Special Awareness Training

Washington, DC
Special Flight Rules Area

revised 30 November 2011

Security-related procedures and requirements are a fact of life for today's pilots, especially those who operate in the Washington, DC metropolitan area Special Flight Rules Area (SFRA) and the DC Flight Restricted Zone (FRZ). Although the rules may sound intimidating, they are not difficult. This course is intended to provide the information you need to fly safely, correctly, and confidently in this airspace.

Background – Why the SFRA?

- Established via NOTAM as ADIZ and FRZ after 9/11 to protect the nation's capital and federal government
- Codified into 14 CFR part 93 as the Special Flight Rules Area in 2009
- Characterized as National Defense Airspace

After the September 11 terrorist attacks, security authorities established the Washington DC Air Defense Identification Zone – the ADIZ – and the Flight Restricted Zone – the FRZ -- to protect the nation's capital. The ADIZ and the FRZ were established and operated via temporary flight restriction, or TFR, until the FAA developed a final rule that took effect on February 17, 2009.

That rule codified the ADIZ and the FRZ in 14 Code of Federal Regulations (CFR) part 93 as the DC Special Flight Rules Area (SFRA). For convenience in this course, we'll pronounce these terms the way many local pilots do: the "SIFRA" and the "FREEZE."

The SFRA, which includes the FRZ, is National Defense Airspace.

Background – Why this course?

- Airspace is monitored very closely.
- Serious consequences for violation.
- Course required to ensure that pilots understand requirements and procedures.
- Course is a one-time only requirement
- Good idea to review periodically
- *Always* check NOTAMs!

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You may be asking why you are required to take this course. The primary reason is that this airspace is monitored very closely, and there are serious consequences for violating the established operating requirements and procedures. The FAA made this course mandatory in order to ensure that pilots understand those requirements and procedures.

You are only required to complete this course once and, if you have already taken it, you do not need to complete it again. But it is a good idea to review this material periodically to refresh your memory.

The most important thing you can do, though, is check Notices to Airmen (NOTAMs) before every flight. The SFRA itself can only be changed by rulemaking, but operating procedures do change from time to time. These changes are always published in a NOTAM.

We make every effort to keep this course updated, but the quickest and most reliable way to keep track of the latest changes is to always check NOTAMs.

Background – Failure to comply

There are serious consequences of failure to comply:

- Enforcement action:
  - Civil penalties
  - Suspension or revocation of airman certificates
- For a knowing / willful violation:
  - Possibly subject to criminal prosecution
- If it is determined that an aircraft poses an imminent security threat:
  - Deadly force is possible

We mentioned serious consequences for violating the established requirements and procedures for flying in this airspace.

For any violation, whether inadvertent or intentional, the FAA may take civil enforcement action. That may include civil penalties, and suspension or revocation of airmen's certificates.

For a knowing and willful violation, the pilot could be subject to criminal prosecution.

If it is determined that an aircraft poses an imminent security threat, use of deadly force is also possible.

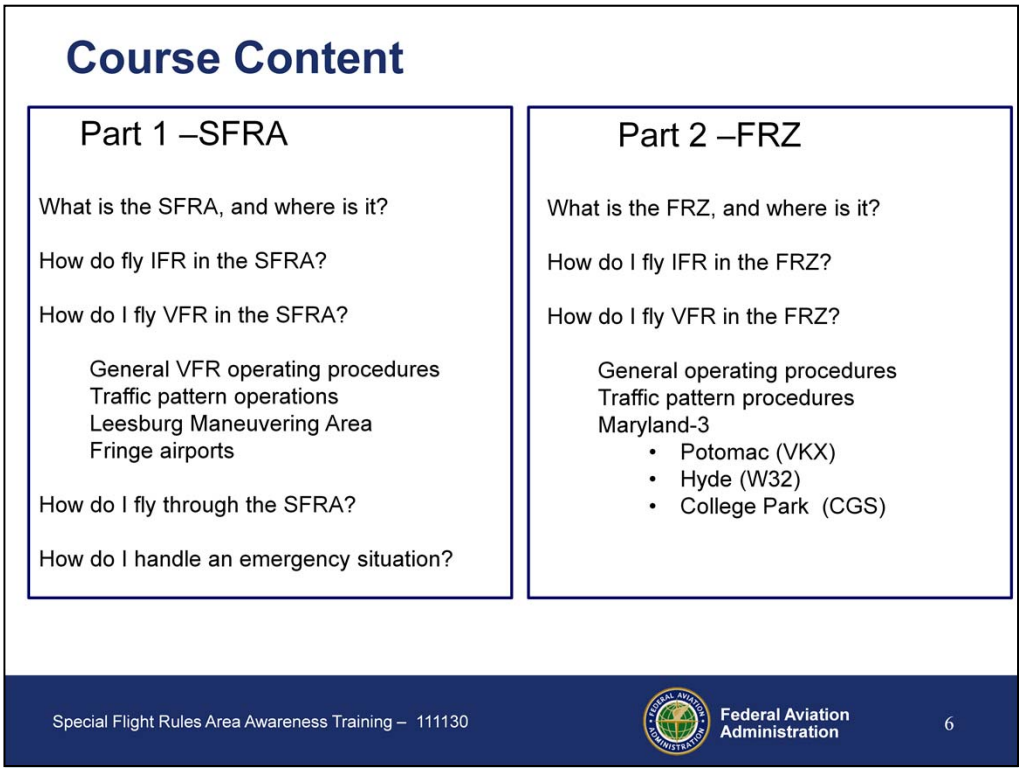
Course Completion Objectives

You will be able to describe and follow requirements and procedures for operating to, from, and within the SFRA and the FRZ. That includes:

- What and where
- IFR and VFR operations
- Traffic pattern operations
- Transit procedures
- Emergency procedures
- Special procedures
  - Leesburg, fringe airports, Maryland 3

When you finish this course, you will be able to describe and follow the requirements and procedures for operating to, from, and within the SFRA and the FRZ. That includes:

•What and where
•IFR and VFR operations
•Traffic pattern operations
•Transit procedures
•Emergency procedures
•Special procedures (Leesburg, fringe airports, MD-3)



This course is organized in two parts.

Part 1 describes the requirements and procedures for operating in the SFRA. Specific topics are shown on the slide.

Part 2 covers the requirements and procedures for operating in the FRZ. Specific topics are shown on the slide.

Course Completion

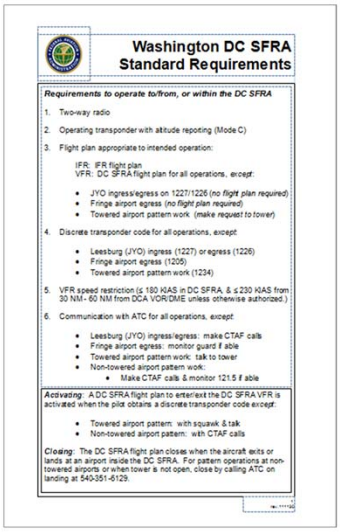
Links and attachments, including:

- Requirements summary chart
- Kneeboard guides

Review

Quiz

Completion Certificate



At the end of the course, you will find links and attachments, including:

- A summary chart of requirements and procedures, and
- Kneeboard guides that you can print and take with you when you fly.
- A review of the course material.

Following the review is a short multiple choice quiz to verify your understanding of this material. You will need to take the quiz in a single session.

When you successfully complete the course, you will be able to print a completion certificate. You should keep this certificate for your records, and be prepared to show it to the FAA, NTSB, or law enforcement upon request.

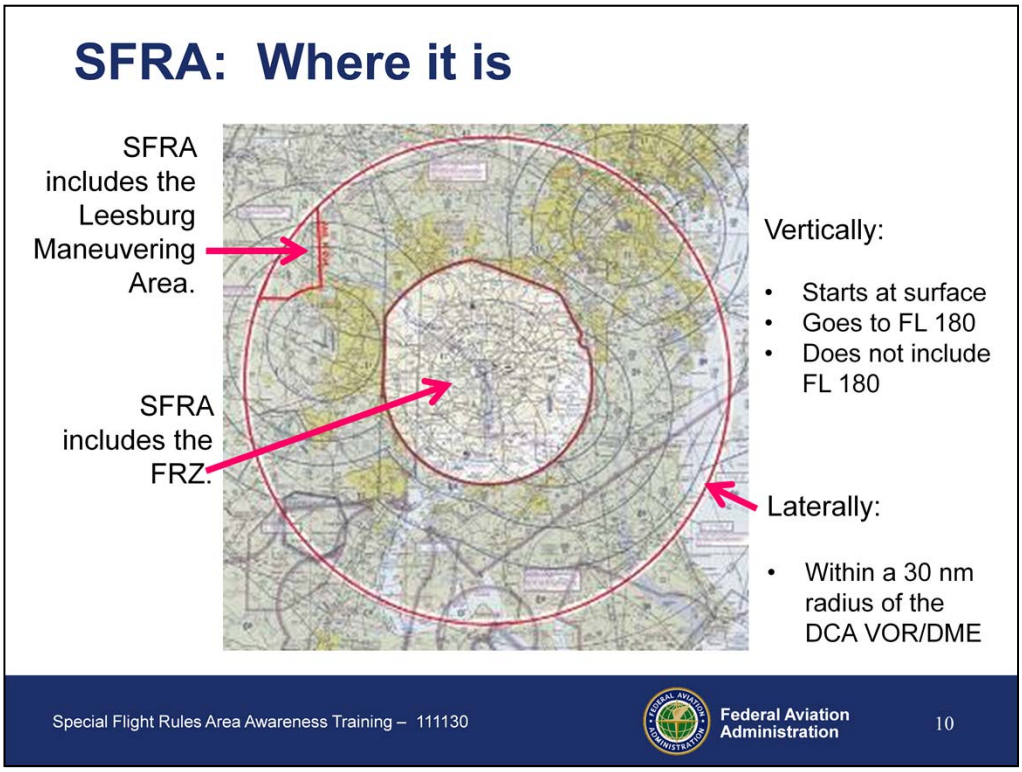
1. What is the SFRA, and where is it?

1. SFRA: What it is

The Washington, DC Special Flight Rules Area (SFRA) is:

An area of airspace where the ready identification, location, and control of aircraft is required in the interests of national security.

The Washington, DC Special Flight Rules Area (SFRA) is an area of airspace where the ready identification, location, and control of aircraft is required in the interests of national security.



Laterally, the SFRA is the airspace within a 30-nm radius of the DCA VOR/DME.

Vertically, it starts at the surface and goes to, but does not include, flight level 180.

The SFRA includes the Leesburg Maneuvering Area in the northwest quadrant.

It also includes the FRZ. The FRZ is a highly-restricted ring of airspace directly over the nation's capital. We will cover the exact location and dimensions of the FRZ and the Leesburg Maneuvering Area later in the course.

This airspace is very clearly marked on both the Washington DC sectional chart and the associated terminal area chart.

SFRA – The 60 nm ring

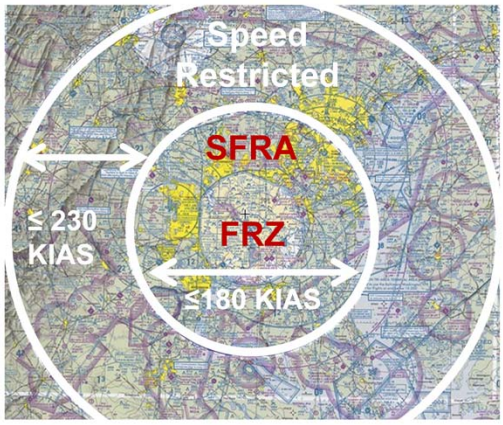
Within 60 nm of the DCA VOR/DME but outside the 30 nm SFRA boundary:

- VFR aircraft are restricted to an IAS of 230 knots or less.

Inside the 30 nm boundary of the SFRA:

- VFR aircraft are restricted to an IAS of 180 knots or less.

If unable to comply, advise ATC.



Note: The speed restrictions do not apply to FAA-approved DOD, Law Enforcement, & waivered Lifeguard/Air Ambulance flights.

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When you look at the Washington DC charts, you will also notice distinct markings for a ring located 60 nm from the Washington DC VOR/DME.

