Northeast Corridor Atlantic Coast Routes (NEC ACR)

Implementation Briefing



Meeting Purpose and Agenda

Purpose

To Provide Details on the Implementation of NEC ACR

Agenda

- What We Are Doing, and... Why, How, and When
- Airspace Improvements for Washington Center (ZDC)
- How We Will Ensure Success
- Short-Term Traffic Management Initiatives (TMIs)
- Preferred IFR Routes (Route Stitching)
- How You Can Help
- Detailed Description of Route/Procedure Changes
 - Q/Y-Routes, J-Routes, SIDs, STARs

What We Are Doing

NEC ACR is one of the biggest changes to the National Airspace System (NAS) in decades

- 39 new/amended Q Routes and Y Routes will replace the north-south high-altitude route structure along the east coast of the United States
- 83 legacy J Routes and Q Routes will be deleted/amended
- 57 new/amended/deleted SIDs/STARs/IAPs
- Changes will affect routes in seven FAA ARTCCs
 - ZBW, ZNY, ZDC, ZTL, ZJX, ZMA, ZOB
 - From Florida to Maine, and as far west as Ohio, Tennessee,
 Alabama





Why We Are Doing This

- Transition to a PBN-Centric NAS
 - Replace conventional J Routes with optimized RNAV-2 Q and Y's
 - Optimized routes require less airspace, thus enabling additional routes to be implemented in existing airspace volumes
- Improve sector throughput for high altitude traffic to and from NEC airports
- Improve ability to accommodate requested altitudes
- Reduce the need for radar vectors and reroutes
- Reduce airspace complexity
- Decrease reliance on ground-based navigational aids (NAVAIDs)
 - Supports the FAA VOR Minimum Operational Network (VOR MON)

