

Northeast Corridor Atlantic Coast Routes (NEC ACR)

Presented to: NEC ACR Stakeholders

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Purpose and Agenda

- **Purpose**

- Provide a status of the project and details on the implementation

- **Agenda**

- Work Group Composition
- Scope and Expected Outcomes
- Implementation Strategy
- Overview of Procedures (Q/Y-Routes, J-Routes, SIDs, STARs)
- Implementation Milestones
- How We Will Ensure Success
- Key Meetings, Activities, and Industry Briefings
- How You Can Help



Work Group Composition

- **Core Work Group (CWG)**
 - FAA Co-Leads, Vicki Turner & Joey Tinsley (NATCA)
 - AJV-14, Paul Withers
 - MITRE, Doug Perkins
 - Human Solutions Inc., Tony Yushinsky and Mike McEntee
 - TetraTech (TARGETS), Mark Thompson and Steve Jubb
- **Full Work Group (FWG)**

ZDC	American Airlines	NBAA
ZNY	Delta Air Lines	Regional Airline Assoc. (RAA)
ZBW	Southwest Airlines	Jeppesen
ZJX	United Airlines	Florida Metroplex
ZMA	JetBlue Airways	FAA Command Center
ZTL	Republic Airways	FAA AJV-A/AIS
Military	Air Wisconsin Airlines	FAA Technical Center



Scope and Expected Outcomes

- **Project Scope**

- Establish new PBN high altitude route structure on East Coast and delete J-Route structure in constrained East Coast airspace
- Proposed (Q-Routes, Y-Routes, J-Routes, SIDs, STARs, SIAPs)
 - New Routes/Procedures
 - Amendments
 - Deletions

- **Expected Outcomes**

- Improve throughput for high altitude traffic to/from NEC airports
- Reduce airspace complexity
- Reduce radar vectors and reroutes
- Improved accommodation of requested altitudes



Implementation Strategy

- **Near Term Implementation**

- Reduce the size and complexity by implementing as much as possible as early as possible, consistent with available resources
 - Incremental implementation over nine charting cycles
- Limited to new routes that mostly mirror existing routes or those that will require minimal training or automation support
- Implement interdependent Qs/Ys/SIDs/STARs concurrently

- **Main Implementation**

- Utilize a “phased implementation” by publishing new procedures on one chart date, then implementing on the next chart date 56 days
- New Q/Y Routes to be NOTAM'd NA for a full chart cycle
 - Give Industry time for planning and to program new routes
 - Give FAA time to enter new Playbook Routes and Coded Departure Routes into the Route Management Tool (RMT)



What Will Be Implemented & When

- **NEC ACR will be implemented on 9 separate chart dates over a 13-month timeframe 10/10/2019-11/5/2020**
 - 160 separate changes (publish, amend, or delete)
 - 112 require Notice of Proposed Rule Making
 - 2 airspace implementations (1 low altitude, 1 high altitude*)



