

SNOWBIRD PLAN 2023-2024

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**Federal Aviation
Administration**

SNOWBIRD PLAN

Purpose

Outline strategy for days with increased demand

Provide common expectations for FAA facilities and industry users

Identify and implement solutions

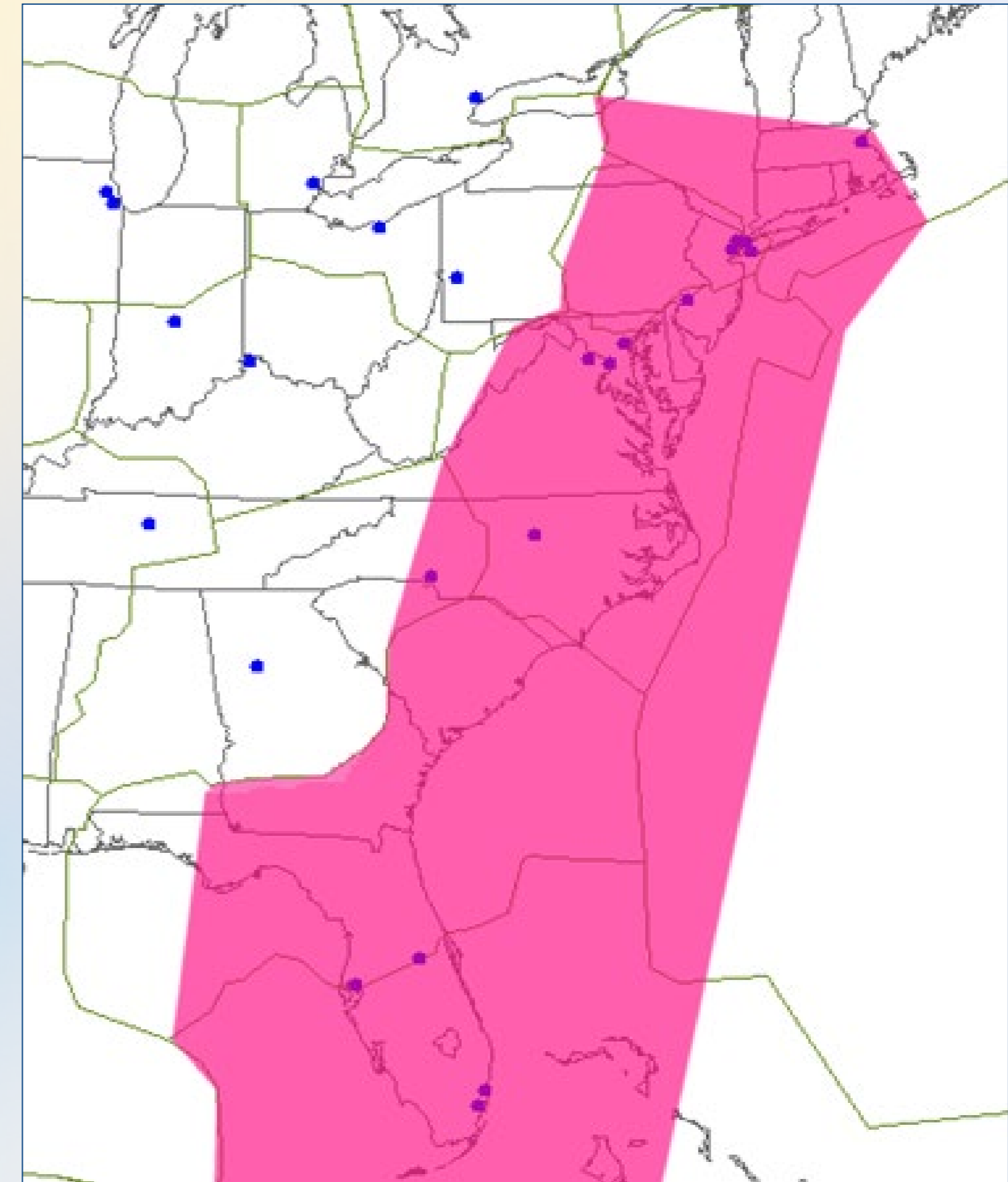


SNOWBIRD PLAN



Background

- Seasonal volume increases in the southeast US, Caribbean, and Mountain West increase complexity
- An annual comprehensive plan is created and shared with facilities to outline actions to manage the demand
- Strategies are prepared in advance to mitigate the volume during peak travel days



SNOWBIRD PLAN



Discoveries

- Increased demand
 - Florida, Caribbean, General Aviation
- East coast airspace changes create new flows
 - NE Corridor/Atlantic Coast Route
 - ZDC38
- Weekend travel has expanded through the entire week



Days of Increased Demand

Identification

- Moderate
- High
- Very High
- Direction based North/South



Projections



2022/2023 Demand Projection Method

NAS Demand Prediction Tool

Southern Flow: Flights originating in Canada/ZNY/ZBW and arriving in ZTL/ZJX/ZMA/ZHU/Mexico/Caribbean or South America