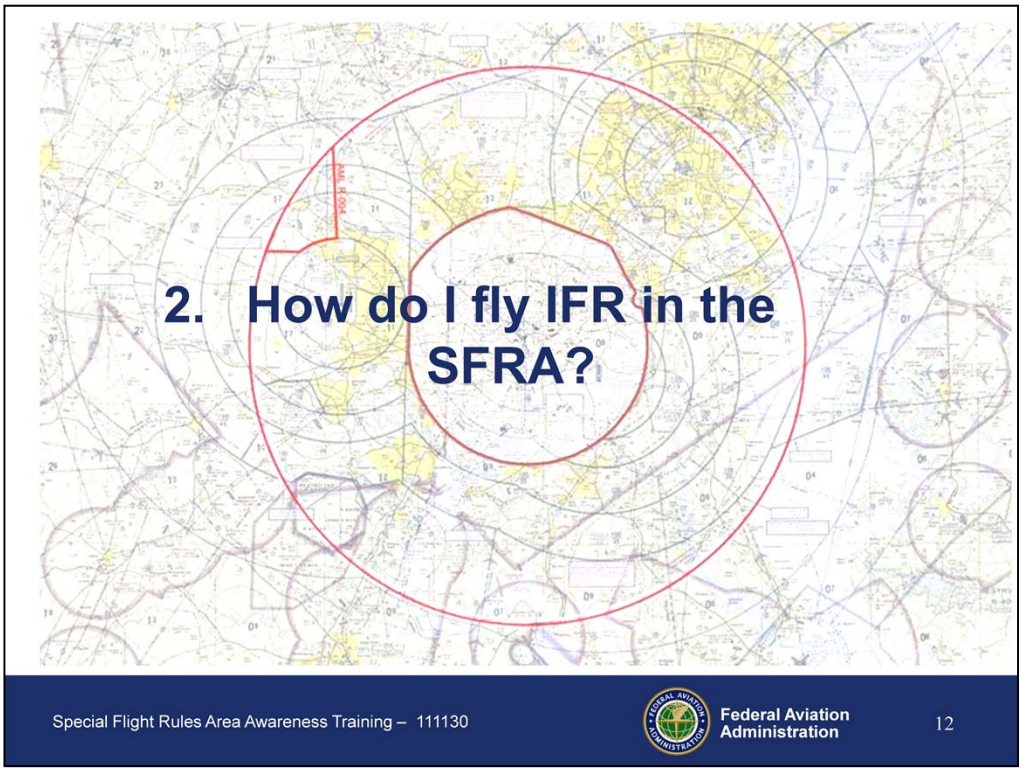
The 60 nm ring is not included in the permanent rule for the SFRA, but it is charted for pilots' awareness and convenience because of VFR operational restrictions imposed within a 60 nm radius of the DCA VOR/DME.

- If you are between the 60 nm ring and the 30 nm ring that marks the boundary of the SFRA, VFR aircraft operations are restricted to a speed of 230 knots unless otherwise authorized by ATC.

- Once you are inside the 30 nm ring – that is, inside the SFRA -- all VFR aircraft operations are restricted to an indicated airspeed of 180 knots or less, unless otherwise authorized by ATC.

If you cannot comply with these restrictions, you must advise ATC of your operational limitations and comply with any instructions.

This requirement does not apply to FAA-approved DOD, Law Enforcement, & waivered Lifeguard/Air Ambulance flights.


2. How do I fly IFR in the SFRA?

IFR in the SFRA - Requirements

To fly IFR to, from, within, or through the SFRA, the aircraft must have:

- An operable two-way radio capable of communicating with ATC on appropriate radio frequencies

- An operating automatic altitude reporting transponder

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To fly IFR to, from, within, or through the SFRA, the aircraft must have:

- An operable two-way radio capable of communicating with Air Traffic Control on appropriate radio frequencies;
- An operating automatic altitude reporting transponder.

IFR in the SFRA - Procedures

Before flying IFR in the SFRA, pilots must:

- File and activate an IFR flight plan.

- Obtain and transmit a discrete transponder code.

- Establish and maintain two-way radio communication with the appropriate ATC facility.

With two exceptions, which we will cover on the next slide, there are no special procedures for flying IFR in the SFRA. The airspace is mostly transparent to IFR pilots, because the normal IFR procedures are the same.

Pilots must:

- File and activate an IFR flight plan.
- Obtain and continuously transmit a discrete transponder code
- Establish and maintain two-way radio communications with the appropriate ATC facility

IFR in the SFRA - Procedures

IFR pilots in the SFRA must remember two things:

1. **File and activate the IFR flight plan before entering the SFRA**.
   - You may not depart VFR and pick up an IFR transponder code and clearance in the air.
   - You must ***always*** be on a discrete code before operating in this airspace.

2. **Never squawk 1200 while flying in the SFRA**.
   - Even after closing your IFR flight plan to land at a non-towered airport, use of the 1200 transponder code is ***never*** permitted.

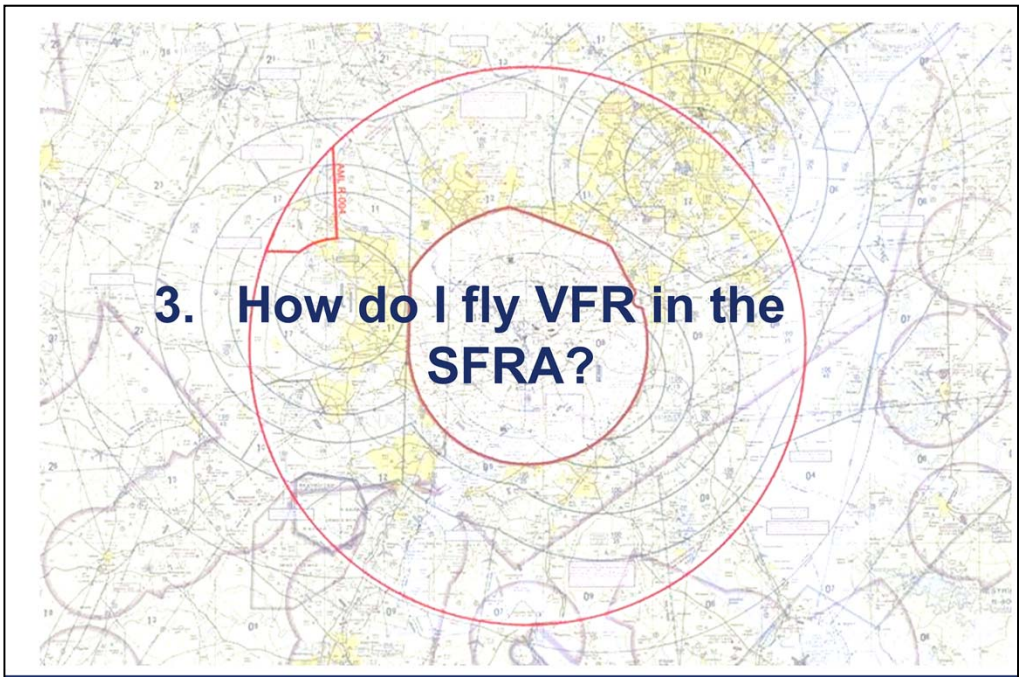
Here are the two exceptions:

1. File and activate the IFR flight plan before entering the SFRA.

It is not permissible to depart VFR and pick up an IFR transponder code and clearance in the air. You must always be on a discrete code before operating in this airspace.

2. Always transmit the assigned discrete beacon code while flying in the SFRA.

Even after closing your IFR flight plan to land at a non-towered airport, use of the 1200 transponder code is ***never*** permitted.


3. How do I fly VFR in the SFRA?

VFR in the SFRA - Requirements

To fly VFR to, from, within, or through the SFRA, aircraft must have:

- An operable two-way radio capable of communicating with ATC on appropriate radio frequencies

- An operating automatic altitude reporting transponder

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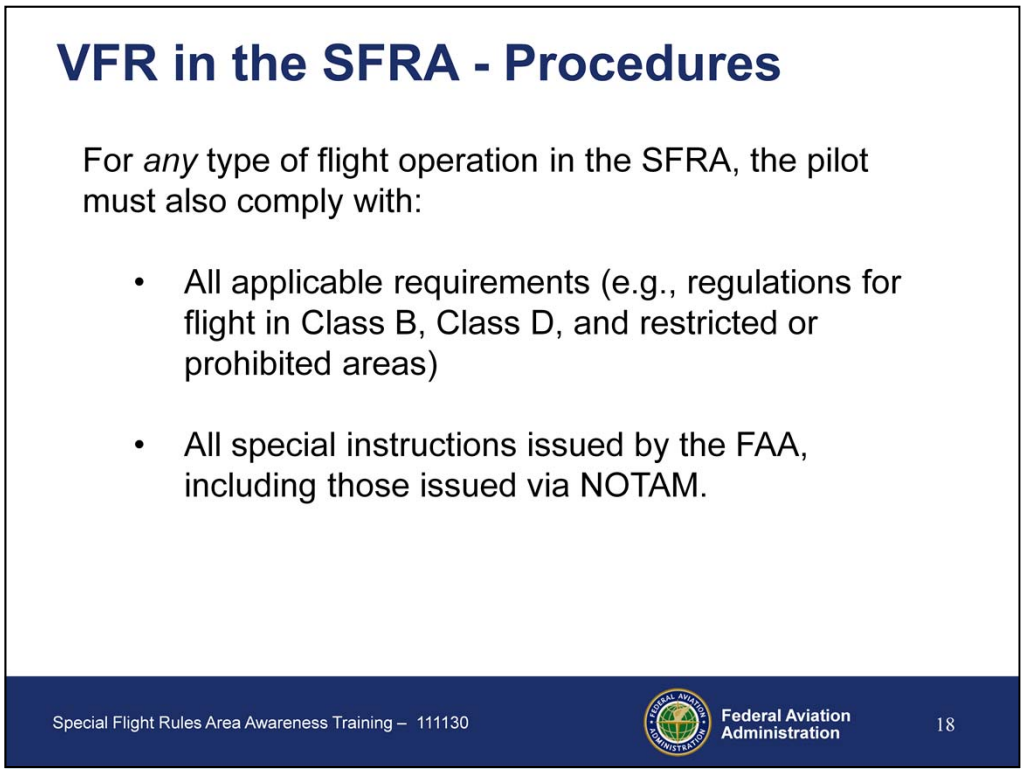
Before operating VFR in the SFRA:

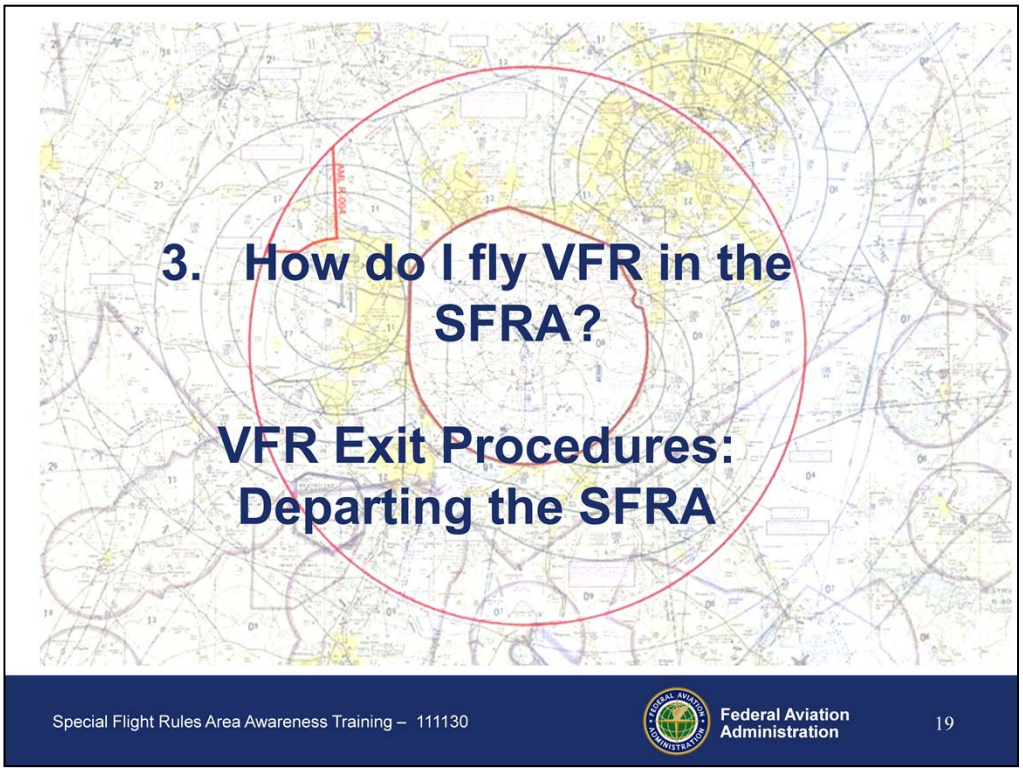
Aircraft must have:

- An operable two-way radio capable of communicating with Air Traffic Control on appropriate radio frequencies
- An operating automatic altitude reporting transponder.



For any type of flight operation in the SFRA, the pilot must comply with:

- All applicable requirements (e.g., regulations for flight in Class B, Class D, and restricted or prohibited areas)
- All special instructions, including those issued via NOTAM.

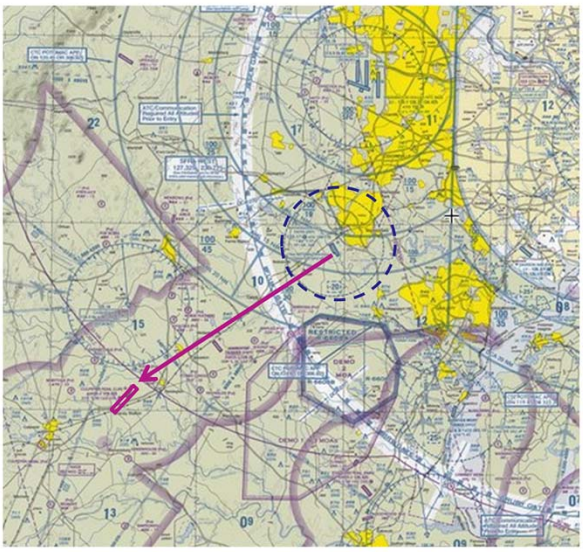


Now we'll look at specific procedures, starting with VFR exit procedures for departing the SFRA.