***NOTE: Includes 3 minor airspace sector boundary changes**

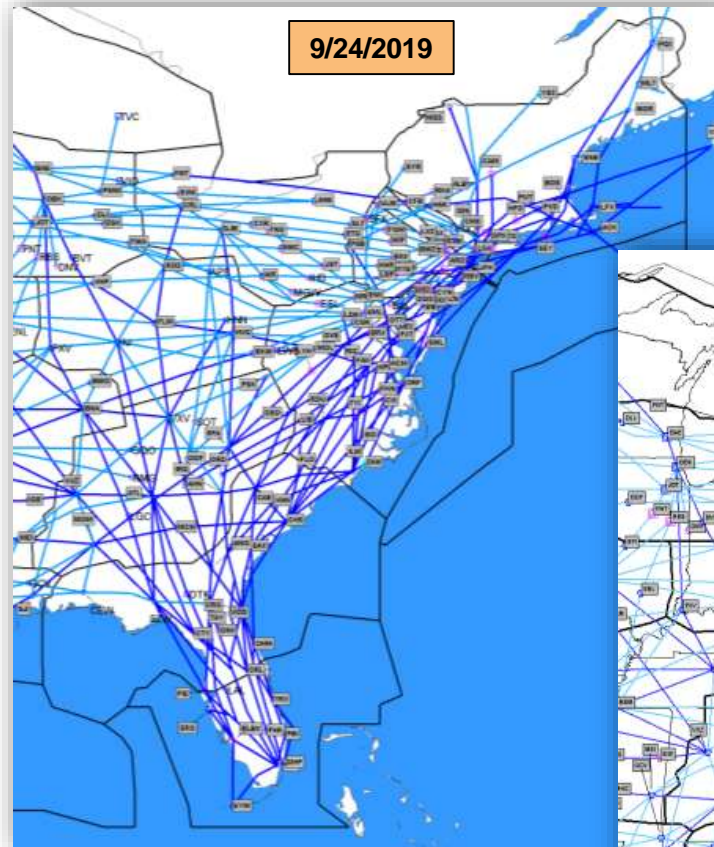


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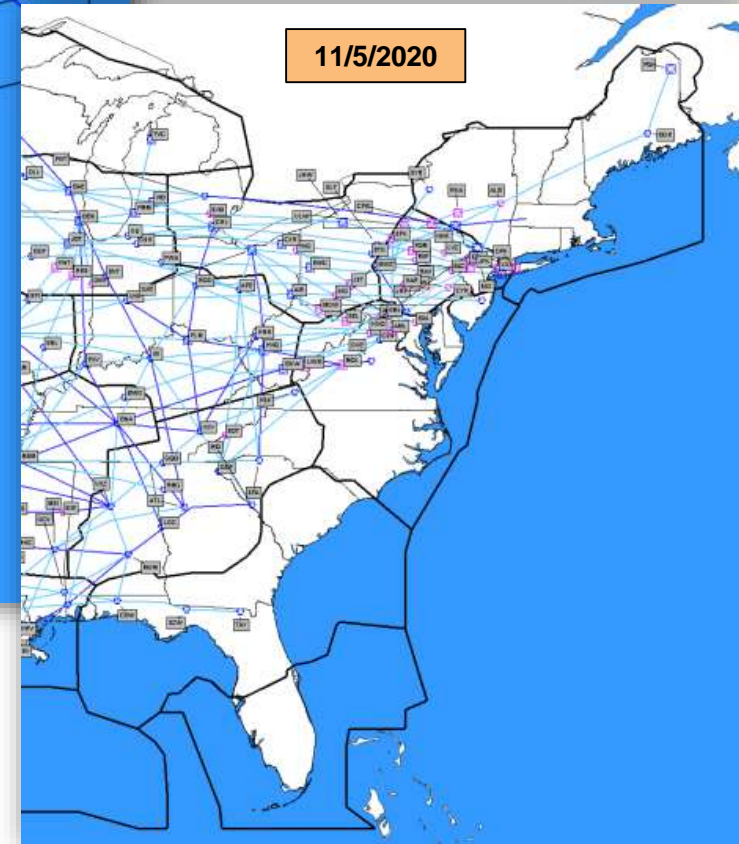
78 J/Q Route Deletions/Amendments

- **77 J-Routes**
 - 35 Delete
 - 42 Amend
- **1 Q-Route**
 - 1 Delete
- **7 ARTCCs**
 - ZBW
 - ZNY
 - ZDC
 - ZTL
 - ZJX
 - ZMA
 - ZOB