Northern Flow was the opposite

Flights arriving and/or departing ZDC were not included

Old Thresholds

- Moderate = 1200-1299
- High = 1300-1499
- Very High = 1500+



Projections

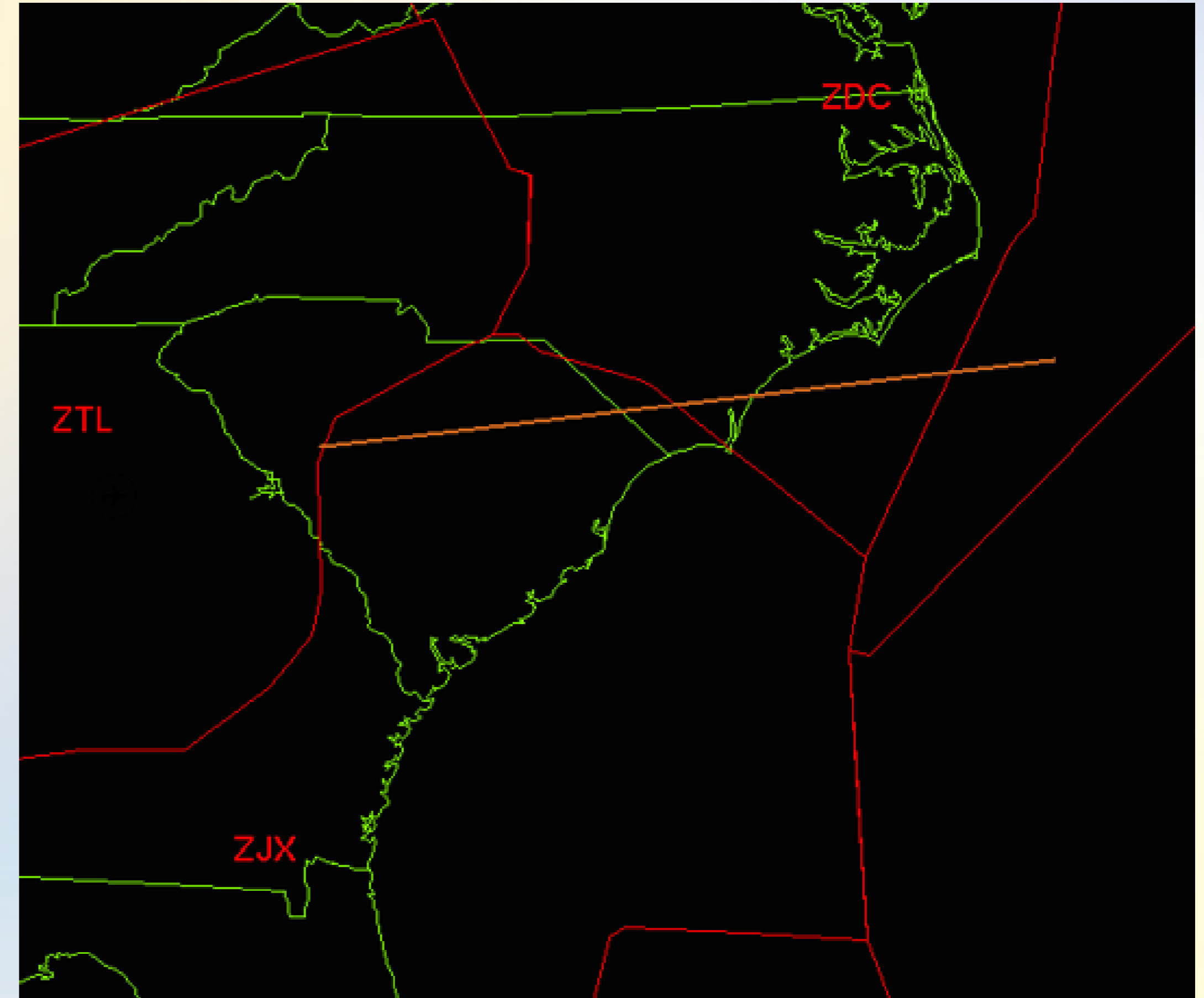
2023/2024 Demand Projection Method

NASCAST North/South Prediction Line

- 090-FL600

New Thresholds

- Moderate = 1650-1799
- High = 1800-1899
- Very High = 1900+



Projections



February 2023 NAS Demand Prediction Tool

February 2023 NASCAST North/South Prediction Line

DAY	DATE	PROJECTED NORTHBOUND	ACTUAL NORTHBOUND	PROJECTED SOUTHBOUND	ACTUAL SOUTHBOUND		PROJECTED SNOWMASTER NORTH	ACTUAL NORTH	PROJECTED SNOWMASTER SOUTH	ACTUAL SOUTH
THU	16-Feb	1337	1333	1436	1372		1711	1697	1854	1872
FRI	17-Feb	1339	1330	1490	1403		1759	1689	1840	1598
SAT	18-Feb	1160	1253	1274	1312		1651	1562	1715	1678
SUN	19-Feb	1202	1258	1182	1223		1690	1607	1606	1526
MON	20-Feb	1517	1429	1275	1288		1906	1796	1672	1565
TUE	21-Feb	1380	1341	1282	1270		1657	1591	1591	1573
WED	22-Feb	1231	1234	1249	1252		1503	1508	1569	1582
THU	23-Feb	1226	1223	1315	1231		1608	1568	1709	1618
FRI	24-Feb	1217	1245	1343	1273		1583	1573	1686	1626
SAT	25-Feb	1195	1286	1212	1207		1654	1533	1643	1571
SUN	26-Feb	1364	1429	1252	1291		1734	1728	1673	1638
MON	27-Feb	1259	1265	1199	1237		1610	1554	1604	1580
TUE	28-Feb	1187	1157	1182	1141		1509	1413	1480	1431