39 New/Amended Q/Y Routes

34 Q-Routes

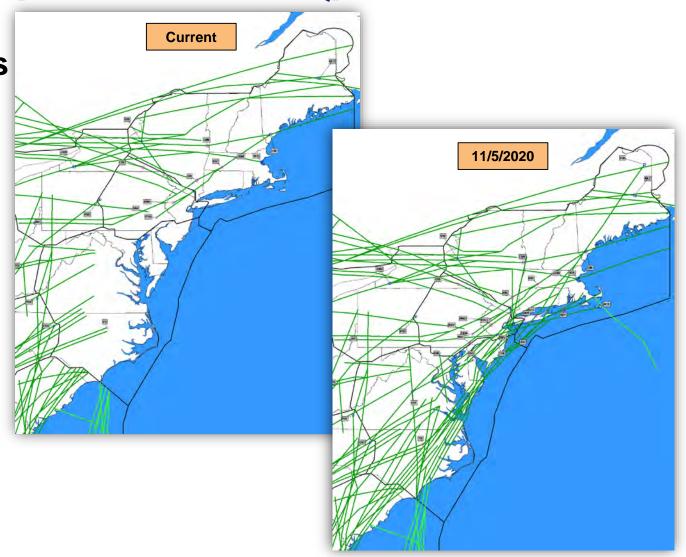
- 19 New
- 15 Amend

5 Y-Routes

- 1 New
- 4 Amend

7 ARTCCs

- ZBW
- ZNY
- ZDC
- ZTL
- ZJX
- ZMA
- ZOB



83 Deleted/Amended J/Q Routes

81 J-Routes

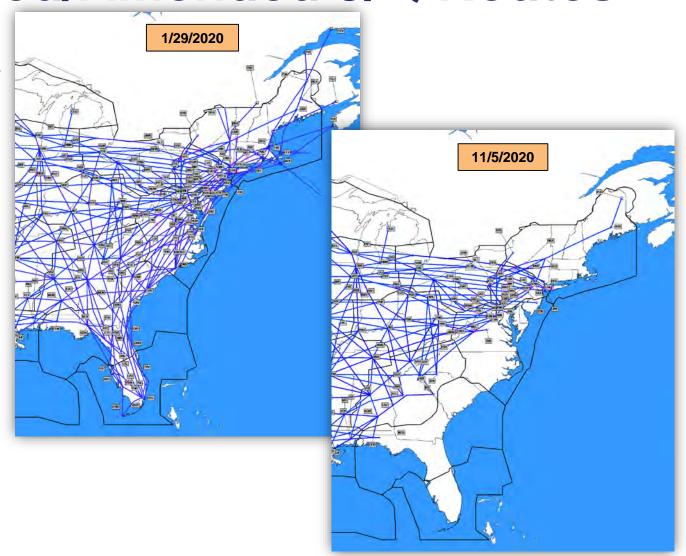
- 37 Delete
- 44 Amend

2 Q-Route

2 Delete

• 7 ARTCCs

- ZBW
- ZNY
- ZDC
- -ZTL
- ZJX
- ZMA
- ZOB



How We Will Implement This

Near Term Implementation

 When and where possible, implement routes/procedures or delete legacy routes/procedures to reduce the size and complexity of the main implementation

Main Implementation

- Utilize a "phased implementation" by publishing new procedures on one chart date, then implementing on the next chart date in 56 days
- Provide operators time to program new routes
 - New Q/Y Routes to be NOTAM'd "Not Authorized" NA or "ATC Assigned Only" for a full chart cycle
 - Legacy J-Routes to be deleted concurrently with implementation of the new routes

Phased Implementation

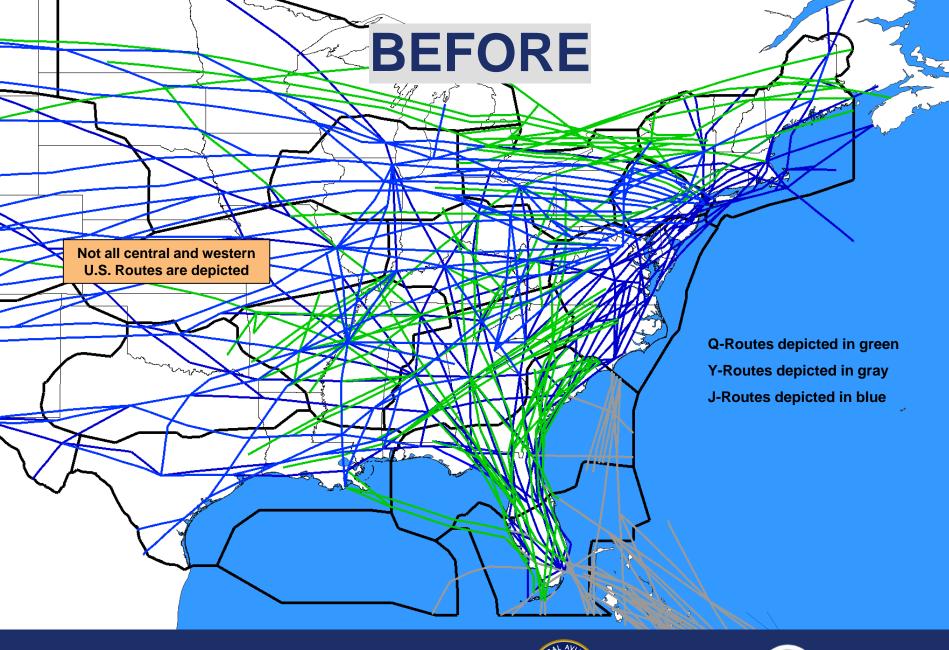
- NEC ACR will be implemented on 9 separate chart dates over a 13-month timeframe 10/10/2019-11/5/2020
 - 179 separate changes (publish, amend, or delete)
 - 117 changes require Notice of Proposed Rule Making
 - 2 airspace implementations (1 low altitude, 1 high altitude*)