J-Routes being deleted or amended depicted in dark blue

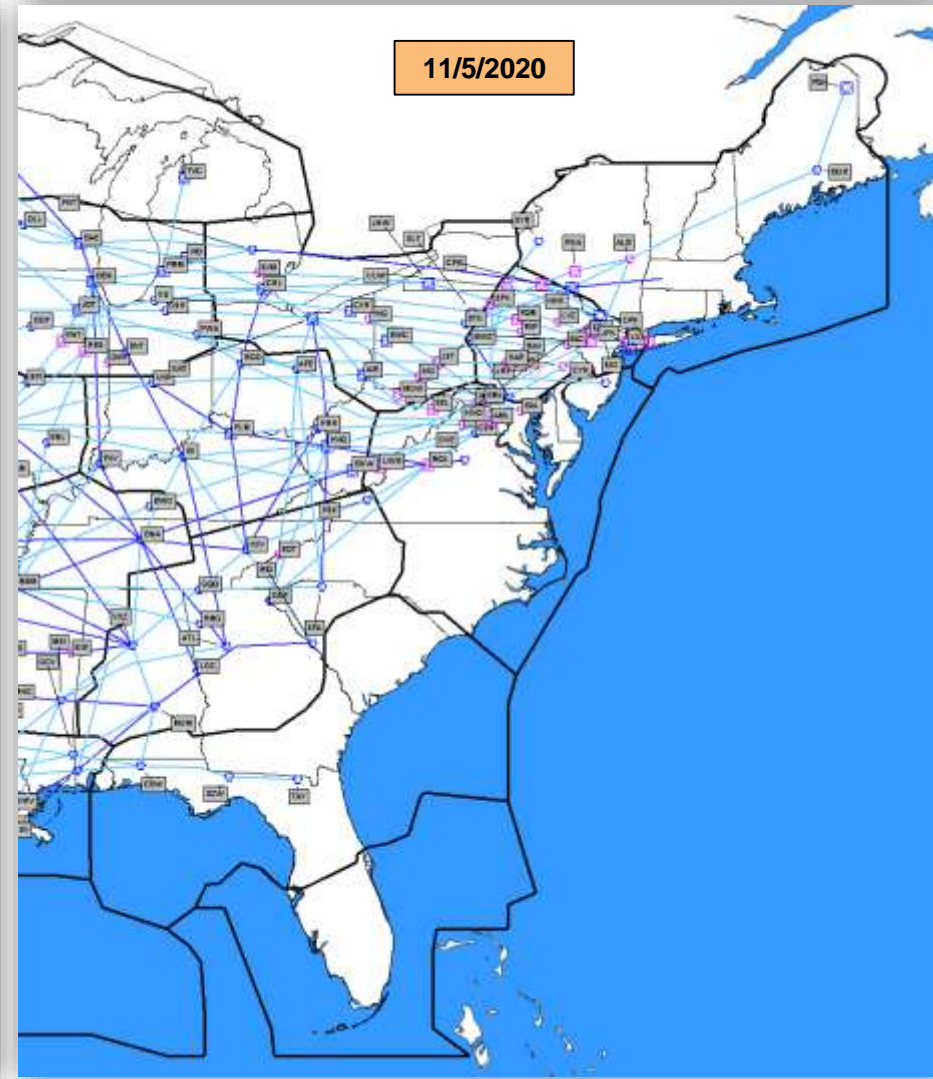
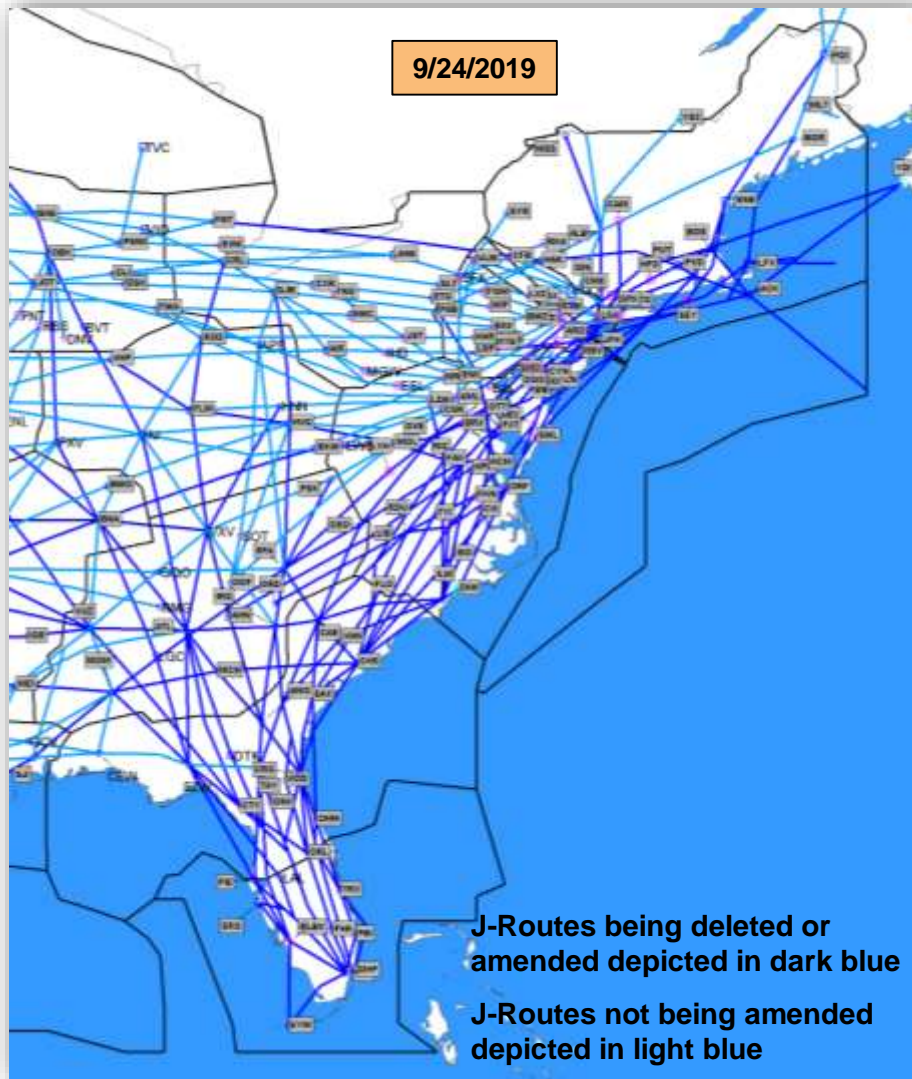
J-Routes not being amended depicted in light blue