1202	MODERATE
1339	HIGH
1906	VERY HIGH

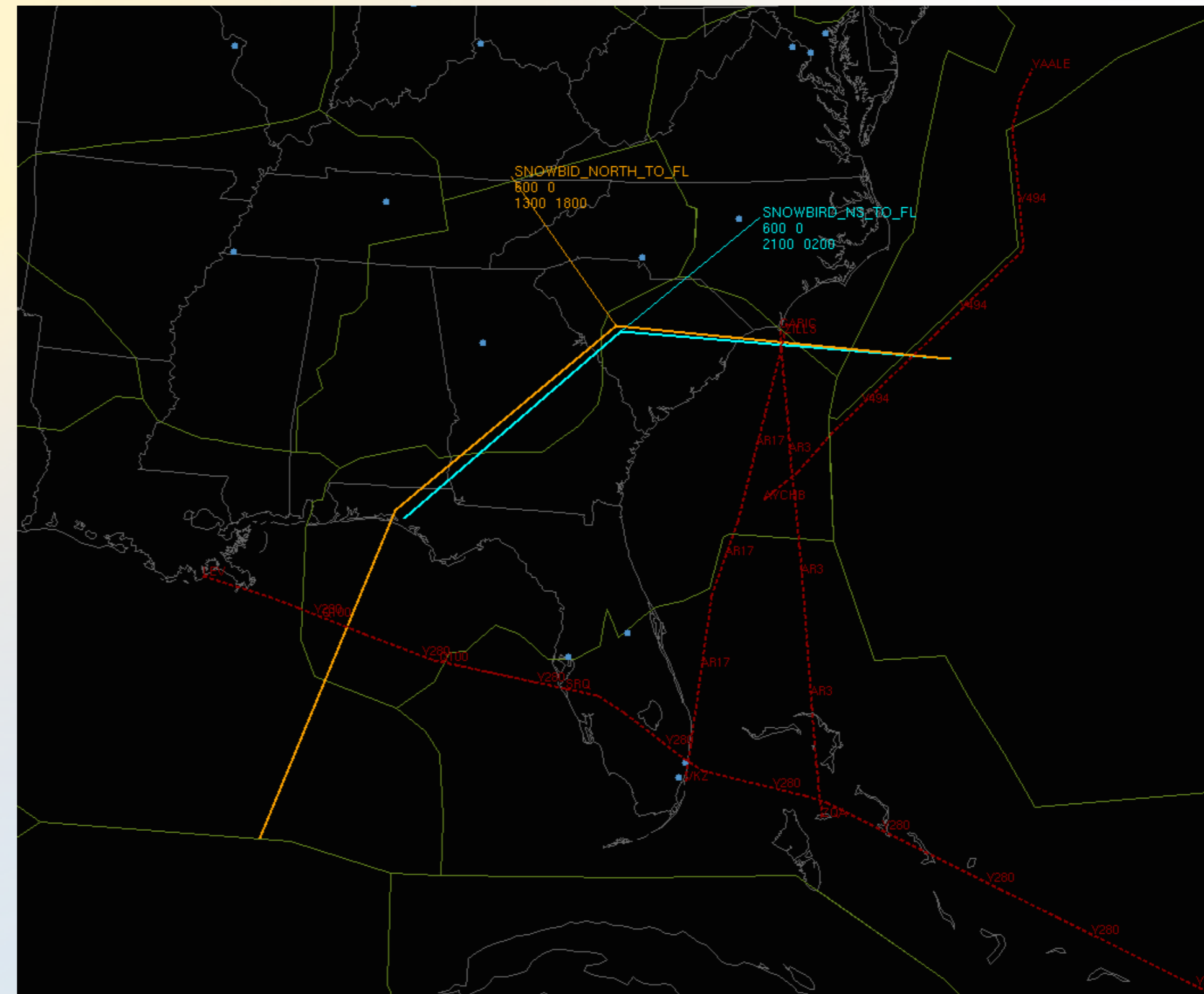


Federal Aviation Administration

Projections

Future NASCAST 2.0 enhancements will project demand:

- North/South along East Coast
- Midwest to the Southeast
- Through the Gulf



Days of Highest Anticipated Demand



- **Sunday Nov 26th 2023**
- **Thursday Dec 21st 2023**
- **Tuesday Dec 26th 2023**
- **Tuesday Jan 2nd 2024**
- **Friday Feb 16th 2024**

Numerous additional days have been identified as potential volume days and are included in the Continuous Planning Tool calendar