*NOTE: Includes 3 minor airspace sector boundary changes

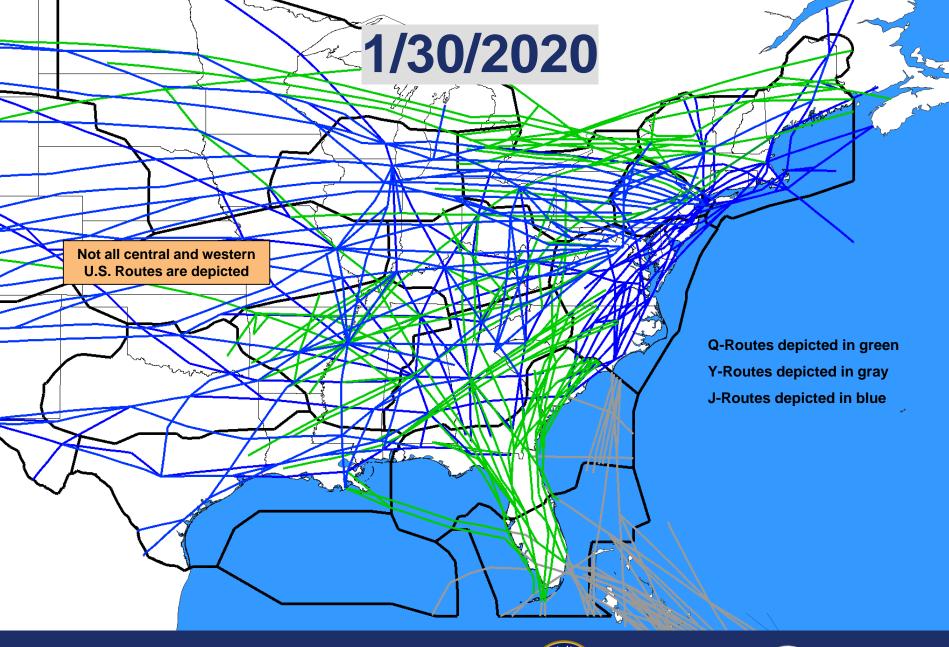


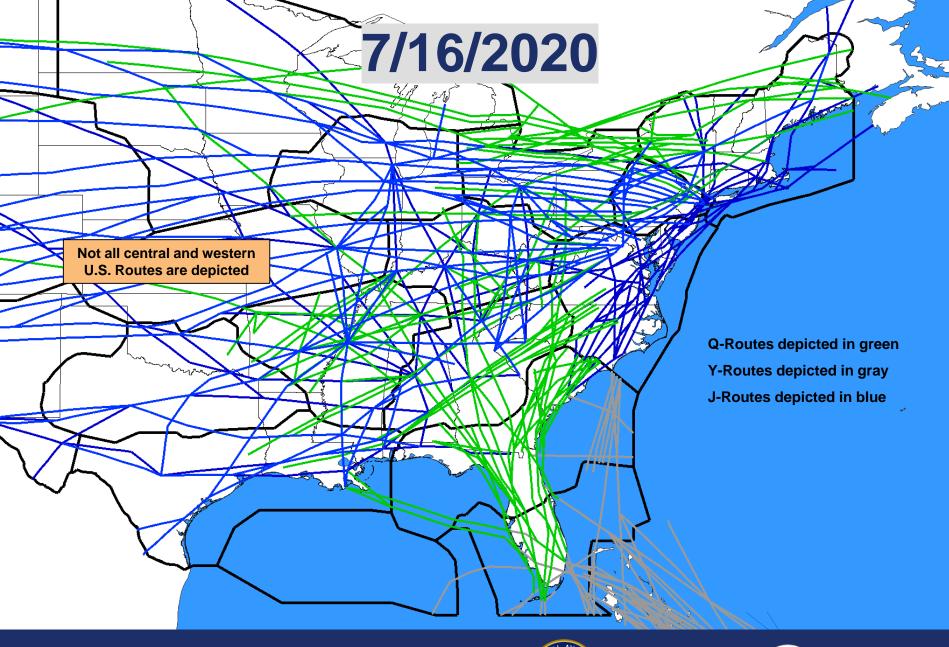






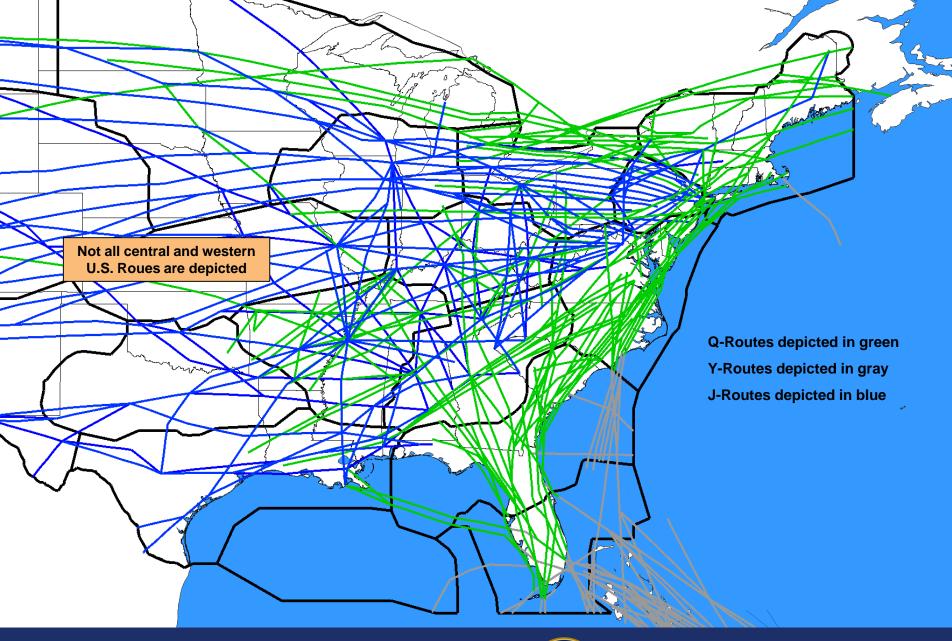












Implementation Milestones

10/10/2019 Publish/Implement 1 New Y-Route and 8 Waypoints 11/7/2019 Implement ZDC Low Altitude Sector Changes 12/5/2019 NOTAM NA 33 J-Routes/Q-Routes (FL Metroplex) for 56 days 1/30/2020 Delete/Amend 33 J-Routes/Q-Route (FL