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78 J/Q Route Deletions/Amendments



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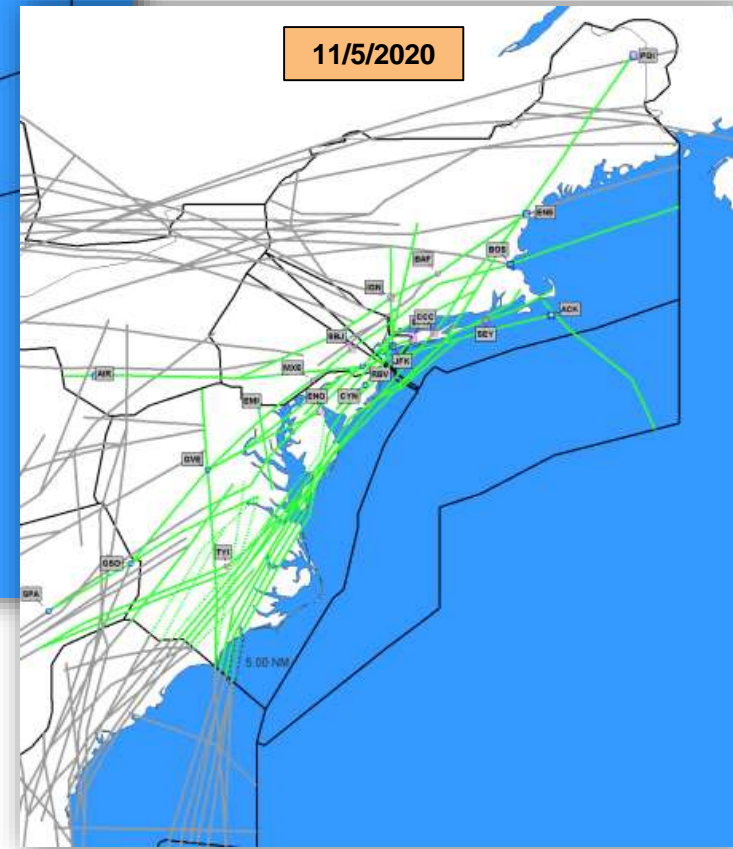
39 New/Amended Q/Y Routes

- **34 Q-Routes**
 - 19 New
 - 15 Amend
- **5 Y-Routes**
 - 1 New
 - 4 Amend
- **7 ARTCCs**
 - ZBW
 - ZNY
 - ZDC
 - ZTL
 - ZJX
 - ZMA
 - ZOB