Days of Increased Demand



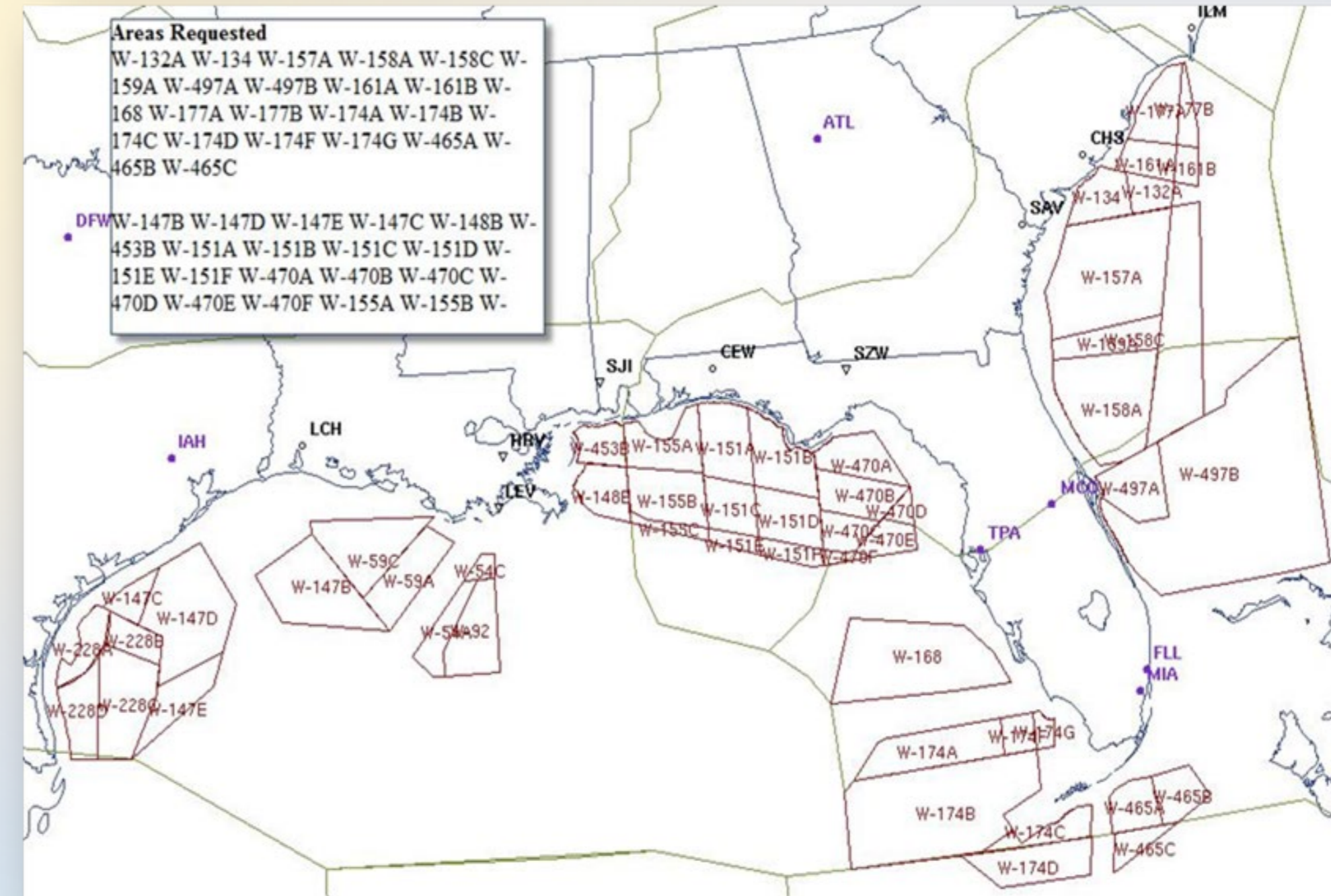
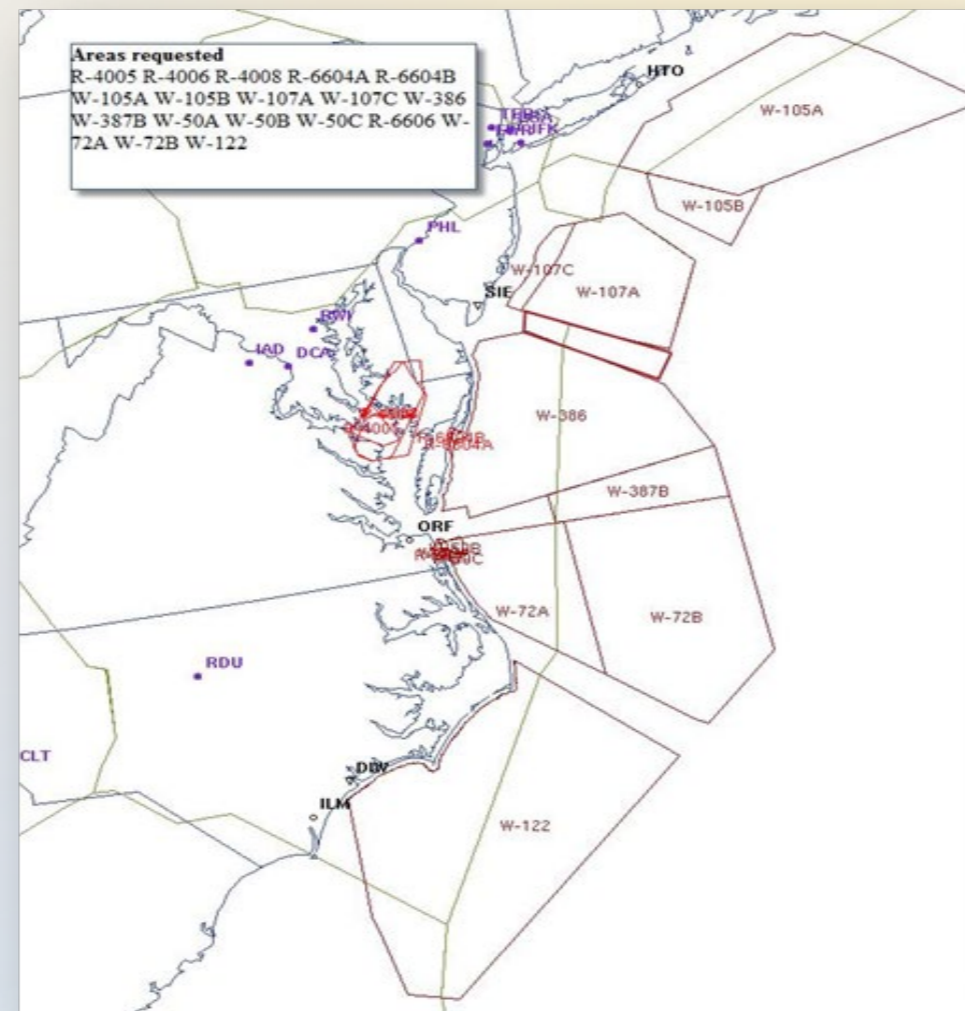
Demand Calendar

- Updated bi-weekly
- Command Center designates days as “Moderate, High, Very High volume”, “North and South direction” in advance
- Holiday Airspace Release Program (HARP) days are identified
- The PERTI Advanced Planning Team briefs Traffic Management Initiatives (TMIs) and strategy the day before on the Advanced Planning Webinar



