

# SPECIAL USE AIRSPACE

- PRESENTATION STARTS IN

00:00

MINUTES

# National Airspace System and

## SPECIAL USE AIRSPACE

Cherry Ridge Pilot Group  
Erik Petschauer



# SPECIAL USE AIRSPACE



Or How to avoid this

Presented by

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Federal Aviation  
Administration

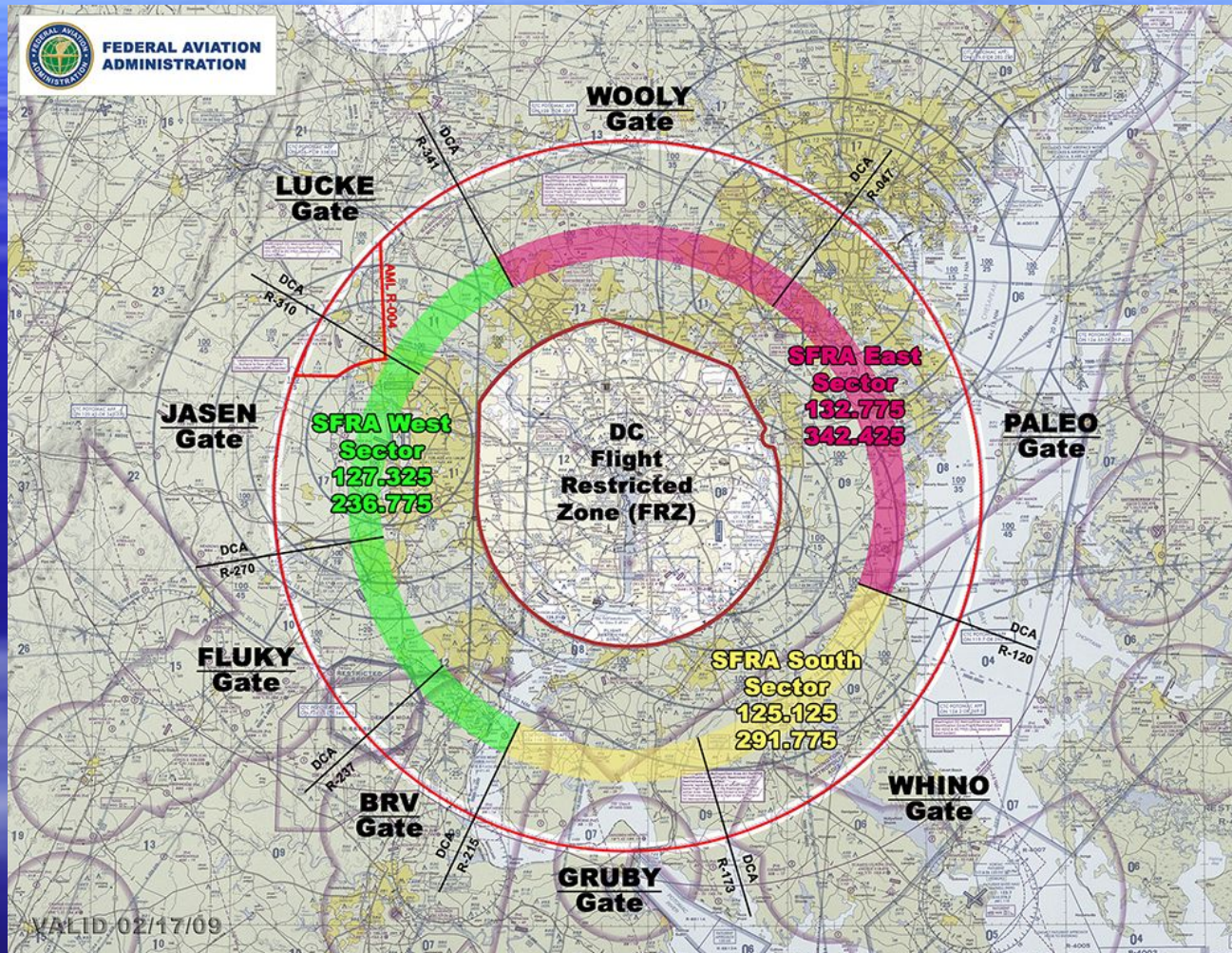


# SPECIAL USE AIR SPACE

- WASHINGTON, DC SFRA
- VISUAL INTERCEPT SIGNALS
- RESTRICTED AREAS (MOAs)
- MILITARY TRAINING ROUTES
- TEMPORARY FLIGHT RESTRICTIONS
- LOCAL AREA CONSIDERATIONS
- NAVIGATION AIDS
- SUMMARY