Existing Q-Routes & Y-Routes depicted in gray

New or Amended Q-Routes & Y-Routes depicted in green

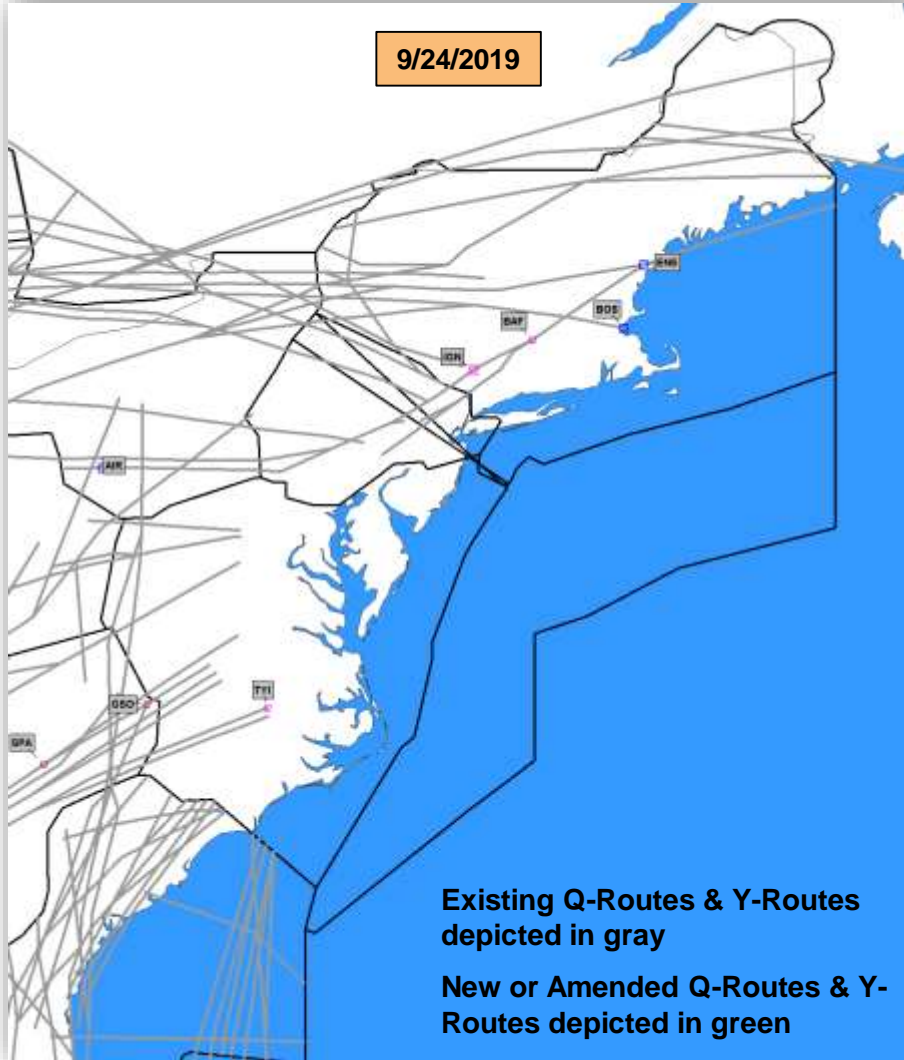


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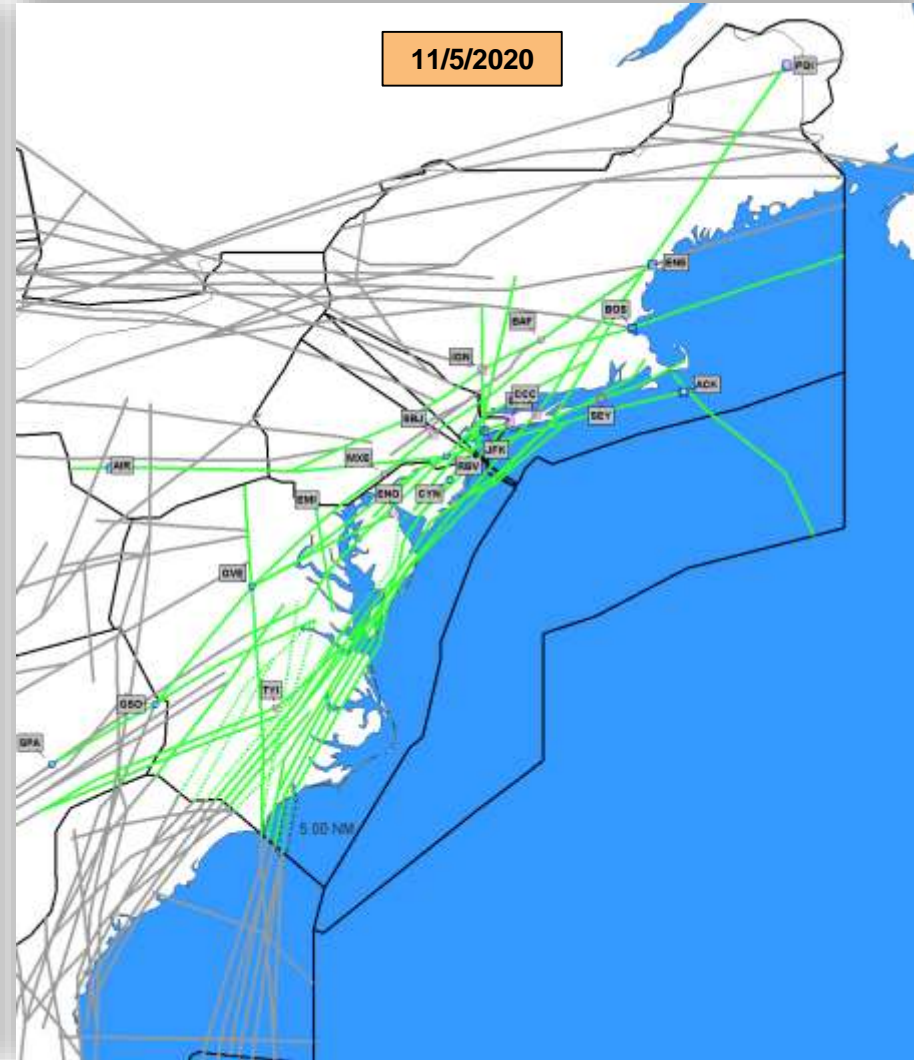