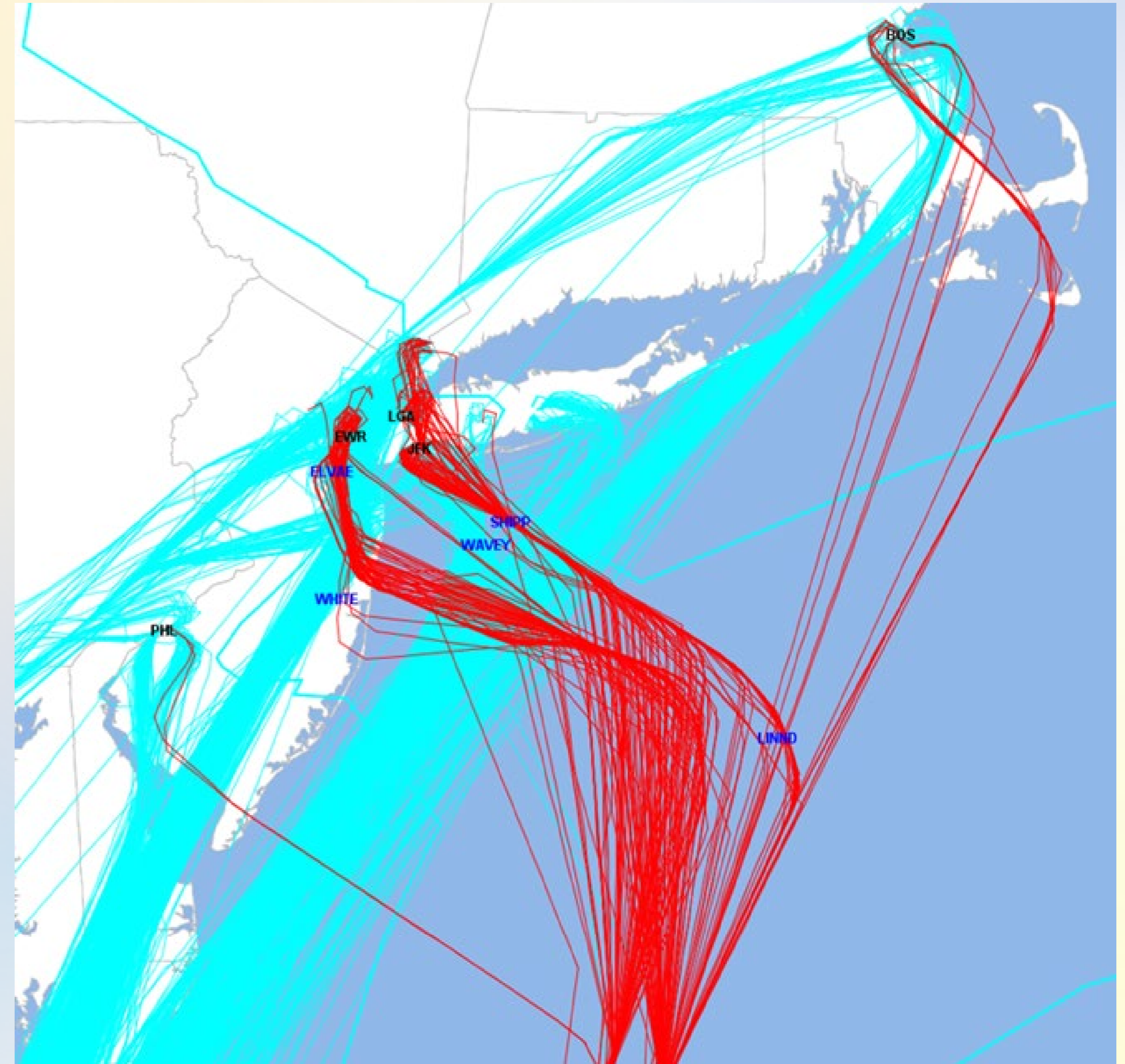
HARP (Holiday Airspace Release Program)

Thanksgiving Christmas New Years



HARP Routes

- Issued when the military releases warning area airspace during pre determined periods of anticipated high demand along the East Coast and Gulf Coast.
- To be implemented when uninterrupted 6-12 hour blocks are released by military.
- WATRS is not available when Atlantic Harp Routes are in effect.
- Decrease inland volume and reduce delays
- East Coast HARP routes will only be issued as a complete package.
- Alternate procedures are in effect during VIP movement.
- Will be issued as FCA based routes.



HARP, Holiday Gulf, and Snowbird Routes



- HARP, Holiday Gulf, and most Snowbird routes are located within the Snowbird subsection.
- Other commonly used routes for Snowbird can be found within Regional Routes subsection.
- The routes below may be implemented per ZSU request:

South	ZSU to TTZP (FCA based)	Per ZSU req
South	ZNY to TNCM TQPF (FCA based)	Per ZSU req
North	TTZP to ZSU (FCA based)	Per ZSU req

Playbook Table Of Contents

National PlayBook Menu

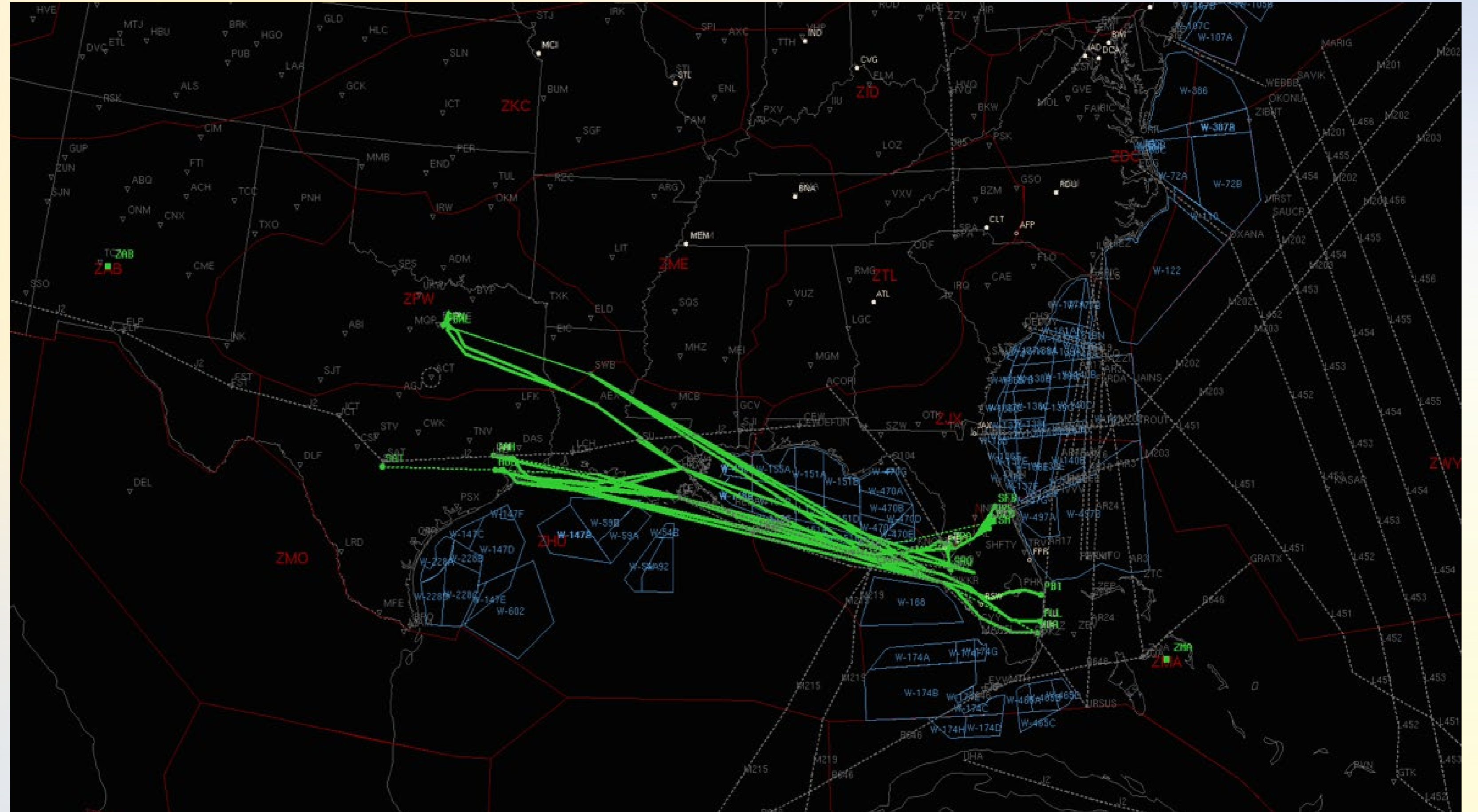
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 - [ZSU CARIBBEAN HARP N](#)
 - ☑ SPACE OPS
 - ☑ SUA ACTIVITY
 - ☑ West to East Transcon Route