VFR in the SFRA – Exit Procedures

Outbound scenario:

You are flying VFR from Manassas (HEF) to Culpeper (CJR), located outside the SFRA.



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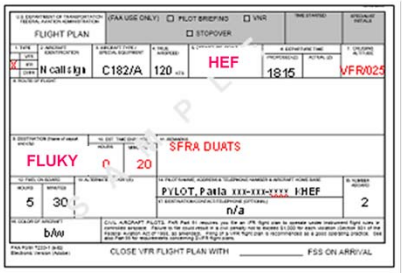
For this discussion, we'll use two scenarios – one outbound, and one inbound -- to explain and illustrate the procedures for flying VFR from or to this airspace.

In the outbound scenario, let's assume that you want to fly VFR from the Manassas Regional Airport, which is located inside the SFRA, to the Culpeper Airport, which is located outside the SFRA.

VFR in the SFRA – Exit Procedures

Step 1 - File a SFRA flight plan (AFSS or DUATS)

- The *SFRA flight plan* is a flight plan filed for the sole purpose of complying with requirements for VFR operations into, out of, and through the SFRA.
- It is separate and distinct from a standard VFR flight plan
- It does not provide any ATC or search and rescue services.
- If you want ATC services or SAR protection, you must separately file a standard VFR flight plan.



There are several procedures that a pilot must follow to fly VFR in the SFRA.

First, file a SFRA flight plan. Here's what you need to know about the SFRA flight plan before we go any further.

The *SFRA flight plan* is a flight plan filed for the sole purpose of complying with the requirements for VFR operations into, out of, and through the SFRA.

It is separate and distinct from a standard VFR flight plan

It does not provide any ATC or search and rescue services.

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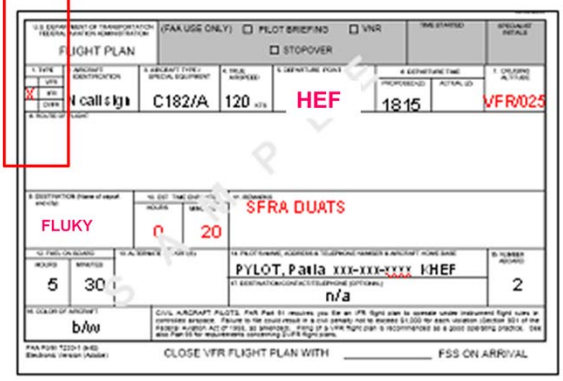
VFR in the SFRA – Exit Procedures

Step 1 - File a SFRA flight plan (AFSS or DUATS)



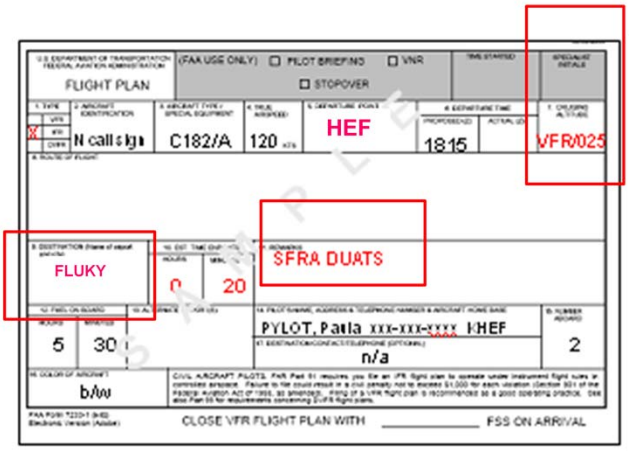
- Mark it as “IFR.”
- This step forces ATC’s computer to generate the discrete transponder code required for operating in the SFRA.

There are also a few specific things you need to know in order to file your SFRA flight plan via DUATS. This information is also useful to know when you are filing with an AFSS briefer.

First, mark it as “IFR.” This step forces ATC's computer to generate the discrete transponder code required for operating in the SFRA.

VFR in the SFRA – Exit Procedures

Step 1 - File a SFRA flight plan (AFSS or DUATS)



- Put the intended exit "gate" in the destination block.
  - See next slide for an explanation of the SFRA gates.
- List altitude as VFR/xxx with an appropriate VFR altitude.
- Include "SFRA DUATS" in the remarks section.

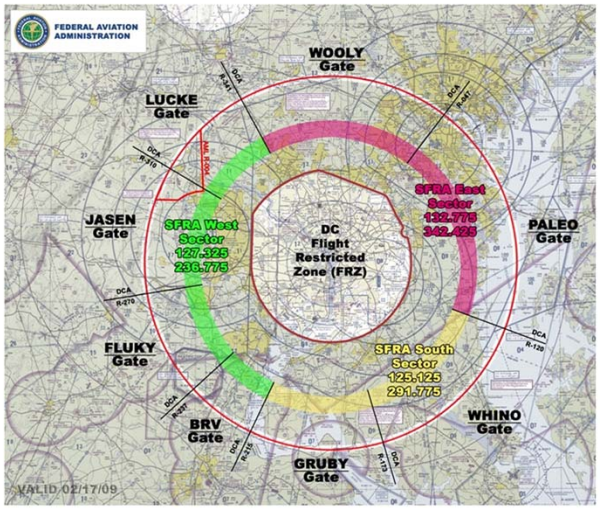
Note that Manassas – HEF – is listed as the departure point in block 5.

Since the SFRA flight plan exists only for flying to or from the SFRA, there is no need to provide your actual destination – in this case, Culpeper. Instead, list the name of the appropriate SFRA exit gate in the destination block. We'll explain gates in the next slide.

List altitude as shown with an appropriate VFR altitude.

Include "SFRA DUATS" in the remarks section.

VFR in the SFRA – Exit Procedures



Use the directional entry/exit gates to:

- File SFRA flight plans
- Establish two-way radio communications
- Avoid congestion over specific points.

Gate boundaries are defined by VOR radials and visual landmarks.

Each gate is associated with the dedicated ATC frequency for that sector.

This graphic shows the directional entry/exit "gates" that pilots use to:

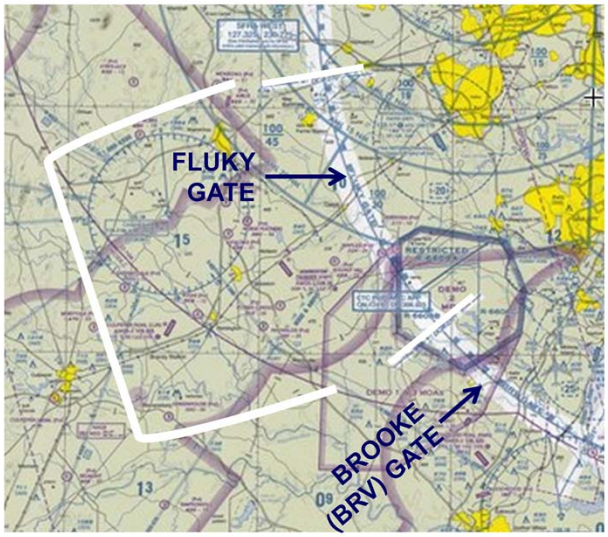
- File the SFRA entry or exit point on SFRA flight plans
- Identify position and direction of entry or exit when contacting ATC
- Avoid congestion over specific points.

As you see on the graphic, gate boundaries are defined by both VOR radials and prominent visual landmarks. Also, note that each gate is associated with the dedicated ATC frequency for the sector. The West Sector currently uses 127.32, with 132.75 in the East Sector and 125.125 in the South Sector. These frequencies are always monitored in the Potomac TRACON.

This graphic highlights the areas for illustration purposes, but don't worry about trying to remember them. The gates, sectors, and frequencies are all clearly marked on the VFR sectional and terminal area charts for the Washington area.

They are also included in the downloadable kneeboard guides.

VFR in the SFRA – Exit Procedures



If departing the SFRA, list the gate appropriate to the exit point as the destination point on Block 9 of the flight plan.

In the Manassas-to-Culpeper scenario, the closest gate is FLUKY.

If you are departing the SFRA, list the gate appropriate to the exit point as the destination point on Block 9 of the flight plan form.

In the example flight from Manassas to Culpeper, the pilot would list FLUKY as the destination point in block 9 of the flight plan form.

VFR in the SFRA – Exit Procedures

There is no need to fly directly to, or directly over, the specific fix for which a gate is named.

For safety and to avoid congestion, you may enter and exit the SFRA at any point within the area of the gate listed on the SFRA flight plan.

One more important point to make about the gates. The gates are named for specific fixes, but there is no need to fly directly to, or directly over, the specific fix for which a gate is named.

For safety and to avoid congestion, you may enter and exit the SFRA at any point within the area of the gate listed on the SFRA flight plan.

VFR in the SFRA – Exit Procedures

Step 2 – Obtain and set a discrete transponder code.

- Before entering the SFRA, call the appropriate ATC facility to obtain a discrete transponder code.

- In the VFR Manassas to Culpeper scenario, the pilot calls Manassas ground control:

  Pilot*: Manassas ground, Skyhawk1234A, west ramp with Information Victor, request SFRA squawk for VFR departure to the west.*

  ATC*: Skyhawk1234A, Manassas ground, squawk 0227, departure frequency 127.32. Advise ready to taxi.*

Now let's move on to Step 2. As we discussed, you mark "IFR" on the SFRA flight plan in order to force ATC's computer to generate the discrete transponder code you need to fly VFR to, from, or inside the SFRA.

You open, or activate, the SFRA flight plan by contacting ATC to obtain the discrete transponder code assigned to your flight.

Here's how the transmission might go in the Manassas-to-Culpeper scenario.

> *Pilot: Manassas ground, Skyhawk 1234A, west ramp with Information Victor, request SFRA squawk for VFR departure to the west.*
>
> *ATC: Skyhawk 1234A, Manassas ground, squawk 0227, departure frequency 127.32. Advise ready to taxi.*

Note that the assigned departure frequency in this case is the one printed on the chart for the SFRA West Sector. The controller may sometimes assign a different frequency, but in the absence of other instructions, use the frequency assigned to the sector you are departing. Again, the three SFRA sector frequencies are always monitored.

VFR in the SFRA – Exit Procedures

Step 3 – Establish/maintain two-way contact with ATC.

- After takeoff, call ATC on the assigned frequency.

- Non-towered airport: call ATC as soon as you are clear of the airport traffic area (within 2-3 nm).
- Towered airport: tower controller will advise you when to contact Potomac TRACON.
- Check in as you normally would for VFR flight following or after an IFR handoff.

Step 3 is to call ATC on the assigned or listed frequency after takeoff.

If departing from a non-towered airport, call ATC as soon as you are clear of the airport traffic area (normally within 2-3 nm).

If departing from a towered airport, the tower controller will advise you when to contact the Potomac TRACON.

Simply check in as you normally would for VFR flight following or after an IFR handoff and continue to monitor the assigned frequency.

VFR in the SFRA – Exit Procedures

Step 3 – Establish/maintain two-way contact with ATC.

- Once you are outside the SFRA, a sample transmission might be as follows:

  ATC*: Skyhawk 1234A, Potomac, you have departed the SFRA. Squawk VFR; frequency change approved.*

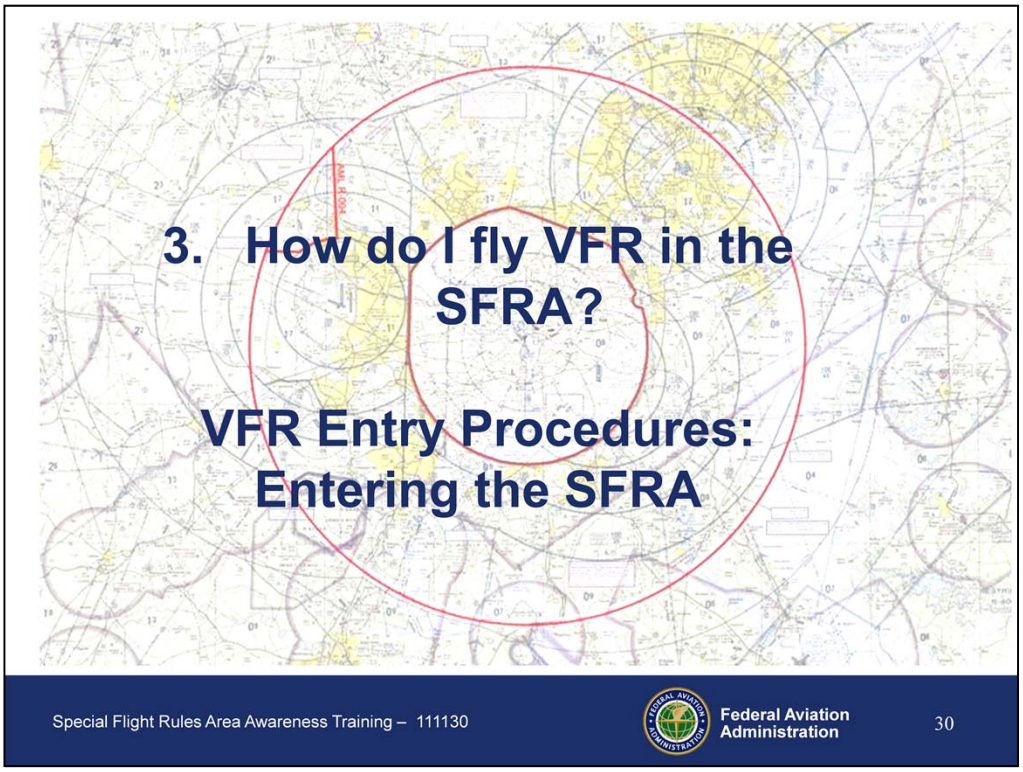
- Acknowledge the transmission as you normally would. At this point, you are outside the SFRA and your SFRA flight plan is considered closed.