# WASHINGTON, DC SFRA





# WASHINGTON FRZ



# SFRA ENTRY PROCEDURES

- FILE & ACTIVATE SFRA FLIGHT PLAN
  - DIFFERENT FROM REGULAR FLIGHT PLAN
- CONTACT POTOMIC APPROACH
- GET AND SQUAWK DISCRETE CODE
  - NEVER SQUAWK 1200 IN ADIZ



# SFRA FLIGHT PLANS

Form Approved: OMB No. 2120-0026

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		(FAA USE ONLY) <input type="checkbox"/> PILOT BRIEFING <input type="checkbox"/> VNR		TIME STARTED		SPECIALIST INITIALS	
FLIGHT PLAN		<input type="checkbox"/> STOPOVER					
1. TYPE	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE / SPECIAL EQUIPMENT	4. TRUE AIRSPEED	5. DEPARTURE POINT	6. DEPARTURE TIME		7. CRUISING ALTITUDE
<input type="checkbox"/> VFR			KTS		PROPOSED (Z)	ACTUAL (Z)	
8. ROUTE OF FLIGHT							
9. DEPARTURE (Name of airport and elevation (ft))		10. EST. TIME ENROUTE HOURS MINUTES		11. REMARKS			
12. FUEL ON BOARD HOURS MINUTES		13. ALTERNATE AIRPORT(S)		14. AIRCRAFT HOME BASE		15. NUMBER ABOARD	
				17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)			
16. COLOR OF AIRCRAFT		CIVIL AIRCRAFT PILOTS. FAR Part 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed \$1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVFR flight plans.					

FAA Form 7233-1 (8-92)  
Electronic Version (Adobe)

CLOSE VFR FLIGHT PLAN WITH \_\_\_\_\_ FSS ON ARRIVAL





# SFRA ENTRY PROCEDURES

- AFTER CONTACT WITH CODE FLY FLIGHT PLAN ROUTE
- FOLLOW NORMAL PROCEDURES FOR CLASS B AIR SPACE
- GET HANDOFF TO TOWER/CTAF
- CONTINUE TO SQUAWK DISCRETE CODE
- LAND
- TURN TRANSPONDER OFF
- CLOSE FLIGHT PLAN



# OUTBOUND SFRA FLIGHT PLAN

- TYPE OF FLIGHT – IFR
- DEPARTURE POINT – AIRPORT
- DESTINATION – FROM LIST
- ALTITUDE – VFR/0##
- REMARKS – ADIZ/DUATS





# SFRA DEPARTURE PROCEDURES

- FILE AND ACTIVATE FLIGHT PLAN
- GET & SQUAWK DISCRETE TRANSPONDER CODE **PRIOR** TO TAKEOFF
- **DO NOT SQUAWK 1200 IN ADIZ**
- WHEN CLEAR OF PATTERN CONTACT POTOMIC APPROACH
- DEPART SFRA
- CLEAR WITH POTOMIC AND CHANGE TRANSPONDER



# COMMON SFRA VIOLATIONS

- PILOT UNAWARE OF ADIZ BOUNDARY
- EARLY SWITCH TO VFR 1200 CODE
- PILOT UNAWARE OF SFRA
- FORGET TO ACTIVATE MODE C (ALTITUDE)





# EQUIPMENT MALFUNCTIONS

- LOST COMM (RADIO OR TRANSPONDER)
  - VFR DIRECT OUT OF ADIZ
  - LAND AND CALL ATC ASAP
- EQUIPMENT FAILURE – LAND OR EXIT