Holiday Gulf Routes



- Allow shortened routes through Warning Area Airspace in the Gulf of Mexico
- Will be issued as FCA based and (RQD)
- Issued independent of East Coast HARP Routes



Domestic Routes



NORTHBOUND

- South to NY Sats
- ATL to ZBW
- South to BUF_ROC_CZY
- South to PHL and PHL Sats
- South to DC Mets
- South to HPN

SOUTHBOUND

- Upstate NY and Canada via J61/Q103
- Ohio Valley and Midwest to Florida
- NE TO MCO_TPA_RSW_SRQ
- SERMN South RQD for DC Mets
- LIMBO_SOUTH
- NYSATS_TO_FL
- DQO_TUNNEL_SOUTHWEST

***WATRS and HARP routes will be exempt from most reroutes when available



SKI COUNTRY

SKI COUNTRY ROUTES

- Ski Country 1
ASE EGE
- Ski Country 2
MTJ TEX GEC
- Ski Country 3
GJT HDN RIL

SKI COUNTRY TERMINAL AFPs

- FCAASE
(may be paired w/GDP)
- FCAEGE
- FCARIL

SKI COUNTRY GROUND DELAY PROGRAMS

- ASE
- EGE



Brent Gardner-Smith/Aspen Journalist

SKI COUNTRY



PROJECTED HIGH VOLUME DAYS

DECEMBER 16
DECEMBER 21-23
DECEMBER 26
DECEMBER 28-30
JANUARY 1-2
JANUARY 11-15
FEBRUARY 15-19

EVERY THURSDAY THRU MONDAY IN MARCH

**DEMAND WILL BE EVALUATED EACH DAY TO DETERMINE IF
ROUTE STRUCTURE WILL BE NECESSARY**



Brent Gardner-Smith/Aspen Journalist



AIRSPACE FLOW PROGRAMS (AFPs)



SOUTHBOUND ZJX

FCAJG5 – Manages Y280 and Y290 volume into Florida

FCAJXW – Manages inland volume on the West coast of Florida

FCAJXE – Manages inland volume on the East coast of Florida

FCAJY3 – Manages volume on the Atlantic Routes (AR's)

FCAJX7 – Manages volume inland and Atlantic Routes (AR's)

FCAJX5 – Manages volume Gulf/Inland and Atlantic Routes (AR's)



AIRSPACE FLOW PROGRAMS (AFPs)