Metroplex), Cancel N/A NOTAM 1/30/2020 Delete 5 CHS STARs 3/26/2020 Delete/Amend 7 SIDs (BWI/IAD/DCA/HEF/ADW/DOV) 5/21/2020 Amend 2 Q-Routes: Q75, Q475 5/21/2020 Publish/Delete/Amend 24 SIDs/STARs (LGA/EWR/WRI/RDU) 7/16/2020 Delete/Amend 18 J-Routes 7/16/2020 Amend 9 SIDs/STARs/SIAPs (CHS/JZI) 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

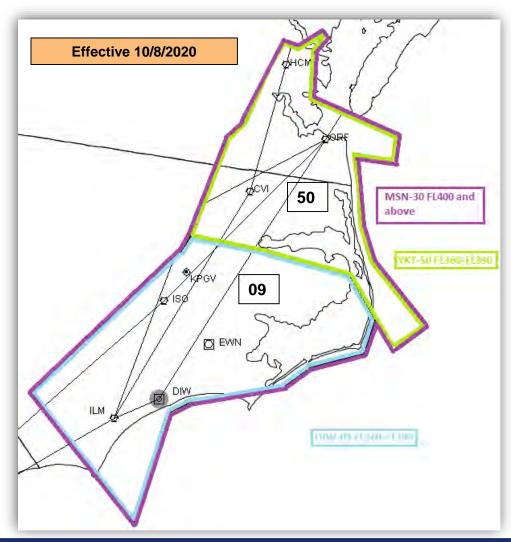
11/5/2020 Publish/Delete/Amend 11 STARs (PHL/EWR/TEB/LGA/DOV/WRI)