39 New/Amended Q/Y Routes

9/24/2019



11/5/2020



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CURRENT STATE ON 9/24/2019

Not all central and western
U.S. Routes are depicted

Q-Routes & Y-Routes depicted in green
J-Routes depicted in blue



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CURRENT STATE ON 9/24/2019

MINUS J-ROUTES BEING DELETED 1/30/2020-11/5/2020

Not all central and western
U.S. Routes are depicted

Q-Routes & Y-Routes depicted in green

J-Routes depicted in blue



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END STATE ON 11/5/2020

Not all central and western
U.S. Routes are depicted

Q-Routes & Y-Routes depicted in green
J-Routes depicted in blue

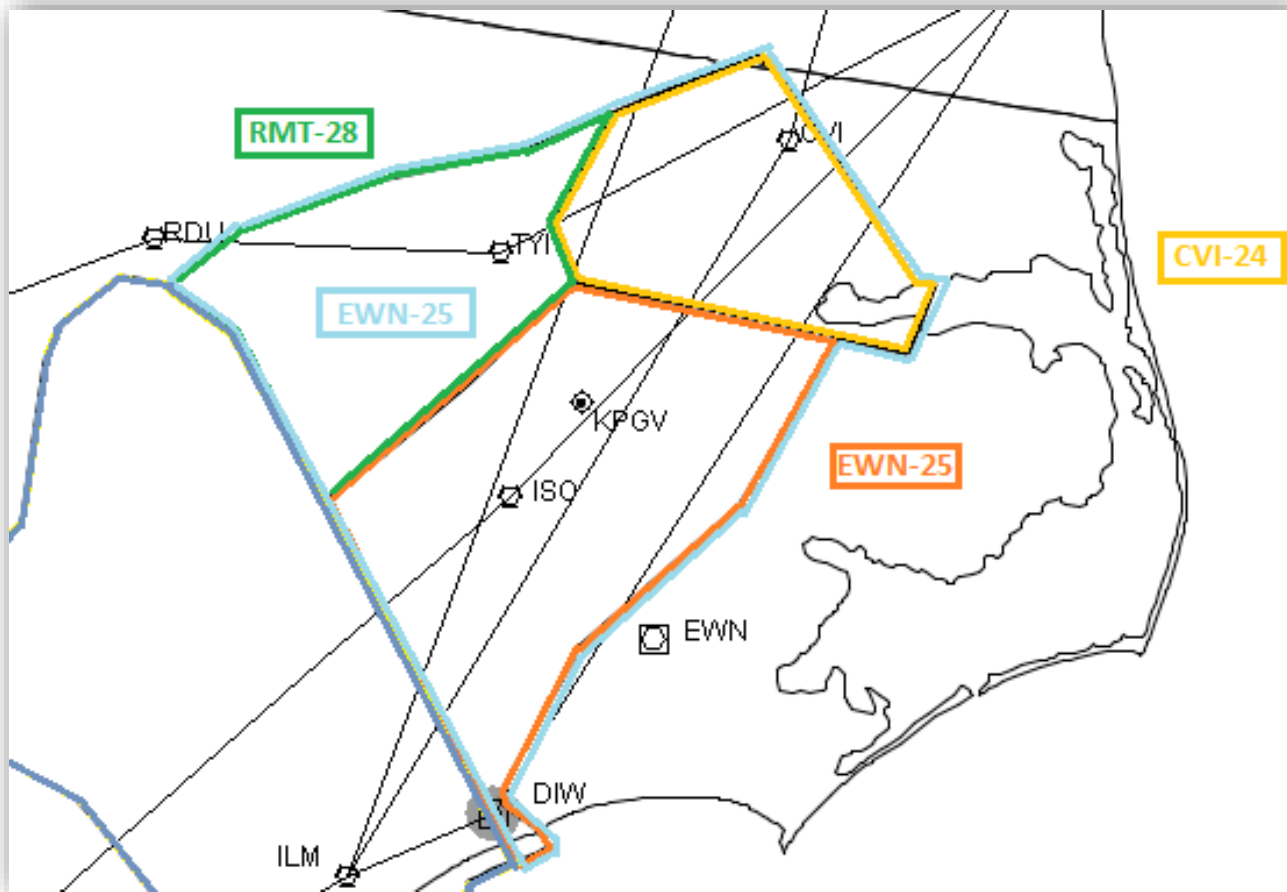


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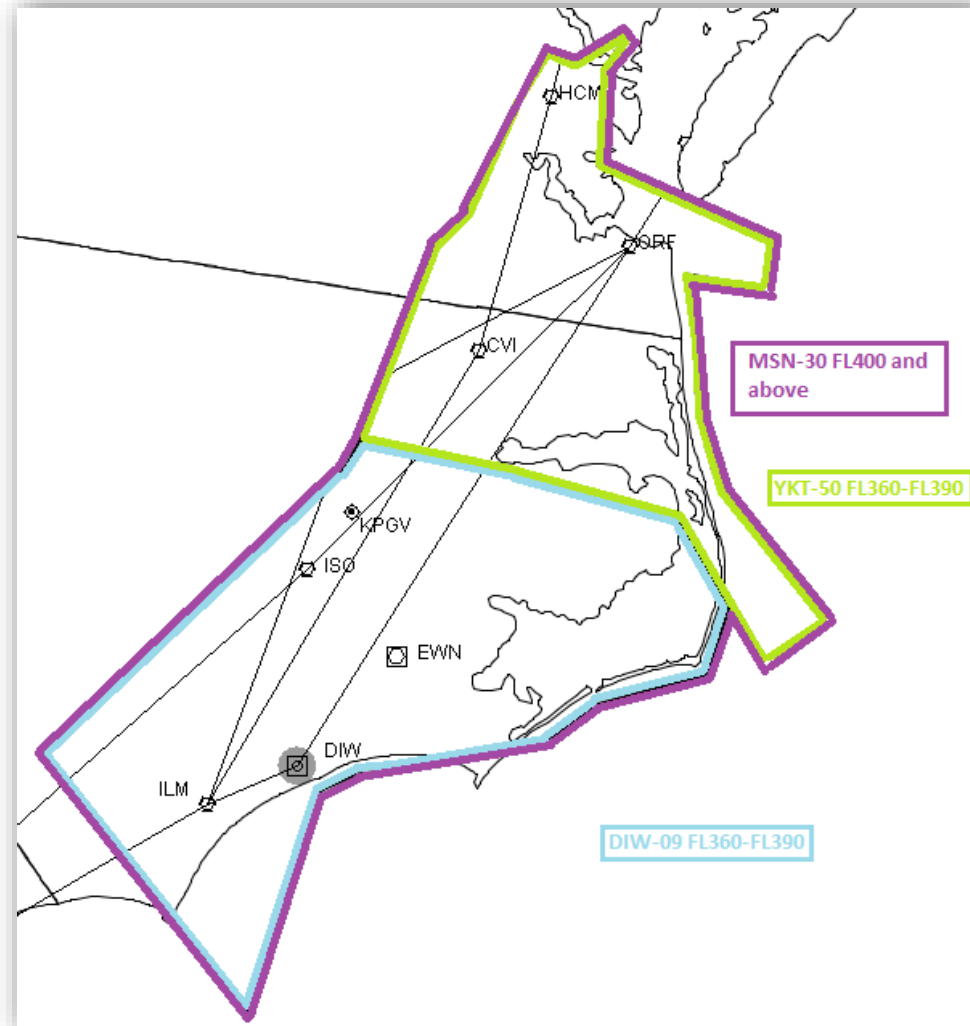
ZDC Low Altitude Sector Changes

- Combine 3 Sectors (24, 25, 28) into Sector 25 EWN Low



ZDC High Altitude Sector Changes