# TOO CLOSE FOR COMFORT

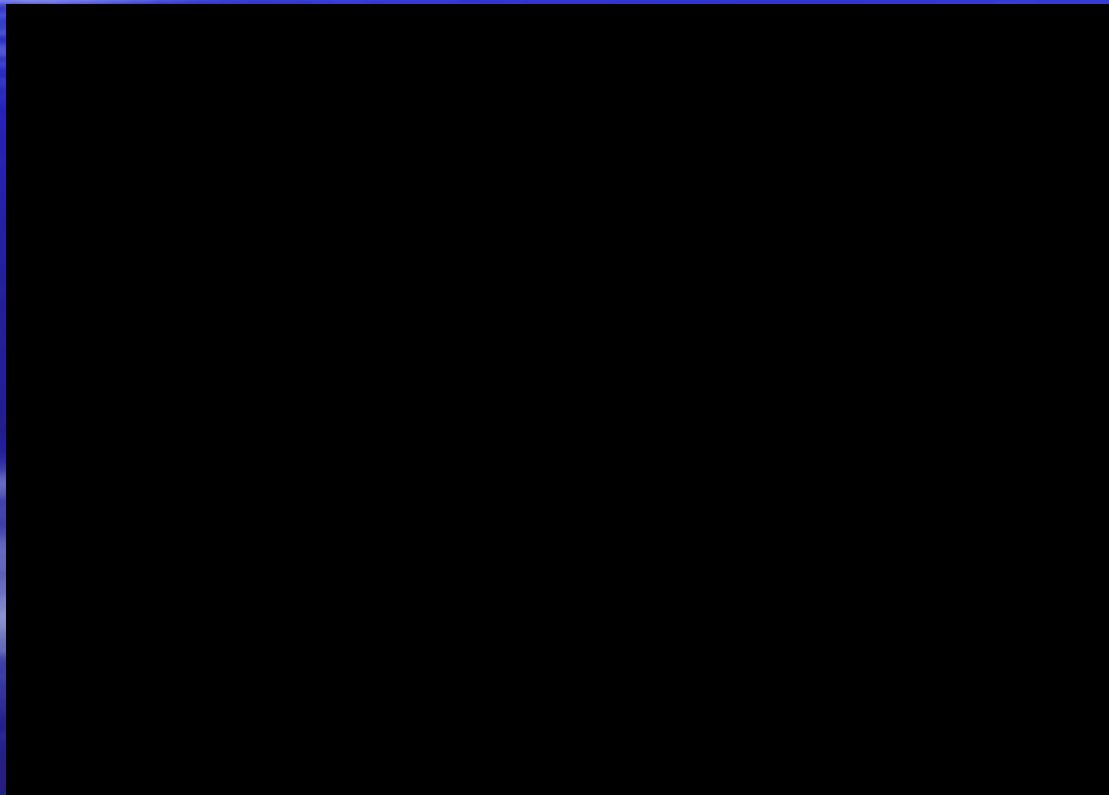
- VISUAL WARNING SYSTEM
  - RED/RED/GREEN LASER LIGHT
  - AIMED AT YOUR AIRCRAFT
  - NOT HARMFUL TO EYES
  - VISABLE TO 20 MILES IN VMC
- EXECUTE THE THREE “Ts”
  - TURN AWAY FROM SFRA & LIGHTS
  - TUNE 121.5 AND SQUAWK 7700
  - TALK TO ANYONE WHO WILL LISTEN





# VISUAL WARNING SYSTEM

- LOOKS LIKE THIS



# I'VE BEEN INTERCEPTED

- FIGHTER/HELICOPTER
- TALK TO ATC AND/OR TUNE 121.5 AND TALK
- FOLLOW INSTRUCTIONS



# VISUAL SIGNALS

Intercepting Aircraft Signal	Meaning	Intercepted Aircraft Response	Meaning
Rocks wings; after acknowledgement initiates a slow level turn, typically to the left, into the desired heading	You have been intercepted	Rocks wings, follows intercepting aircraft's lead	I understand and will comply
Night operations = flashing of navigation lights		Night = flash navigation lights	
Performs an abrupt breakaway maneuver with a climbing 90 degree turn without crossing the intercepted aircraft's flight path	You may proceed	Rocks wings	I understand and will comply
Circles airport, lowers landing gear, and files over runway in the direction of landing	Land at this airport	Lowers landing gear, follows intercepting aircraft and lands if runway is safe	I understand and will comply
Night = additionally turns on landing lights		Night = turn on landing light	