11/5/2020 Delete/Amend 31 J-Routes, 1 Q-Route



ZDC High Altitude Sector Changes

- Stratify Sectors 09 & 50 to create <u>new</u> Sector 30
- Resulting 3 Sectors
 - 09 DIW Ultra High
 - FL360-390
 - 50 YKT Ultra High
 - FL360-390
 - 30 MSN Super High
 - FL400-ABV
- To help reduce sector workload/complexity and improve sector throughput





How We Will Ensure Success

- Ensure best use of new routes by completing extensive route stitching
- 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
- Increase time for industry to complete flight planning/programming and check charts/databases for errors
 - NOTAM new procedures NA to suppress new routes from 9/10/2020-11/5/2020
- Delete Jet Routes on day of implementation (11/5/2020)



How We Will Ensure Success

Ensure usage of correct routes during implementation

 Coordinate with other facilities (i.e. ZOB, ZKC, ZME, ZHU, ZID) to request that flights be left on routes (no shortcuts during phase-in)

Manage sector complexity during main implementation phase-in

- Coordinate short-term implementation Traffic Management
 Initiatives (TMIs) with the FAA Command Center and Industry
- Manage special events affecting the implementation

Resolve implementation issues rapidly

- Utilize Go-Teams starting on implementation day to monitor the operation and intervene as the situation dictates
- Utilize an Open Conference Bridge to communicate issues realtime and assist in timely resolution

Implementation TMIs

- Utilized up to 2 weeks during the implementation period
- To provide controllers and aircrews the opportunity to become accustomed to the new routes and changes to the airspace while ensuring a safe operation
- Intended to reduce complexity and redistribute volume across all available airspace
- TMIs being considered to reduce the need for AFPs
 - Reroutes to the west of ZDC i.e.J6, altitude capping or tunneling
- Voluntary actions to reduce need for TMIs
 - Use of overwater routes, filing at/above FL400, filing lower altitudes on shorter routes, filing routes west or north of ZDC
- TMIs to be re-evaluated on a daily basis



Preferred IFR Routes

- Published Preferred IFR Routes to be updated each chart date
 - Should be used to the maximum extent possible
 - NEC ACR will share anticipated changes as soon as practical
- Route stitching document(s) including non-published routes provided by NEC ACR should be utilized only when Published Preferred IFR Routes not available
- Coded Departure Routes (CDRs) and Playbook Routes to be updated each chart date, but should not be utilized without specific coordination

How You Can Help

Share this briefing with others

- Share inside your organization
- Utilize briefing(s) for route planners & dispatchers

Provide feedback and suggestions

- Help identify issues/mitigations not yet identified
- Direct questions/comments to NEC ACR