- **Stratify Sectors 09 & 50 to create new Sector 30**
- **Resulting 3 Sectors**
 - 09 DIW Ultra High
 - FL360-390
 - 50 YKT Ultra High
 - FL360-390
 - 30 MSN Super Ultra High
 - FL400-ABV
- **Other minor boundary changes**
 - 58/59, 58/19
 - 30, 34, 50, 35, 09



50 SID/STAR/SIAP New/Amendments/Deletions

	STARs			SIDs			SIAPs	
	New	Amend	Delete	New	Amend	Delete	Amend	Total
CHS		2	5		1		4	12
IAD/DCA					2			2
BWI					2			2
DOV	1		1		1			3
HEF					1			1
ADW					1			1
RDU	1	3	1		6	4		15
ATL					1			1
PHL		2						2
EWR	1	1	1					3
TEB		2						2
LGA	2		2					4
WRI	1		1					2
Total	6	10	11	0	15	4	4	50



Implementation Milestones

10/10/2019 Publish/Implement 1 New Y-Route and 8 Waypoints

11/7/2019 Implement ZDC Low Altitude Sector Changes

1/30/2020 Delete/Amend 32 J-routes, 1 Q-route associated with FL Metroplex

1/30/2020 Delete 5 CHS STARs

3/26/2020 Delete/Amend 12 SIDs (IAD/BWI/HEF/DOV/ADW/RDU)

5/21/2020 Amend 2 Q-routes: Q75, Q475.