- No further action is required.

The Potomac TRACON controller will advise you when you are outside the SFRA boundary. A sample transmission:

ATC: *Skyhawk 1234A, Potomac, you have departed the SFRA. Squawk VFR; frequency change approved*.

Acknowledge the transmission as you normally would. At this point, you are outside the SFRA, and your SFRA flight plan is considered closed. No further action is required.

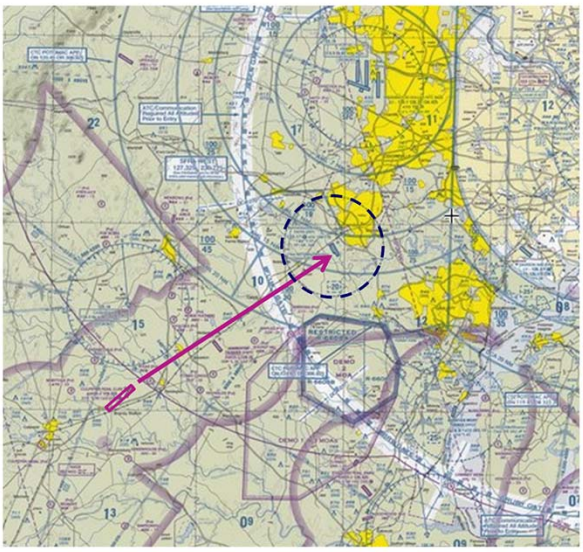


Next we will look at VFR procedures for entering the SFRA.

VFR in the SFRA – Entry Procedures

Inbound scenario:

You are flying VFR from Culpeper (CJR), located outside the SFRA, to Manassas (HEF).

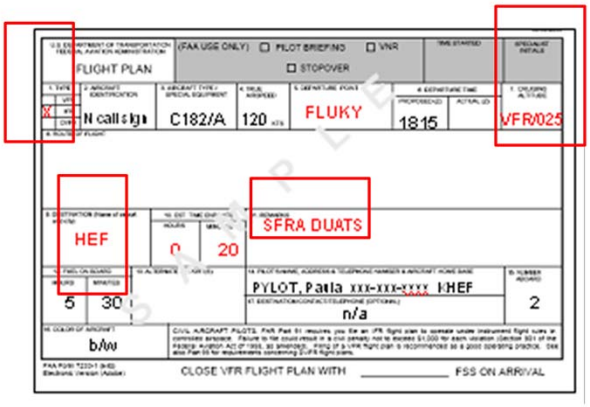


Now that you know how to fly VFR out of the SFRA, let's quickly go through the opposite scenario and look at how to fly from an airport outside the SFRA to an airport inside its boundaries.

For the inbound scenario, let's assume that you want to fly VFR from the Culpeper Airport, which is located outside the SFRA, back to the Manassas Airport.

VFR in the SFRA – Entry Procedures

Step 1 - File a SFRA flight plan (AFSS or DUATS)



- Mark it as “IFR.”
- List Manassas as the destination point.
- List an appropriate VFR altitude as shown in this example.
- Put “SFRA DUATS” in the remarks section.

As before, you start by filing a SFRA flight plan.

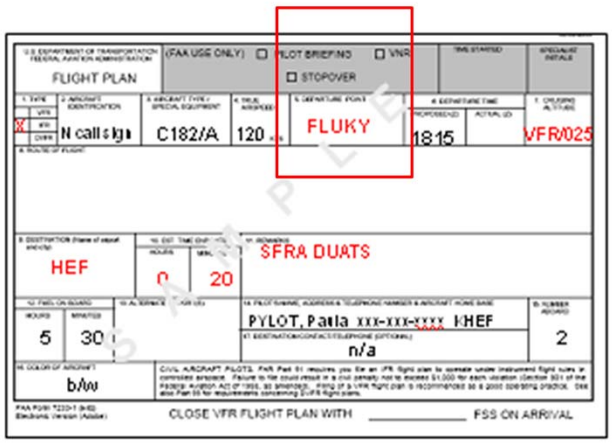
All the same procedures apply: mark it IFR so that ATC’s computers will generate the discrete transponder code you need.

List Manassas as the destination.

Include an appropriate VFR altitude coded as shown, and write “SFRA DUATS” in the remarks section.

VFR in the SFRA – Entry Procedures

Step 1 - File a SFRA flight plan (AFSS or DUATS)



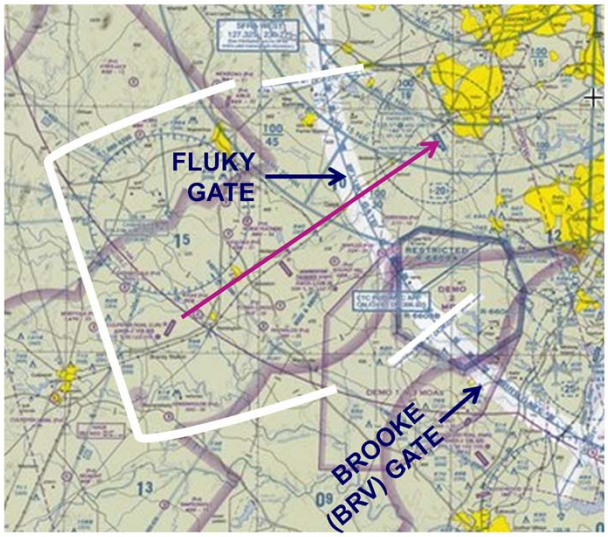
- Since the SFRA flight plan exists only for flying to or from the SFRA, there is no need to provide your actual departure point – in this case, Culpeper.
- Instead, list the name of the appropriate SFRA entry gate – FLUKY, in this case - in the departure block.

Manassas – HEF – is listed as the destination point in block 9.

Since the SFRA flight plan exists only for flying to or from the SFRA, there is no need to provide your actual departure point – in this case, Culpeper.

Instead, list the name of the appropriate SFRA entry gate in the departure block. In this scenario, you list FLUKY.

VFR in the SFRA – Entry Procedures



When filing to enter, list the gate appropriate to the entry point as the departure on block 5 of the flight plan.

In the Culpeper-to-Manassas scenario, the appropriate gate is FLUKY.

Let's go through that point again. When filing to enter the SFRA, list the gate appropriate to the entry point as the departure point on Block 5 of the flight plan.

In the Culpeper-to-Manassas scenario, the appropriate gate is FLUKY. There is no need to list your physical departure point, Culpeper, anywhere on the SFRA flight plan. That's because FLUKY gate is the departure point – the beginning -- for your VFR flight into the SFRA.

VFR in the SFRA – Entry Procedures

There is no need to fly directly to, or directly over, the specific fix for which a gate is named.

For safety and to avoid congestion, you may enter and exit the SFRA at any point within the area of the gate listed on the SFRA flight plan.

A point that bears repeating for safety reasons: Although the gates are named for specific fixes, there is no need to fly directly to, or directly over, the specific fix for which a gate is named.

To avoid congestion, you may enter and exit the SFRA at any point within the area of the gate listed on the SFRA flight plan.

VFR in the SFRA – Entry Procedures

Step 2 – Obtain and set a discrete transponder code.

- Before entering the SFRA, call the appropriate ATC facility to obtain a discrete transponder code.

- In the VFR Culpeper to Manassas scenario, the pilot calls Potomac Approach approximately 10-15nm from the SFRA boundary:

  Pilot*: Potomac Approach, Skyhawk 1234A, 15 miles west of the FLUKY gate; VFR inbound to Manassas.*

  ATC*: Skyhawk 1234A, Potomac, squawk 0227, remain outside the SFRA.*

Now let's move on to Step 2. You open, or activate, the SFRA flight plan by contacting ATC to obtain the discrete transponder code assigned to your flight.

You should plan to make initial contact with ATC 10-15 nm outside the SFRA boundary.

Here's how the transmission might go in the Culpeper-to-Manassas scenario.

Pilot*: Potomac Approach, Skyhawk 1234A, 15 miles west of the FLUKY gate; VFR inbound to Manassas.*

ATC: *Skyhawk 1234A, Potomac, squawk 0227, remain outside the SFRA.*

VFR in the SFRA – Entry Procedures

Step 3 – Maintain two-way radio contact with ATC.

- Continue inbound and monitor the assigned frequency, but remain outside the SFRA boundary until the controller reports observing your transponder code.

- In the VFR Culpeper to Manassas scenario:

  ATC*: Skyhawk 1234A, Potomac, transponder observed. Proceed as requested and remain clear of Class B airspace. Report Manassas in sight.*

You can continue inbound, but you must remain outside the SFRA boundary until the controller observes your transponder and instructs you to proceed as requested.

In the VFR Culpeper to Manassas scenario:

> ATC: *Skyhawk 1234A, Potomac, transponder observed. Proceed as requested and remain clear of Class B airspace. Report Manassas in sight.*

You will note from these examples that some of the terminology used in the SFRA is different from typical ATC phraseology. The downloadable kneeboard guides for this course include a short glossary of terms specific to the SFRA.

VFR in the SFRA – Entry Procedures

Step 3 – Maintain two-way radio contact with ATC.

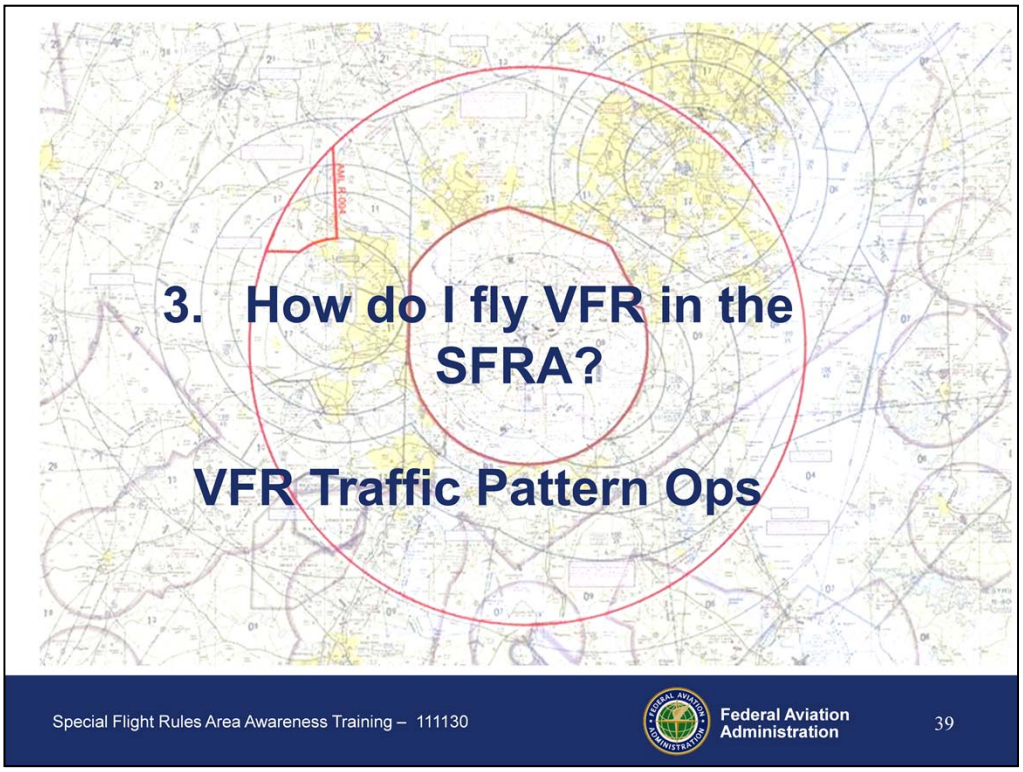
- Once you report Manassas in sight, the Potomac TRACON controller will hand you off to the tower.
- IMPORTANT: The controller will remind you to keep the assigned discrete beacon code until you land. **Never squawk 1200 in the SFRA!**
- Once you land and shut down, the SFRA flight plan for VFR entry is considered to be closed.
- No further action is required.

Once you report Manassas in sight, the Potomac TRACON controller will hand you off to the tower.

