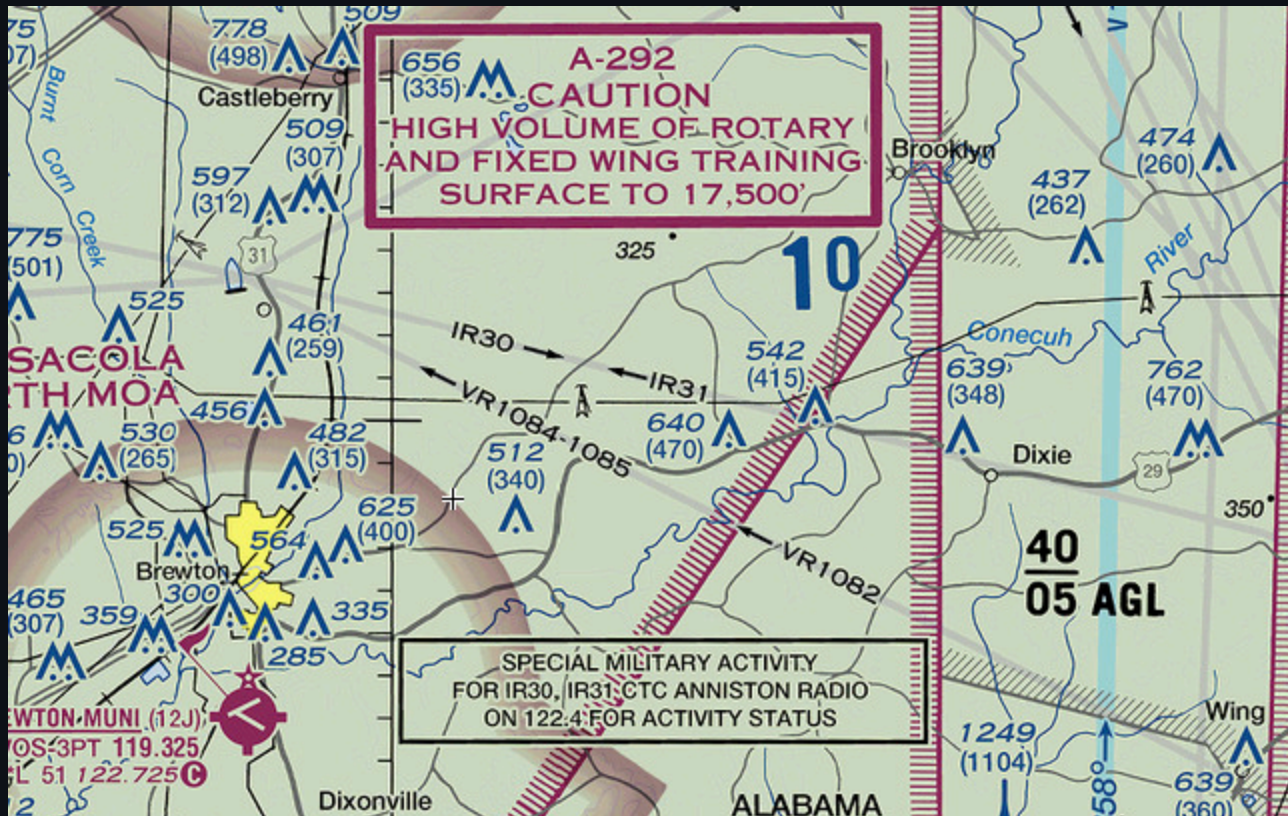
What would be sure to check before you depart?

Knowledge Check

You're planning a scenic flight over the Grand Canyon. Where would you find information about the flight operations allowed there?

Knowledge Check

Your flight has you cross this military training route VR1084.



Where would you expect to find military aircraft along that route?