# VISUAL SIGNALS

Intercepted Aircraft Signal	Meaning	Intercepting Aircraft Response	Meaning
Raises landing gear while flying over runway between 1000' and 2000' and continues to circle airport	This airport is inadequate	If the intercepted aircraft is required to go to an alternate airport, intercepting aircraft will raise landing gear and use intercept procedures	Understood, follow me
Night operations = intercepted aircraft will flash landing lights while passing over runway			
		To release the intercepted aircraft, the intercepting aircraft will perform a breakaway maneuver	Understood, you may proceed
Pilot switches all available lights on and off at regular intervals	Cannot comply	Performs breakaway maneuver	Understood
Pilot switches all available lights on and off at irregular intervals	In distress	Performs breakaway maneuver	Understood



# SPECIAL USE AIR SPACE

- PROHIBITED AREAS
- RESTRICTED AREAS
- WARNING AREAS
- ALERT AREAS
- MILITARY OPERATING AREAS (MOAs)
- MILITARY TRAINING ROUTES



# PROHIBITED AREAS

- DON'T GO THERE – EVER
  - THE MALL IN WASHINGTON, DC
  - CAMP DAVID
  - CRAWFORD, TEXAS
  - NATIONAL SECURITY AREAS
- DIMENSIONS LISTED ON SECTIONALS & WACs





# RESTRICTED AREAS

- UNMANNED, UNGUIDED OBJECTS HURLING THROUGH SPACE
- DON'T GO THERE WITHOUT CHECKING AND GETTING A CLEARANCE
- TIMES, DIMENSIONS & CONTROLLING AGENCY LISTED ON SECTIONALS & WACs



# WARNING AREAS

- RESTRICTED AREA IN INTERNATIONAL AIR SPACE
- VFR FLIGHT OK - ???????
- TIMES, DIMENSIONS & CONTROLLING AGENCY LISTED ON SECTIONALS & WACs

# ALERT AREAS

- INTENSIVE STUDENT TRAINING
- TIMES, DIMENSIONS & CONTROLLING AGENCY LISTED ON SECTIONALS & WACs
- VFR OK – NO CLEARANCE REQUIRED
- FLIGHT FOLLOWING – EXTRA SET OF EYES





# MILITARY OPERATING AREAS (MOAs)

- ADVISORY IN NATURE
- AGGRESSIVE, MANUVERING FLIGHT
- TIMES, DIMENSIONS & CONTROLLING AGENCY LISTED ON SECTIONALS & WACs
- VFR FLIGHT PERMITTED **AT YOUR OWN RISK**
- CONTACT WITH ATC OR CONTROLLING AGENCY **NOT** REQUIRED
- FLIGHT FOLLOWING HIGHLY RECOMMENDED
- IFR FLIGHT ONLY IF AREA IS COLD
- NIGHT LIGHTS OUT SELECTED MOAs



# MILITARY TRAINING ROUTES

- VRs – VISUAL ROUTES
- IRs – INSTRUMENT ROUTES
- ##### < 1500 AGL (VRs)
- ### > 1500 AGL (IRs & VRs)
- BIG & SMALL JETS GREATER THAN 250KTS
- PILOT MUST REQUEST INFORMATION ABOUT SPECIFIC VRs/IRs ON FLIGHT PLAN ROUTE



# TEMPORARY FLIGHT RESTRICTIONS (TFRs)

- PRESIDENTIAL
- SPECIAL EVENTS
- DISASTER/HAZARD AREAS
- HOMELAND SECURITY





# TFR FORMAT

1. Location of the TFR area
2. Effective period
3. Defined area
4. Altitudes affected
5. FAA coordination facility and telephone number
6. Reason for the TFR
7. Agency directing relief activities (if applicable) and telephone number
8. Any other information considered appropriate.