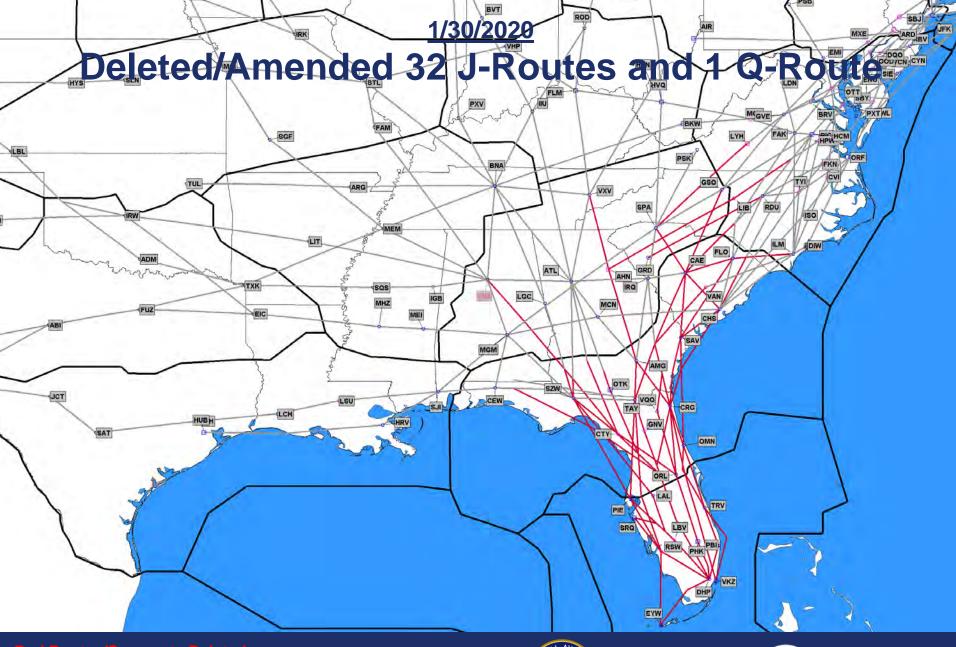
Watch for additional information

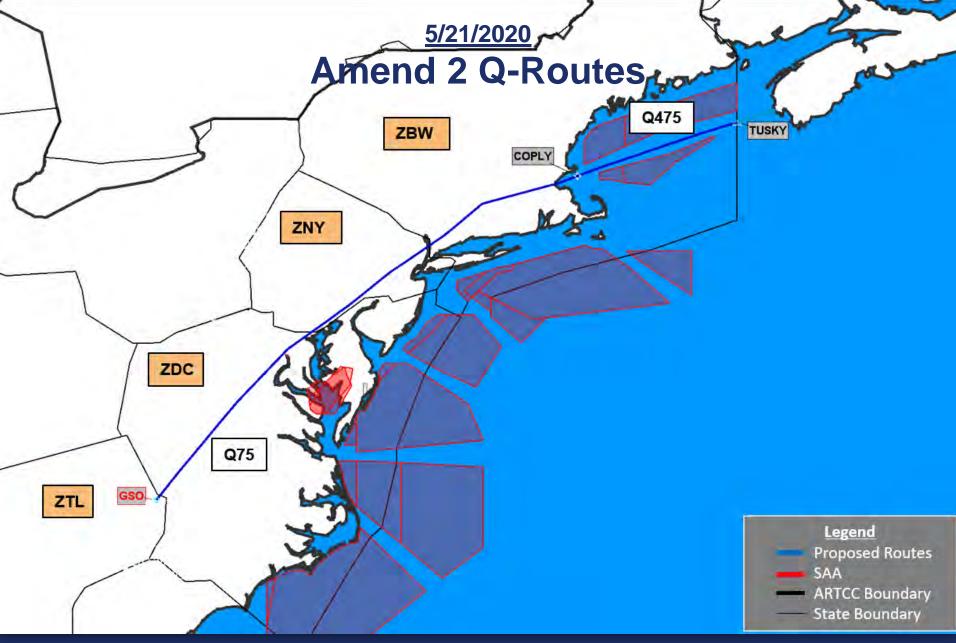
Flight Planners Telcon, NCF briefings, NBAA, CNS Taskforce, etc.