IMPORTANT: The controller will remind you to keep the assigned discrete beacon code until you land. Never squawk 1200 in the SFRA!

Once you land and shut down, the SFRA flight plan for VFR entry is considered to be closed.

No further action is required.



Now let's look at the procedures for VFR traffic pattern operations in the SFRA.

VFR in the SFRA – Traffic Pattern Ops

To operate VFR in the traffic pattern of a *non-towered* airport:

- File a SFRA flight plan for traffic pattern work.
- Contact ATC to activate the SFRA flight plan by obtaining a discrete beacon code.
- Transmit the assigned discrete transponder code and communicate position via the published CTAF.
- Monitor VHF 121.5 or UHF frequency 243.0.
- Call ATC via telephone at 540-351-6129 to close SFRA flight plan upon completion of pattern work.

To operate VFR in the traffic pattern of a non-towered airport:

- File a SFRA flight plan for traffic pattern work.
- Contact ATC to activate the SFRA flight plan by obtaining a discrete beacon code.
- Transmit the assigned discrete transponder code and communicate position via the published CTAF.
- Monitor VHF 121.5 or UHF frequency 243.0.
- Call ATC via telephone at 540-351-6129 to close SFRA flight plan upon completion of pattern work.

VFR in the SFRA – Traffic Pattern Ops

To operate VFR in the traffic pattern of a *towered* airport:

- Before departure, request to remain in the pattern
- Squawk 1234 unless otherwise instructed by ATC
- Remain in two-way radio communication with tower
- Monitor VHF frequency 121.5 or UHF frequency 243.0.
- If the tower is closed, call ATC (Potomac TRACON) via telephone at 540-351-6129 to close SFRA flight plan upon completion of pattern work.
- *Note: A SFRA flight plan is not required if the tower is open.*

When operating an aircraft in the VFR traffic pattern at a towered airport in the SFRA, a pilot must:

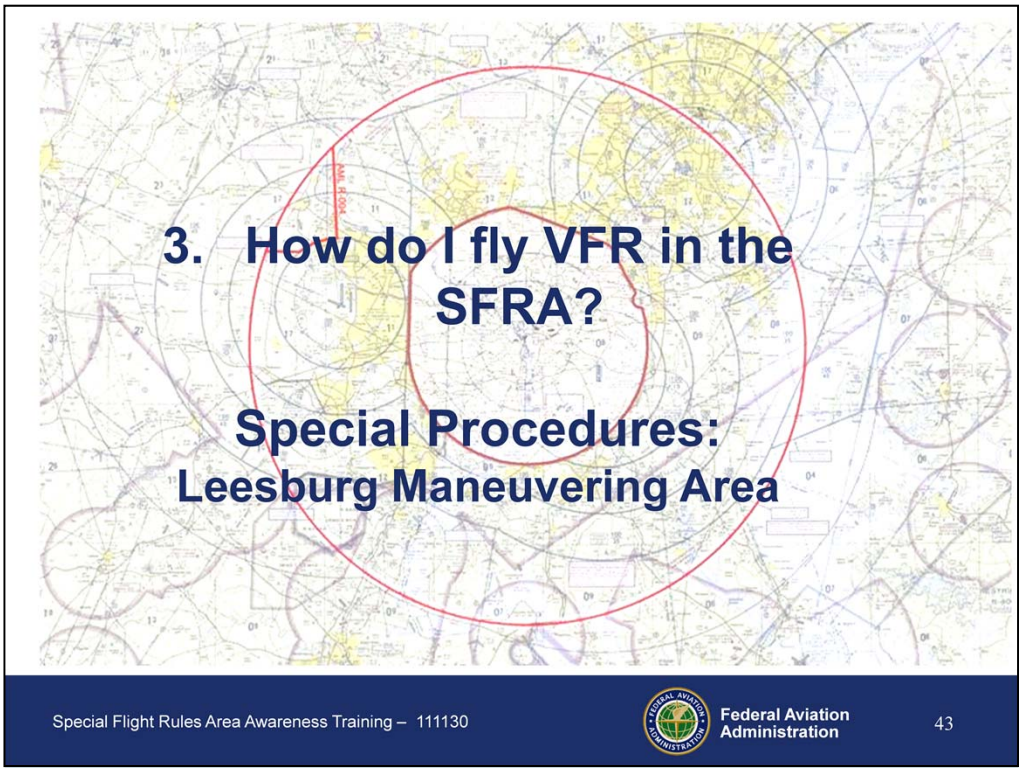
- Request to remain in the pattern before departure
- Squawk transponder code 1234 unless otherwise instructed by ATC
- Remain in two-way radio communication with the tower
- If able, monitor VHF 121.5 or UHF 243.0.

If tower is closed, call ATC via telephone at 540-351-6129 to close SFRA flight plan upon completion of pattern work.

VFR in the SFRA – Traffic Pattern Ops

When conducting traffic pattern operations, do not depart the airport traffic pattern or conduct any other flight operations in the SFRA unless you comply with standard SFRA operating procedures.

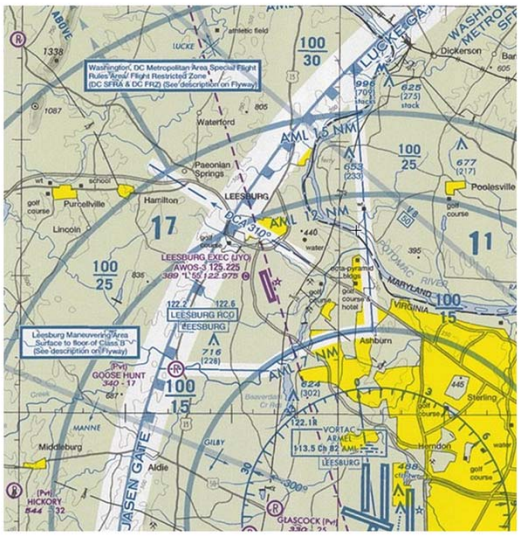
You may not depart the airport traffic pattern or conduct any other flight operations within the SFRA unless you comply with the standard SFRA procedures described elsewhere in this course.



Next we'll look at the special procedures for flying VFR in the Leesburg Maneuvering Area.

VFR in the SFRA – Leesburg (JYO)

A Notice to Airmen (NOTAM) establishes special procedures for pilots flying directly to or directly from Leesburg Executive Airport (JYO).



A Notice to Airmen (NOTAM) establishes special procedures for pilots flying directly to or directly from the Leesburg Executive Airport (JYO). The NOTAM describes the precise dimensions and operating procedures for the Leesburg Maneuvering Area. Even though the Leesburg Maneuvering Area is not codified in part 93 with the SFRA rule, it is clearly charted for pilots' convenience and awareness.

Although we make every effort to keep this course updated, changes can – and do – occur on very short notice. There is no substitute for checking NOTAMs before every flight to ensure that you have the most up-to-date information on operating procedures for this airspace.

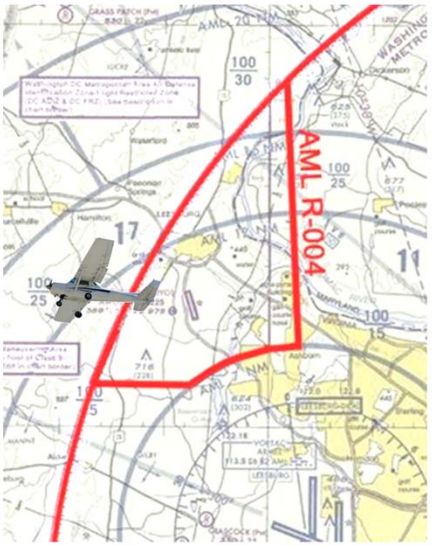
VFR in the SFRA – Leesburg (JYO)

The special procedures apply *only* to direct egress (exit) or ingress (entry) to the Leesburg Maneuvering Area.

Pilots *must* remain within the Leesburg Maneuvering Area boundaries at all times.

These procedures do *not* apply to:

- Airport traffic pattern work
- Practice instrument approaches
- Flights between JYO and any other SFRA airport.



If you operate in the Leesburg Maneuvering Area, here are the critical points to remember.

The special procedures apply only to direct egress (exit from) or ingress (entry to) the Leesburg Maneuvering Area.

Pilots must remain within the Leesburg Maneuvering Area boundaries at all times.

These procedures do not apply to:

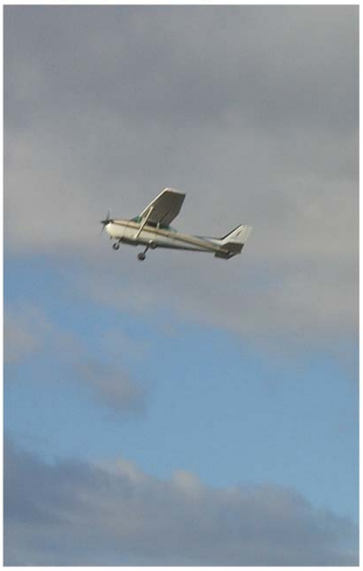
- Airport traffic pattern work
- Practice instrument approaches
- Flights between Leesburg and any other SFRA airport

VFR in the SFRA – Leesburg (JYO)

Egress (exit) procedures:

- Squawk **1226** prior to takeoff from Leesburg.
- Announce call sign, type, and departure runway on the CTAF before takeoff.
- Exit the SFRA via the most direct route through the Leesburg Maneuvering Area.

As of 30 November 2011, a SFRA flight plan is no longer required for VFR departure through the Leesburg Maneuvering Area.



Egress (exit) procedures:

- Squawk 1226 prior to takeoff from Leesburg.
- Announce call sign, type, and departure runway on the CTAF before takeoff.
- Exit the SFRA via the most direct route through the Leesburg Maneuvering Area.
- As of 30 November 2011, a SFRA flight plan is no longer required for VFR departure through the Leesburg Maneuvering Area.

VFR in the SFRA – Leesburg (JYO)

Ingress (entry) procedures:

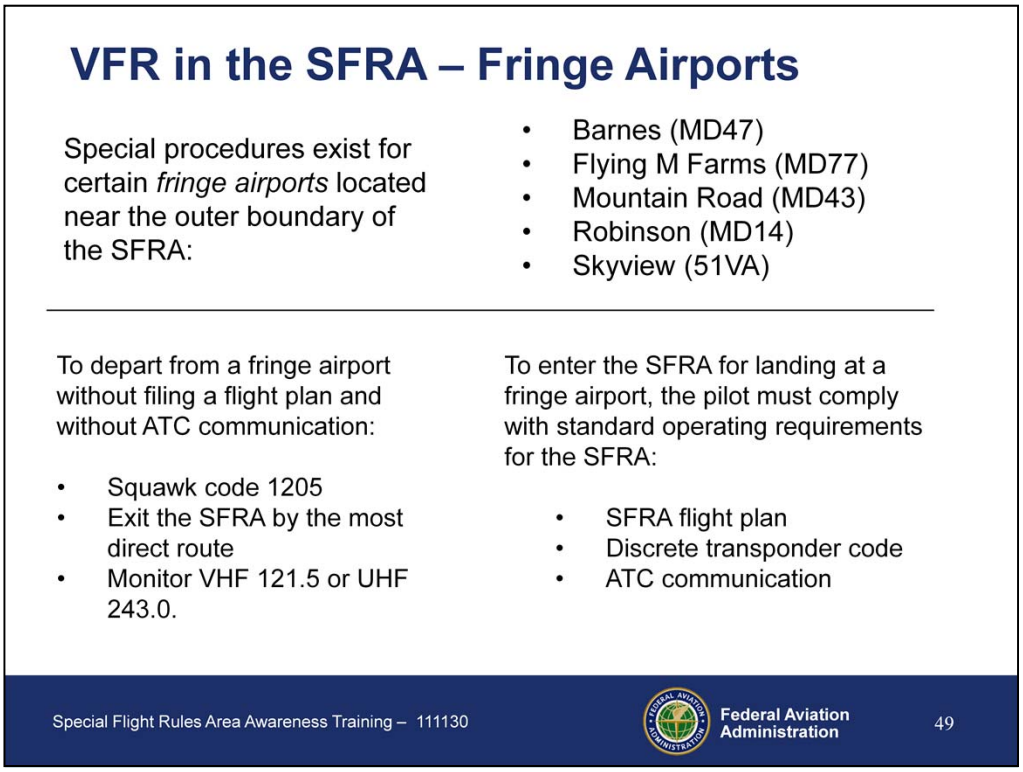
- Squawk **1227** prior to entering the Leesburg Maneuvering Area (LMA).
- Announce call sign, type, and runway of intended landing on the CTAF before entering the LMA.
- Enter via the most direct route through the LMA, make normal traffic pattern position reports, and land as soon as practicable.

As of 30 November 2011, a SFRA flight plan is no longer required for VFR entry through the Leesburg Maneuvering Area.

Ingress (entry) procedures:

- Squawk 1227 prior to entering the Leesburg Maneuvering Area (LMA).
- Announce call sign, type, and runway of intended landing on the CTAF before entering the LMA.
- Enter via the most direct route through the LMA, make normal position reports, and land as soon as practicable.
- As of 30 November 2011, a SFRA flight plan is no longer required for VFR entry through the Leesburg Maneuvering Area.