# PRESIDENTIAL TFRs

- SHORT NOTICE
- TAKE NO PRISONERS MENTALITY



# PRESIDENTIAL TFRs





## SPECIAL USE AIR





# SPECIAL EVENT TFRs

- SPORTS EVENTS/STADIUMS
- AIRSHOWS
- SPACE FLIGHTS



# DISASTER/HAZARDS TFRs

- FOREST FIRES
- HURRICANE RELIEF
- MUDSLIDES
- EARTHQUAKE

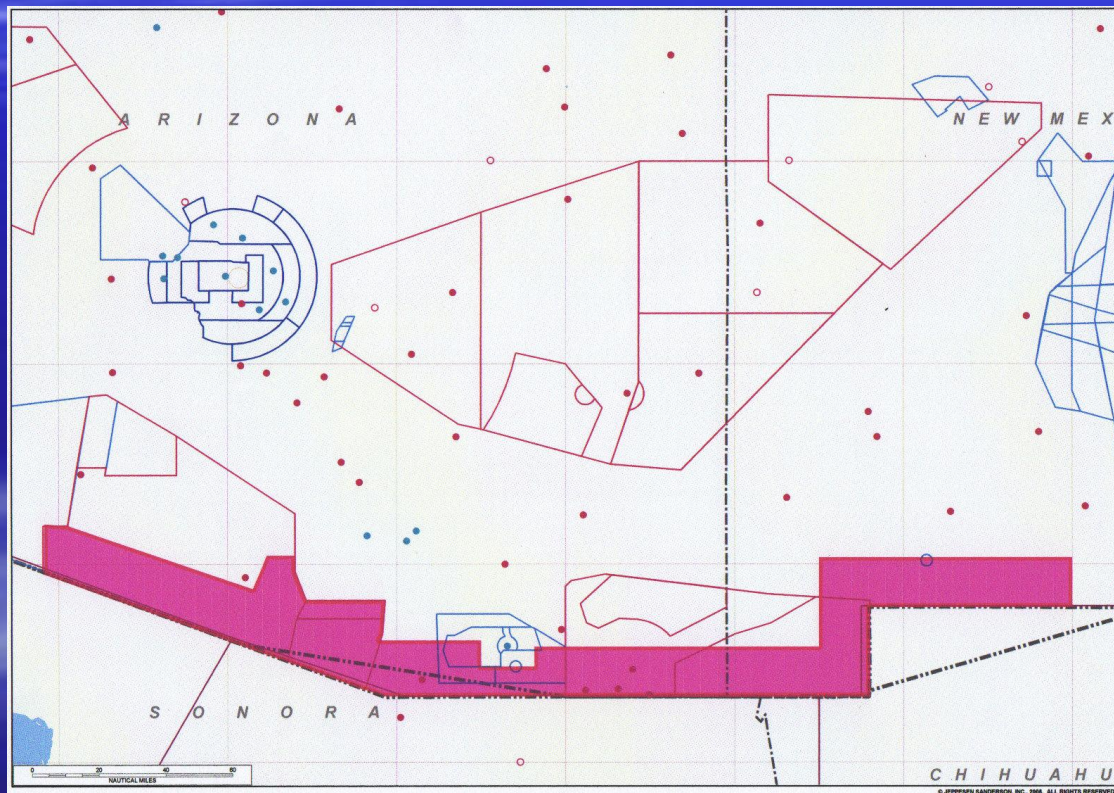
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# HOMELAND SECURITY TFRs

- ARIZONA/NEW MEXICO UAV TFR



# SPECIAL FEDERAL AVIATION REGULATIONS

- SFAR 50-2 – GRAND CANYON OPERATIONS
- SFAR 60 – ATC EMERGENCY OPERATION
- SFAR 94 – WASHINGTON, DC SPECIAL FLIGHT RULES AREA