5/21/2020 Publish/Delete/Amend 24 SIDs/STAR/SIAPs (RDU/CHS/LGA/EWR/WRI/TEB)

7/16/2020 Delete/Amend 18 J-routes

9/10/2020 Publish/Amend 32 Q-routes, 4 Y-routes (NOTAM N/A for 56 days)

9/10/2020 Amend 1 ATL SID

10/8/2020 Implement ZDC Ultra High Sector 30 and 3 minor airspace changes

11/5/2020 Implement 32 Q-routes, 4 Y-routes (Cancel N/A NOTAM)

11/5/2020 Publish/Delete/Amend 8 STARs (PHL/EWR/TEB/LGA/DOV)

11/5/2020 Delete/Amend 27 J-routes

11/5/2020-2021 Post-Implementation and Closeout



Ensuring Success

- **Ensure best use of new routes by completing extensive route stitching**
- **Increase time for industry to complete flight planning/programming and check charts/databases for errors**
 - NOTAM new procedures NA (not authorized) to suppress new routes from 9/10/2020-11/5/2020
- **Ensure Industry/Military knows what routes to file for each implementation phase**
 - Outreach to NCF, CNS Task Force, route planners, dispatchers, GA, Jeppesen, NBAA, User Groups, Military
 - Make preferred routes available early and through automated means



Ensuring Success

- **Identify potential implementation risks/hazards and mitigations in advance by applying FAA Safety Risk Management (Controllers, Traffic Management, Industry)**
 - In accordance with FAA 7100.41 SRM to be applied to the Implementation Plan/Go-Team and airspace/LOA changes
- **Reduce chart clutter from 9/10/2020-11/5/2020**
 - Delete J-Routes as soon as practical, prior to the main implementation if at all possible
 - Possible publication of a temporary chart with only the new Q/Y Routes; to be used only for purposes of flight planning/programming
 - The regular chart with only the legacy J-Routes for operational use
- **Utilize FAA automation to correct flight plans containing incorrect routes (FTRs, D-Lines)**



Ensuring Success

- **Manage sector complexity during main implementation phase-in**
 - Coordinate short-term implementation Traffic Management Initiatives (TMIs) with the FAA Command Center, Eastern/Central Service Centers, Traffic Management Officers (TMOs), Deputy Directors of System Operations (DDSOs), and Industry
- **Ensure usage of correct routes during implementation**
 - Coordinate with other ARTCCs (i.e. ZOB, ZKC, ZME, ZHU) to request that flights be left on routes (no shortcuts during phase-in)
- **Resolve implementation issues rapidly**
 - Utilize Go-Teams to monitor the operation and intervene as the situation dictates
 - Utilize an Open Conference Bridge to communicate issues real-time and assist in timely resolution



Key Meetings and Activities

- **9/24/2019 - 12:00-4:00 Implementation Kick-off Meeting at MITRE McLean**
- **Full Work Group Meetings**
 - 9/24-26/2019 at MITRE McLean
- **11/5-6/2019 - SRM Panel, Implementation Plan (all phases)**
- **Industry/Military Briefings**
 - NCF, NBAA, CNS TF, RAA, TUG, NavCanada/AOCM, Flight Plan Filers, Aeronautical Charting Forum, IATA, Military
- **Update Green Book Routes, Playbook Routes and Coded Departure Routes (CDRs) for each pub date**
- **Detailed Industry Outreach for route planners**



Industry Briefings

- **OCT 2019** - Aeronautical Charting Forum; National Business Aircraft Association (NBAA)
- **OCT 2019** - Flight Plan Filers
- **DEC 2019** - Communications, Navigation and Surveillance (CNS) Task Force
- **FEB 2020** - National Customer Forum (NCF)
- **APR 2020** - NavCanada/Airline Operators Customer Meeting (AOCM)
- **Spring 2020** - Teterboro Users Group (TUG)
- **Spring-Summer 2020** - Industry Route Planners and User Groups



How You Can Help

- **Share this briefing with others**
 - Share inside your organization, with subsidiaries & Express carriers
- **Provide feedback and suggestions**
 - Help identify issues/mitigations not yet identified
- **Work with us to schedule more detailed briefings**
 - Briefings and/or training for route planners & dispatchers
- **Watch for additional information**
 - Future NCF briefings, Flight Planners Telcon, CNS Taskforce, etc.
- **Plan resources for route planning & programming**
 - Especially after the 9/10/2020 publication of new routes
- **Be ready to utilize the new routes**
 - Beginning on 11/5/2020 flight plan the new routes



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