Now we'll take a quick look at procedures for the fringe airports.



Special procedures exist for certain fringe airports located near the outer boundary of the SFRA:

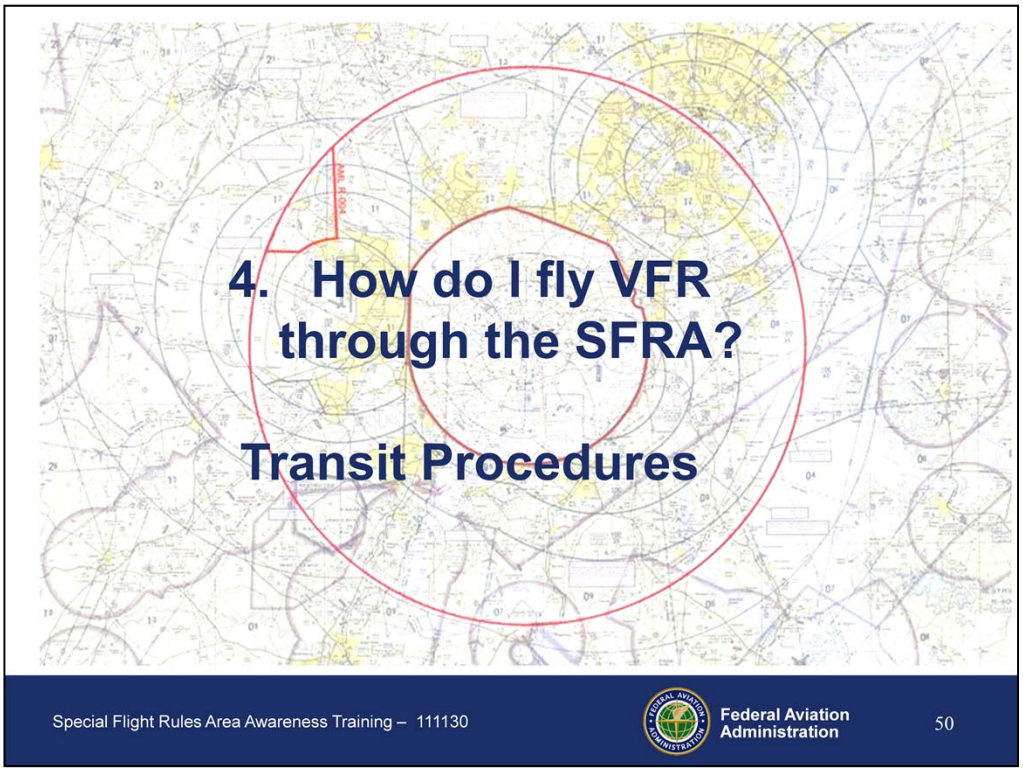
- Barnes (MD47),
- Flying M Farms (MD77),
- Mountain Road (MD43),
- Robinson (MD14)
- Skyview (51VA).

To depart from a fringe airport without filing a SFRA flight plan and without ATC communication, the pilot must:

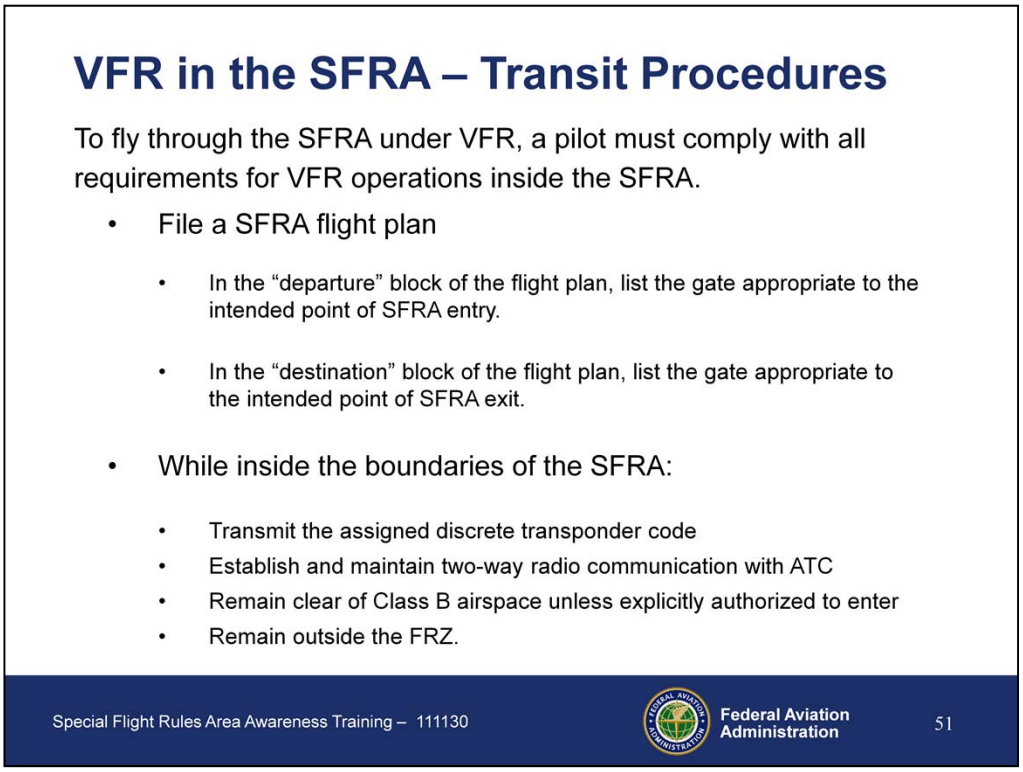
- Squawk code 1205
- Exit the SFRA by the most direct route
- Monitor VHF 121.5 or UHF 243.0.

A pilot arriving at a fringe airport must comply with all the standard operating requirements for the SFRA:

- SFRA flight plan
- Discrete transponder code
- ATC communication



In this section, we'll cover procedures for VFR transit through the SFRA.



Suppose you want to simply transit the SFRA VFR without landing at an airport inside its boundaries. VFR transit is permitted, but the pilot must comply with all requirements previously described for VFR operations inside the SFRA.

- File a SFRA flight plan
- In the “departure” block of the flight plan, list the gate appropriate to the intended point of SFRA entry.
- In the “destination” block of the flight plan, list the gate appropriate to the intended point of SFRA exit.

While inside the boundaries of the SFRA:

- Transmit the assigned discrete transponder code
- Establish and maintain two-way radio communication with ATC
- Remain clear of Class B airspace unless explicitly authorized to enter
- Remain outside the FRZ.

VFR in the SFRA – Transit Procedures

Scenario: Warrenton (HWY) to Easton (ESN)

1. File a SFRA flight plan from FLUKY to PALEO.
2. Activate (open) the SFRA flight plan by calling ATC before FLUKY to obtain a discrete transponder code and establish two-way contact.
3. Transmit the discrete code and maintain two-way contact with ATC until departing the SFRA boundary via the PALEO gate.
4. Remain clear of Class B, restricted areas, and FRZ unless authorized to enter.

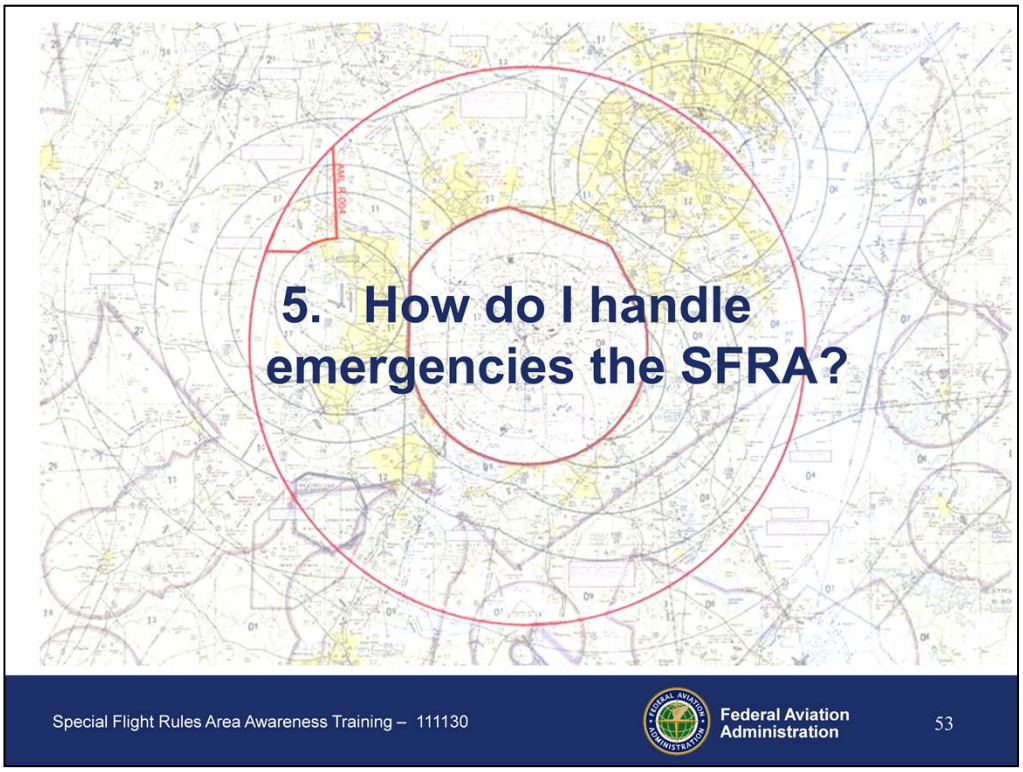
Let's look at a specific example. You want to fly from Warrenton Airport in Virginia to Easton Airport in Maryland without having to circumnavigate the southern boundary of the SFRA.

In this case, you would file a SFRA flight plan just as you would for any other SFRA operation. You would list FLUKY as the departure point, because you will enter the SFRA through the area defined as the FLUKY gate. For the route depicted on the graphic, you would file PALEO as the destination, since you will depart the SFRA through the area defined as the PALEO gate.

As with any SFRA operation, you would open, or activate, the SFRA flight plan before reaching FLUKY gate by calling ATC to obtain a discrete transponder code and establish two-way radio contact. After that, you simply transmit the assigned discrete transponder code and maintain two-way radio communication with ATC until you exit the SFRA boundary on the eastern side.

If you look closely at the chart, you will see that VFR transit of this very complex airspace could be challenging. Unless explicitly authorized to enter, you will have to navigate around the restricted area, maintain altitudes that keep you clear of Class B airspace, and ensure that you avoid entering the FRZ.

You might want to request Class B clearance and VFR flight following for virtually any VFR transit of the SFRA.



Next, we'll look at handling emergency and abnormal situations while in the SFRA.

SFRA - Emergency Procedures

Procedures exist for several types of emergencies that could occur in the SFRA:

- Radio failure

- Transponder failure

- Intercepts

Procedures exist for several types of emergencies that could occur in the SFRA:

- Radio failure
- Transponder failure
- Intercepts

SFRA - Emergency Procedures

If you lose radio communications when operating IFR in the SFRA:

- Continue the flight via the two-way radio communications failure procedures found in the FAA *Aeronautical Information Manual* & 14 CFR part 91.
  - These procedures *do not* authorize penetration of restricted or prohibited airspace.

If you lose radio communications when operating IFR in the SFRA:

- Continue the flight via the two-way radio communications failure procedures found in the FAA *Aeronautical Information Manual* and 14 CFR part 91.
- These procedures do not authorize penetration of restricted or prohibited airspace.

SFRA - Emergency Procedures

If you lose radio communications when operating VFR in the SFRA:

- Change the transponder code to 7600.
- Exit the SFRA by the most direct lateral route.
  - If the aircraft departure point is within the SFRA and is closer than the SFRA boundary, return to the departure point by the most direct route.

These procedures do not authorize penetration of restricted or prohibited airspace.

If you lose radio communications when operating VFR in the SFRA:

- Change the transponder code to 7600.
- Exit the SFRA by the most direct lateral route.
  - If the aircraft departure point is within the SFRA and is closer than the SFRA boundary, return to the departure point by the most direct route.
- These procedures do not authorize penetration of restricted or prohibited airspace.

SFRA - Emergency Procedures

If you become aware of a transponder problem:

- Contact ATC to report the problem and request instructions.
- Comply with ATC instructions.
- If unable to contact ATC, depart the SFRA via the most direct lateral route.

If you become aware of a transponder problem:

- Contact ATC to report the problem and request instructions.
- Comply with ATC instructions.
- If unable to contact ATC, depart the SFRA via the most direct lateral route.

SFRA - Emergency Procedures

Intercepts:

- Review AIM procedures
- If not in contact with ATC:
  - Squawk 7700
  - Tune to 121.5
  - Establish communication.
  - Remain calm.
  - Comply with all instructions.

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Regardless of where you fly, it's a good idea to review the AIM procedures for interception from time to time. The AIM provides a thorough description of procedures and signals for interception.