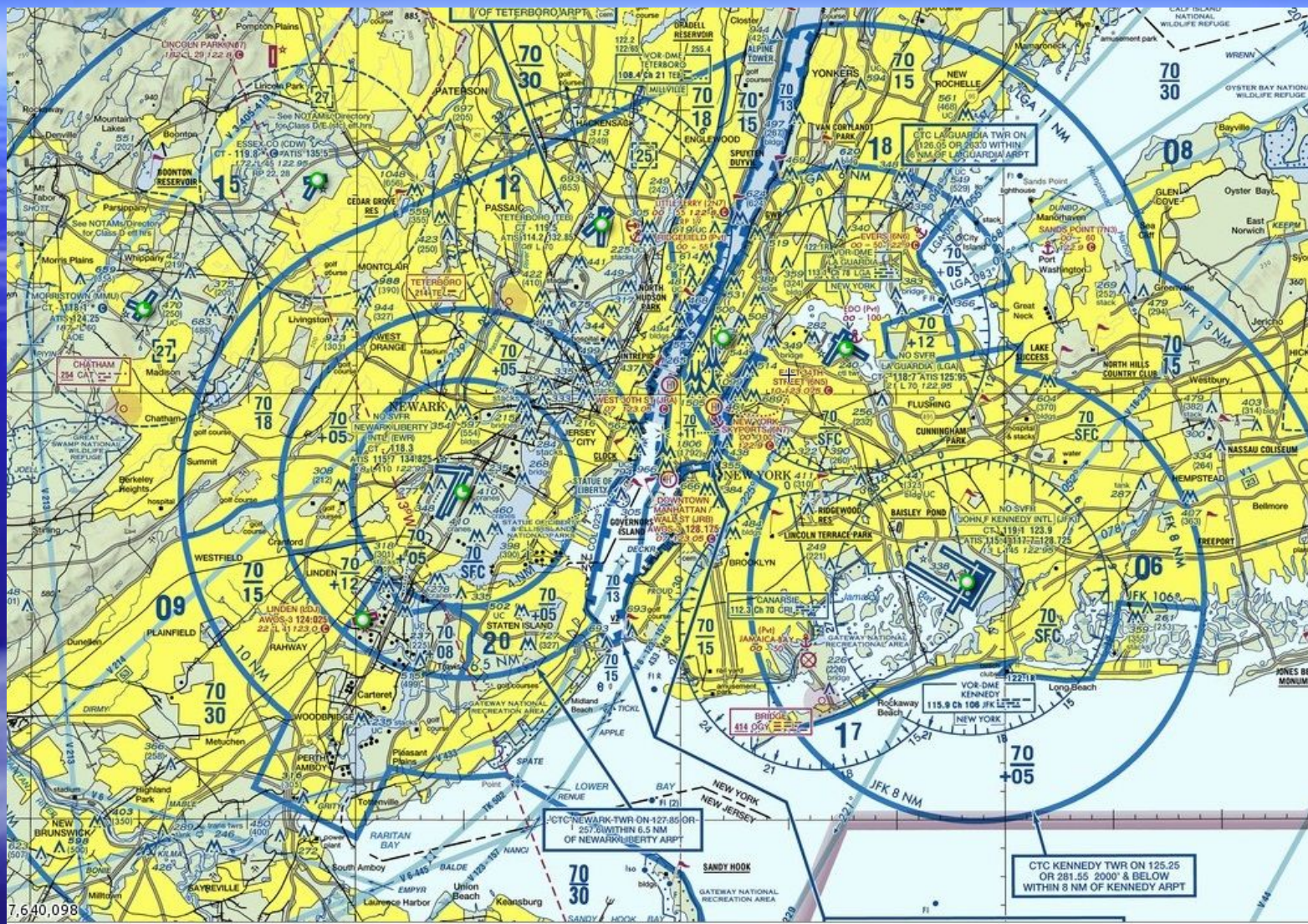
# LOCAL STUFF

- CLASS B TERMINAL CONTROL AREA
- MIRAMAR FLIGHT ACTIVITY





# NYC Class B



Federal Aviation  
Administration



# NAVIGATION AIDS

- LOCKHEED FLIGHT SERVICE STATIONS
- CHARTS – MUST BE CURRENT
- CURRENT NOTAMS (UPDATE IN THE AIR ON LONG FLIGHTS)
- VOR/DME
- CURRENT GPS DATABASE
- GPS – USE BIGGEST PICTURE FEASIBLE



# Airspace Depiction



# SUMMARY

- GOOD FLIGHT PLANNING
- CHECK PERMANENT AND TEMPORARY RESTRICTIONS
- GET HELP WITH SPECIAL PROCEDURES
- GET A BRIEFING ON TAPE FROM AN “OFFICIAL” SOURCE
- UPDATE FREQUENTLY



# SUMMARY

- ADDITIONAL INFORMATION & TRAINING

<http://faasafety.gov/>

CLICK ON “TFR TRAINING”

<http://www.aopa.org/>

CLICK “AIR SAFETY FOUNDATION” >  
“ON-LINE COURSES”





# SUMMARY

- FLYING IS STILL FUN!!!!
- GOOD PRE-FLIGHT PLANNING MAKES IT LESS STRESSFUL AND KEEPS IT FUN



Flying is not inherently dangerous, but to an even greater extent than the sea, it is terribly unforgiving of any carelessness, incapacity, or neglect.

Thank you for attending.