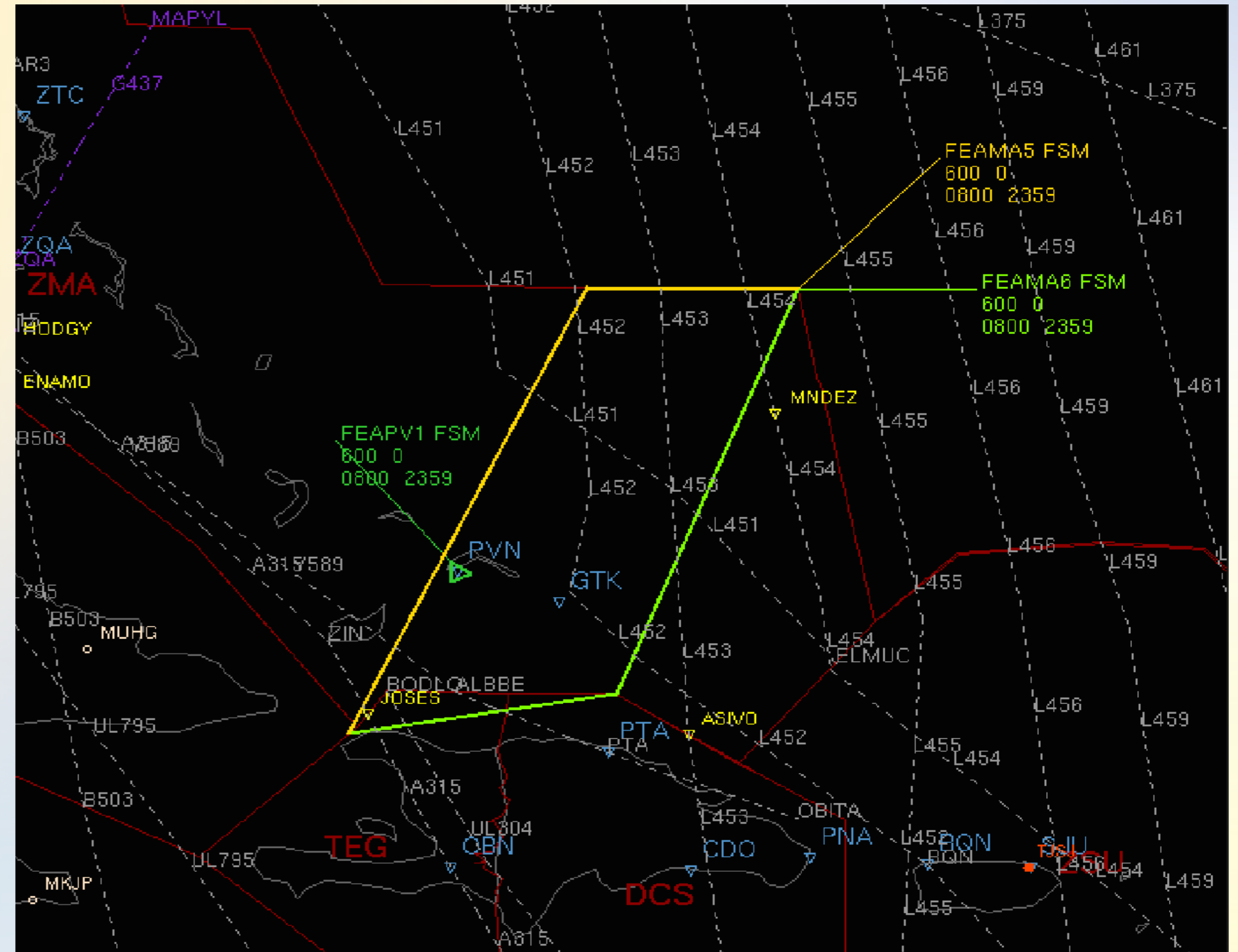
SOUTHBOUND ZMA

FCAMA5 – Manages southbound volume into the Caribbean. Northbound traffic is monitored for throughput with FCAMA6.

FCAPV1 – Manages southbound volume into Providenciales.

(Turks and Caicos Island Airport Authority has not determined if they will issue a NOTAM to close the airport to GA aircraft.)

**** Historically most used AFPs from 2022 Season**



Federal Aviation Administration

TERMINAL AIRSPACE FLOW PROGRAMS (AFPs)



FCAN93

Manages volume into Teterboro (TEB), Morristown (MMU), and Caldwell (CDW) as one.

FCAN92

Manages volume into Morristown (MMU), and Caldwell (CDW) as one. A Teterboro (TEB) Ground Delay Program will be implemented in conjunction with the FCAN92 AFP.

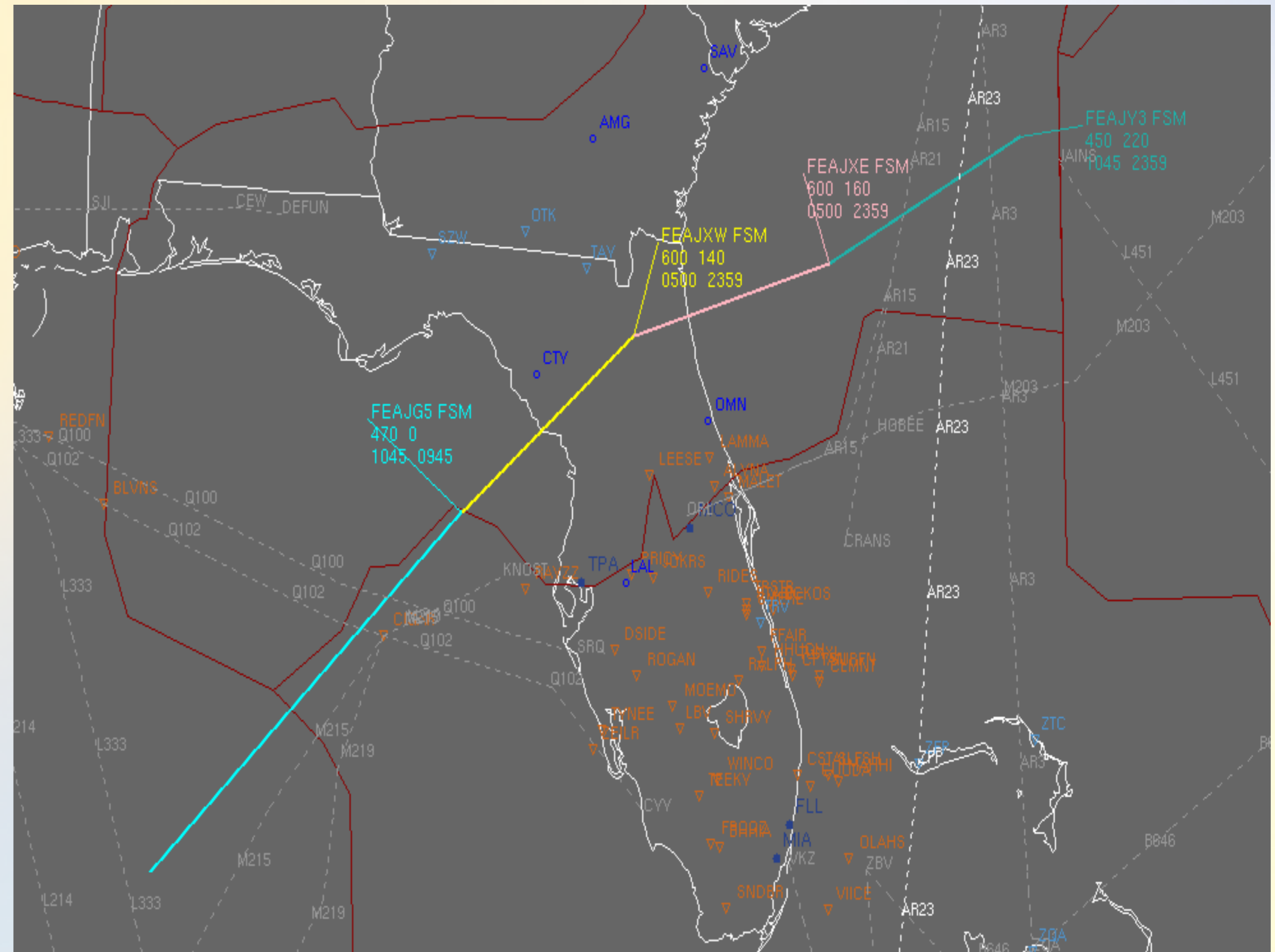
PBI

Preferred strategy is early issuance of a GDP in UDP mode. Dual AFPs (Scheduled vs Unscheduled) being analyzed as an additional tool and will be considered.