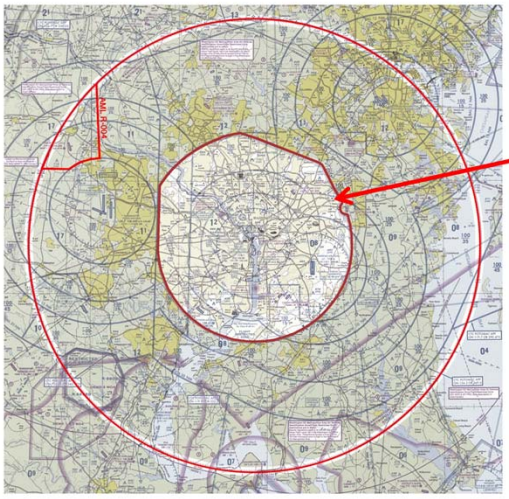
The basic idea is to remain calm, communicate, and comply.

If you are intercepted when you are not in contact with ATC:

- Squawk 7700
- Tune to 121.5
- Establish communication.
- Remain calm.
- Comply with all instructions.

6. What is the FRZ, and where is it?

FRZ – What is it, where is it?

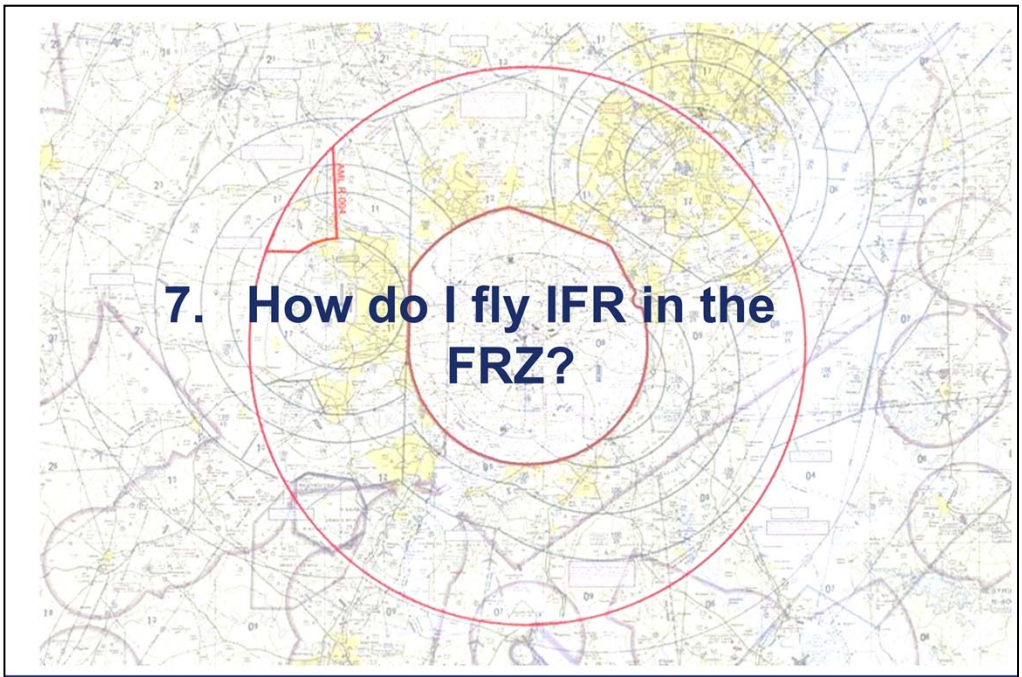


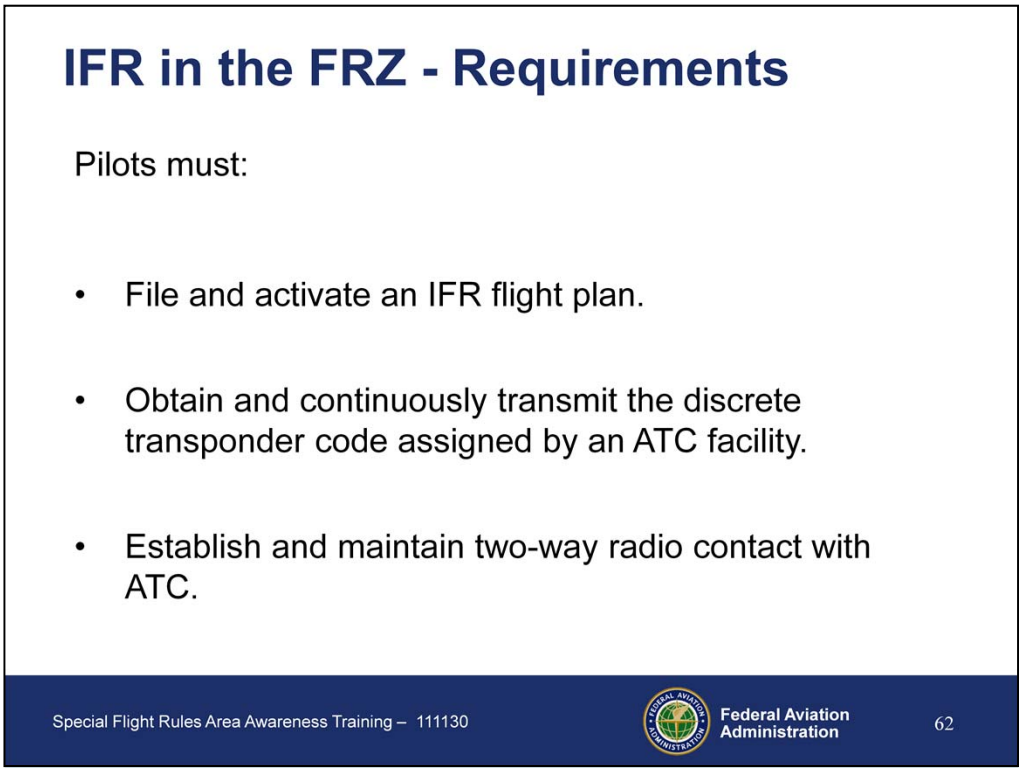
The Flight Restricted Zone (FRZ) is part of the SFRA, but it is subject to additional security requirements and procedures.

The Washington DC Flight Restricted Zone (FRZ) is within, and part of, the SFRA, but this area is subject to additional security requirements and procedures.

The rule precisely defines the dimensions of the FRZ, which is depicted in the graphic.

Unlike the SFRA boundary, which is a ring established on a 30 nm radius from the DCA VOR/DME, the FRZ has a unique and irregular boundary.


7. How do I fly IFR in the FRZ?



To fly IFR in the FRZ, pilots must:

- File and activate an IFR flight plan
- Obtain and continuously transmit the discrete transponder code assigned by an ATC facility.
- Establish and maintain two-way radio contact with ATC

IFR in the FRZ - Requirements

Aircraft operations permitted in the FRZ:

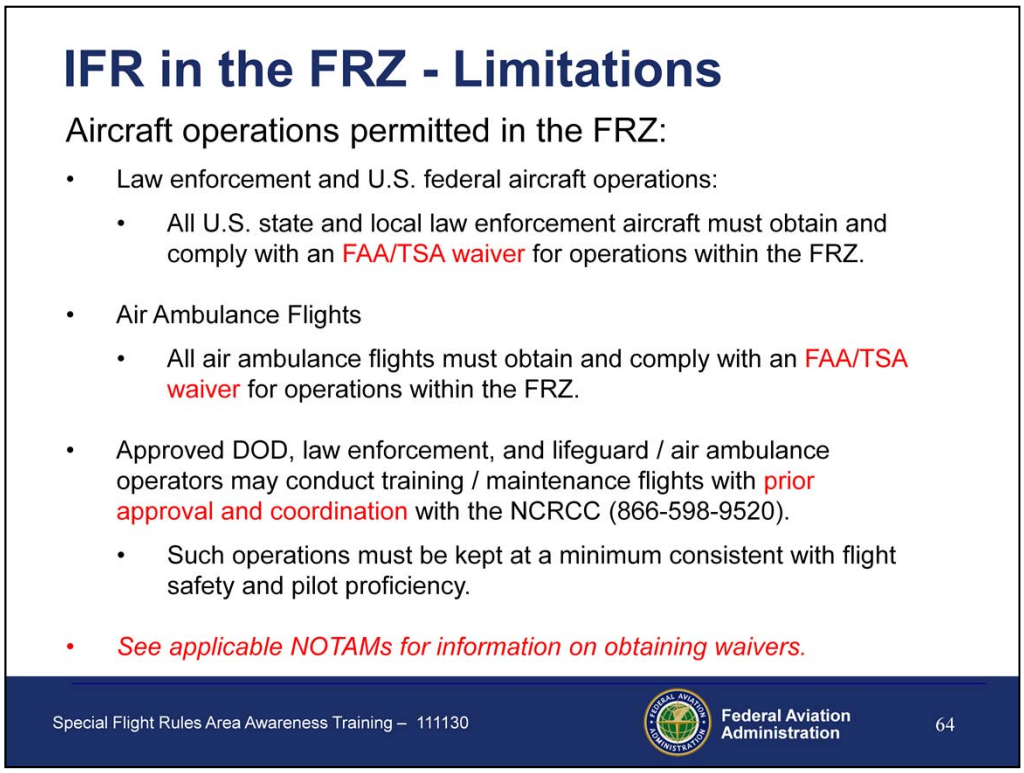
- Access to Ronald Reagan Washington National Airport (DCA) is limited to "DCA Approved Carriers."
- DCA Approved Carriers must:
  - Be part 121 or part 129 regularly scheduled air carrier flights
  - Have a TSA-approved Aircraft Operator Standard Security Program or Model Security Program
  - Hold specific authorization from the Department of Transportation.

Although the basic requirements just described sound similar to those for the overall SFRA, there are a number of limitations on who can fly in the FRZ, even under IFR.

As noted on the screen, access to Ronald Reagan Washington National Airport, DCA, is limited to DCA Approved Carriers. The screen also lists the criteria for acceptance as a DC Approved Carrier.

DCA Approved Carriers must:

- Be part 121 or part 129 regularly scheduled air carrier flights
- Have a TSA-approved Aircraft Operator Standard Security Program or Model Security Program
- Hold specific authorization from the Department of Transportation.



On your screen, you will see a description of the types of aircraft operations permitted in the FRZ, both IFR and VFR.

The common factor is that operators need an FAA/TSA waiver and coordination with security authorities in order to operate within the boundaries of the FRZ.

Procedures for obtaining a waiver are beyond the scope of this course. For that information, please read the applicable NOTAMs, including FDC NOTAM 0/9477, for details. You will also find a list of contact numbers on the next slide.

FRZ – Contact Information

- Emergency or short-notice requests after normal hours:
  - TSA - 866-598-9520
- DC FRZ flight plan filing by pilots with a waiver or pilot PIN:
  - Flight Service - 866-225-7410
- Information on U.S. Diplomatic Clearance/Landing Authorization Procedures:
  - http://useg.org/useg.html.
- Procedural questions on DC SFRA or DC FRZ:
  - FAA System Operations Security – 9-AWA-ATS-NCRCC@faa.gov.
- Waivers & sections requiring notice to TSA NCRCC:
  - 866-598-9520
- Sections requiring notice to FAA NCRCC:
  - 866-598-9522

If you want to have a copy of the contact information shown on the screen, please download a copy of the SFRA course notes.

Emergency or short-notice requests after normal hours:
TSA - 866-598-9520

FRZ flight plan filing by pilots with a waiver or pilot PIN:
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Sections requiring notice to FAA NCRCC:
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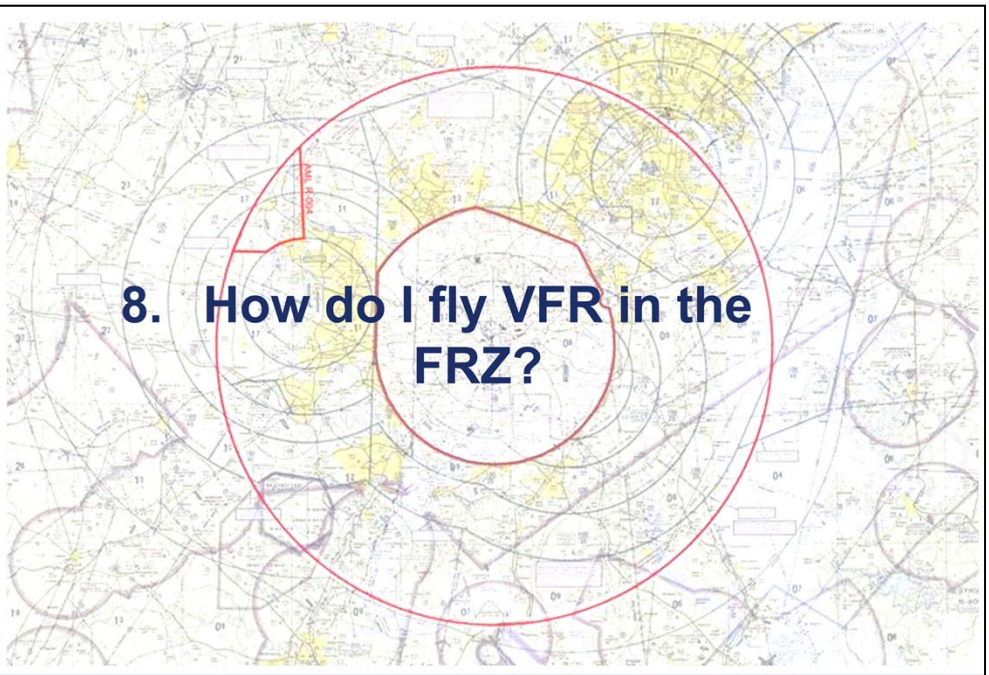

8. How do I fly VFR in the FRZ?

FRZ – VFR Limitations

Operations not authorized in the FRZ:

- Flight training (including practice instrument approaches)
- Aerobatic flight
- Glider operations
- Parachute operations
- Ultralight, hang gliding, balloon or tethered balloons
- Agriculture/crop dusting or animal population control
- Banner towing operations
- Maintenance test flights
- Model aircraft operations, model rocketry
- Unmanned aircraft systems (UAS)
- Aircraft/helicopters operating from a ship or private yacht

VFR operations in the FRZ are extremely limited. As you see on the screen, there is a long list of activities that are prohibited in the FRZ. Take a moment to read through the activities not authorized in this airspace.