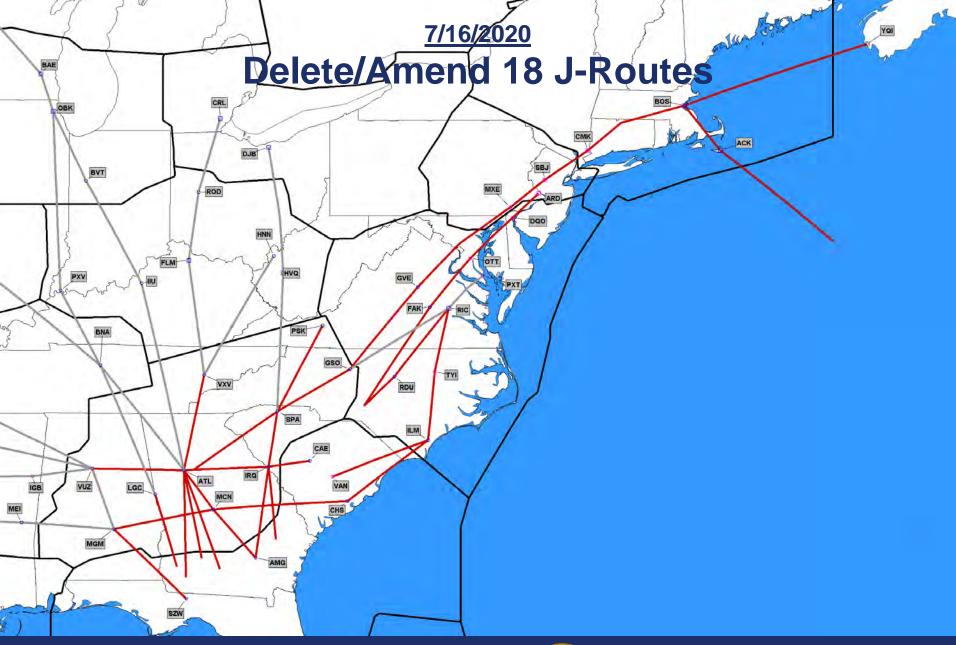
Plan resources for route planning & programming

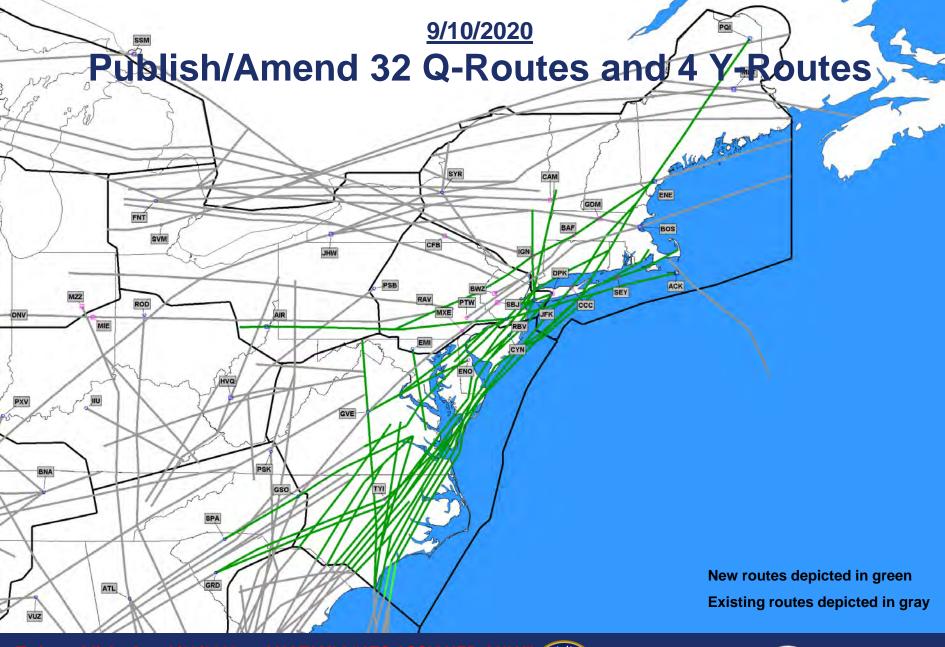
- Especially after the 9/10/2020 publication of new routes
- Be ready to utilize the new routes
 - Beginning on 11/5/2020 flight plan the new routes











9/10/2020

NOTAM NA Completely New Q101, Q107, Q111, Q115, Q117, Q119, Q127, Q129, Q131, Q133, Q167, Q220, Q419, Q430, Q437, Q439, Q445, Q450, Q481

NOTAM "ATC Assigned Only": Segments of Q-Routes Specified Below

ROUTES BEING NOTAM'd "ATC ASSIGNED ONLY" on SEPTEMBER 10, 2020
Q22 BEARI, VA TO FOXWD, CT ATC ASSIGNED ONLY.