FCA/FEA Monitoring

- Each AFP has an associated FCA that is monitored for volume increases
- If a constraint requires one segmented AFP, expect multiple AFPs to be implemented simultaneously due to automation concerns
- All AFPs shall be implemented in UDP mode



SNOWBIRD Early Implementation Strategies



TMI	OUTLOOK
HOLIDAY GULF ROUTES	Per Calendar
HARP North /HARP South	Per Calendar
MIDWEST TO FLORIDA	Expected (High days -Issue Night Prior)
OHIO VALLEY TO FLORIDA	Expected (High days -Issue Night Prior)
TEXAS ZME TO ZNY AND ZBW	Expected
TEXAS ZME TO DC METS	Expected
UPSTATE NY & CANADA VIA Q103/J61	Expected
FLORIDA TO NORTHEAST ESCAPE	Probable
MCO/TPA/RSW ESCAPE	Probable
ATL TO ZMA	Possible
ZMA TO ATL	Possible
NE TO FLORIDA VIA J6/Q75	Possible
SERMN SOUTH (FYI/RQD)	Possible
CUBA ARRIVALS VIA TADPO/URSUS/MAXIM	Possible
CARIBBEAN ARRIVALS VIA TADPO/URSUS & ZMR ARRIVALS VIA CANOA	Possible

Route Issuance Strategies:

Moderate Volume Days - Routes will be evaluated and issued early morning of operations.

High/Very High Volume Days – Midwest to FLA & Ohio Valley to FLA may be issued night prior, due to early morning AFP evaluation, remaining routes to be evaluated and issued as needed during morning of operations.



Additional Routes/TMIs

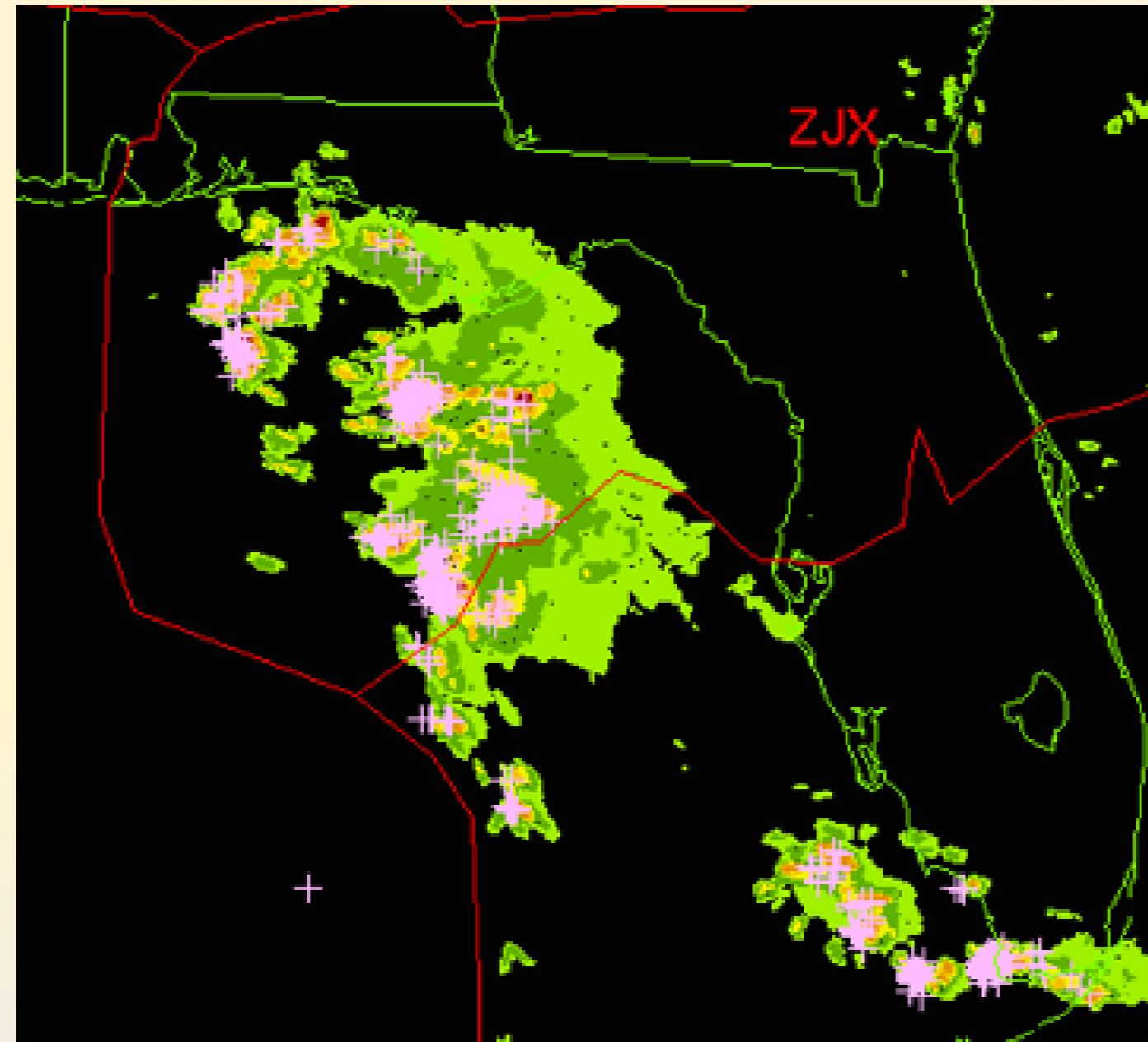


TMI	OUTLOOK
SKI COUNTRY 1,2 &3	Per Facility Request
ZSU ROUTES	Per Facility Request
ZJX CAPPING/TUNNELING	Per Facility Request
WATRS ROUTE	Per Facility Request
ZDC CAPPING/TUNNELING	Per Facility Request
NY/DC/PHL METRO ESCAPE ROUTES	Per Facility Request
MMUN, MMSD, MMPR AFPs	Per SENEAM Request



Additional Challenges to Snowbird

- Convective Weather
- Space Operations
- VIP Movement



QUESTIONS