- flight training (including practice instrument approaches),
- aerobatic flight,
- glider operations,
- parachute operations,
- ultralight, hang gliding, balloon operations, tethered balloons,
- agriculture/crop dusting,
- animal population control flight operations,
- banner towing operations,
- maintenance test flights,
- model aircraft operations, model rocketry,
- unmanned aircraft systems (UAS),
- float plane operations, and
- aircraft or helicopters operating from a ship or private yacht.

FRZ – VFR Limitations

VFR pilots should think of the FRZ as a “no-fly” area.

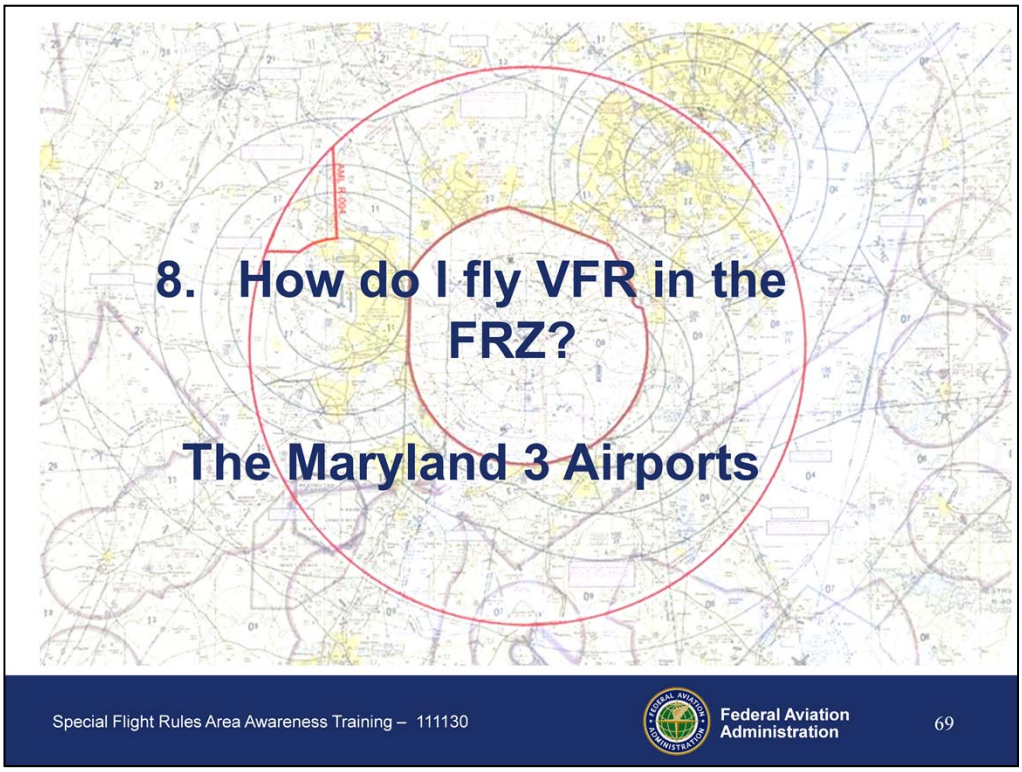
Exception – Maryland 3 Airports

- Unless specifically authorized by a waiver, flight operations under 14 CFR parts 91, 101, 103, 105, 125, 133, & 137 are prohibited in the FRZ.
- VFR traffic pattern operations are not permitted in the FRZ.

As shown, flight operations under parts 91, 101, 103, 105, 125, 133, and 137 are prohibited in the FRZ without a waiver.

The bottom line: VFR pilots should think of the FRZ as a “no-fly” area.

The only exception is for the Maryland 3 airports, which we will cover in the next section.



Now let's take a look at procedures for operating to or from the Maryland-3.

FRZ – Maryland 3 Airports

The Maryland 3 Airports are:

- College Park Airport, MD (CGS)
- Potomac Airfield, MD (VKX)
- Washington Executive/Hyde Field Airport, MD (W32)

FRZ – Maryland 3 Requirements

To operate to or from CGS, VKX, or W32:

- Aircraft, crew & passengers must comply with security rules issued by the TSA in 49 CFR part 1562, subpart A.
- Pilot must be approved (vetted) and receive a personal identification number (PIN) for use in filing a FRZ flight plan.
- Before departing, the pilot must call the Washington Hub Flight Service Station (FSS) to file an IFR or FRZ flight plan for each operation from/to CGS, VKX, and W32, whether or not the aircraft makes an intermediate stop.
- The pilot must comply with the applicable IFR or VFR egress procedures.

To operate to or from College Park, Potomac, or Hyde:

- Aircraft, crew & passengers must comply with security rules issued by the TSA.
- Pilot must be approved (vetted) and receive a personal identification number (PIN) for use in filing a FRZ flight plan.
- Before departing, the pilot must call the Washington Hub Flight Service Station (FSS) to file an IFR or FRZ flight plan for each operation, whether or not the aircraft makes an intermediate stop.
- The pilot must comply with the applicable IFR or VFR exit procedures.

FRZ – Maryland 3 Requirements

When filing a flight plan with the Washington Hub FSS, the pilot must provide the assigned pilot identification code.

- The Washington Hub FSS will accept the flight plan only after verifying the code.

For information on obtaining a pilot PIN, please see the TSA website.

When filing a flight plan with the Washington Hub FSS, the pilot must provide the assigned pilot identification code.

The Washington Hub FSS will accept the flight plan only after verifying the code.

For information on obtaining a pilot PIN, please see the TSA website.

FRZ – Maryland 3 Entry Procedures

- Call the Washington Hub FSS and provide confidential pilot PIN to file an IFR or FRZ flight plan. Activate the FRZ flight plan by contacting ATC to obtain a discrete transponder code.
- Establish two-way radio communication with ATC prior to entering the SFRA/FRZ.
- Squawk the discrete transponder code assigned by ATC.
- *Note: It is not permissible to file a FRZ flight plan while airborne!*

To file a DC FRZ flight plan for Maryland-3 entry, call the Washington Hub FSS and provide confidential pilot PIN.

Activate, or open, the DC FRZ flight plan by contacting ATC to obtain the discrete transponder code.

Establish two-way radio communication with ATC prior to entering the SFRA/FRZ.

Squawk the discrete transponder code assigned by ATC.

FRZ – Maryland 3 Entry Procedures

For VFR operations to:

- Hyde (W32) and Potomac (VKX) – expect routing via Maryland Airport or Nottingham VORTAC
- College Park (CGS) – expect routing via vicinity of Freeway Airport.

For VFR operations to:

- Hyde and Potomac – expect routing via Maryland Airport or Nottingham VORTAC.
- College Park – expect routing via vicinity of Freeway Airport.

FRZ – Maryland 3 Exit Procedures

- Call the Washington Hub FSS and provide confidential pilot PIN to file an IFR or FRZ flight plan.
- Call ATC to obtain a discrete transponder code, and begin transmitting that code before takeoff.
- After takeoff, continue to transmit the code, contact ATC and fly as assigned until clear of the FRZ and SFRA.

To file an IFR or DC FRZ flight plan to exit one of the Maryland-3 airports, call the Washington Hub FSS and provide confidential pilot PIN.

Activate, or open, the DC FRZ flight plan by calling ATC to obtain the required transponder code before takeoff.

Before takeoff, squawk the assigned code.

After takeoff, contact ATC and fly as assigned until clear of the FRZ and SFRA.

FRZ – Maryland 3 Procedures

If departing a Maryland 3 airport under IFR, a pilot must also:

- Obtain an ATC clearance from Potomac TRACON;
- Comply with ATC departure instructions from CGS, VKX, or W32.
- Proceed on the assigned course.

If departing the FRZ IFR, a pilot must also:

- Obtain an ATC clearance from Potomac TRACON;
- Comply with ATC departure instructions from College Park, Potomac, or Hyde.
- Proceed on the assigned course.

FRZ – Maryland 3 Procedures

Monitoring 121.5

- When operating an aircraft in the FRZ, it is a good idea to continuously monitor VHF frequency 121.5 or UHF frequency 243.0 (“Guard”) for any emergency instructions.
- If the aircraft is not equipped with a second radio, consider using portable radio equipment.

When operating an aircraft in the FRZ, it's a good idea to monitor VHF frequency 121.5 or UHF frequency 243.0 (“Guard”) for any emergency instructions.

If the aircraft is not equipped with a second radio, consider using portable radio equipment.

FRZ – Maryland 3 Airports

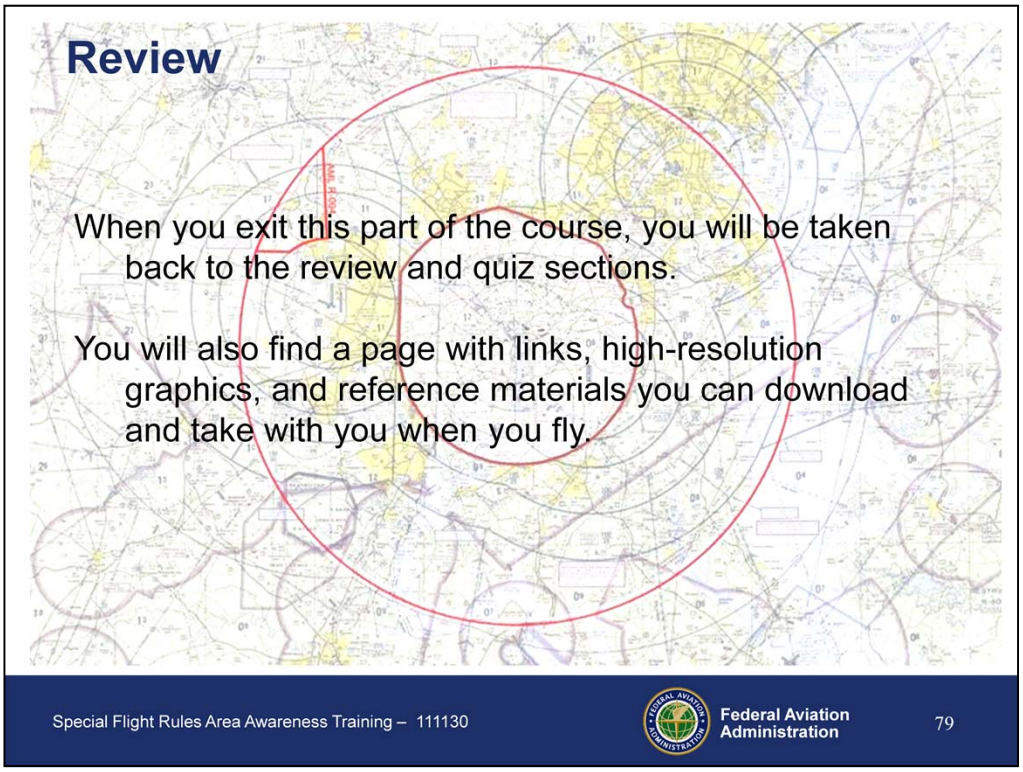
A FRZ flight plan will meet the requirements for a SFRA flight plan, but the reverse is not true.

A SFRA flight plan will *not* fulfill the requirements for VFR operations in the FRZ.

Although they look the same in many ways, the different security requirements, such as pilot vetting, create an operational difference between the SFRA flight plan and the FRZ flight plan.

A FRZ flight plan will meet the requirements for a SFRA flight plan, but the reverse is not true:

A SFRA flight plan will not fulfill the requirements for VFR operations in the FRZ. To operate in the FRZ, such as to or from the Maryland-3, you need a DC FRZ flight plan that can only be filed with the confidential pilot PIN.



Congratulations on completing this presentation. We hope this information will allow you to operate safely, correctly, and confidently in the Washington DC Special Flight Rules Area.

When you exit this part of the course, you will be taken back to the review and quiz sections.

You will also find a page with reference materials you can download and take with you when you fly.

Fly safely!