Q54 NO NOTAM TO BE ISSUED.

Q60 JAXSN, VA TO HURTS, VA ATC ASSIGNED ONLY.

Q64 TAR RIVER, NC (TYI) VORTAC TO SAWED, VA ATC ASSIGNED ONLY.

Q85 SMPRR, NC TO CRPLR, VA ATC ASSIGNED ONLY.

Q87 LCAPE, SC TO HURTS, VA ATC ASSIGNED ONLY.

Q97 ELLDE, NC TO PRESQUE ISLE, ME (PQI) VOR/DME ATC ASSIGNED ONLY.

Q99 POLYY, NC TO HURLE, VA ATC ASSIGNED ONLY.

Q101 SKARP, NC TO DLAAY, MD ATC ASSIGNED ONLY.

Q107 GARIC, NC TO HURTS, VA ATC ASSIGNED ONLY.

Q109 LAANA, NC DFENC, NC ATC ASSIGNED ONLY.

Q111 ZORDO, NC TO ALXEA, VA ATC ASSIGNED ONLY.

Q113 SARKY, SC TO RIDDN, VA ATC ASSIGNED ONLY.

Q115 GORDONSVILLE, VA (GVE) VORTAC TO ROBBINSVILLE, NJ (RBV) VORTAC ATC ASSIGNED ONLY.

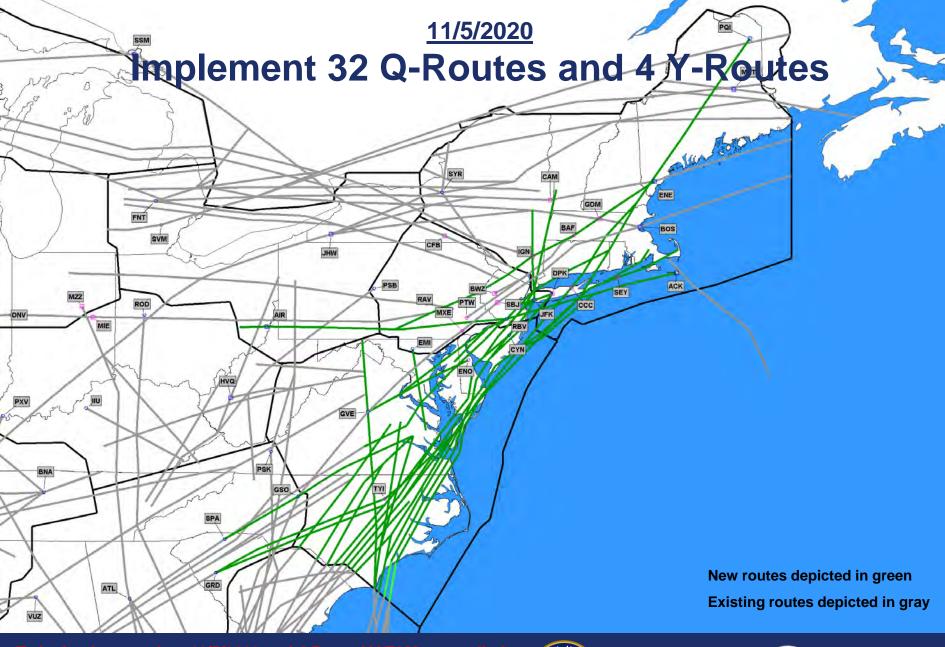
Q117 YLEEE, NC TO SAWED, VA ATC ASSIGNED ONLY.

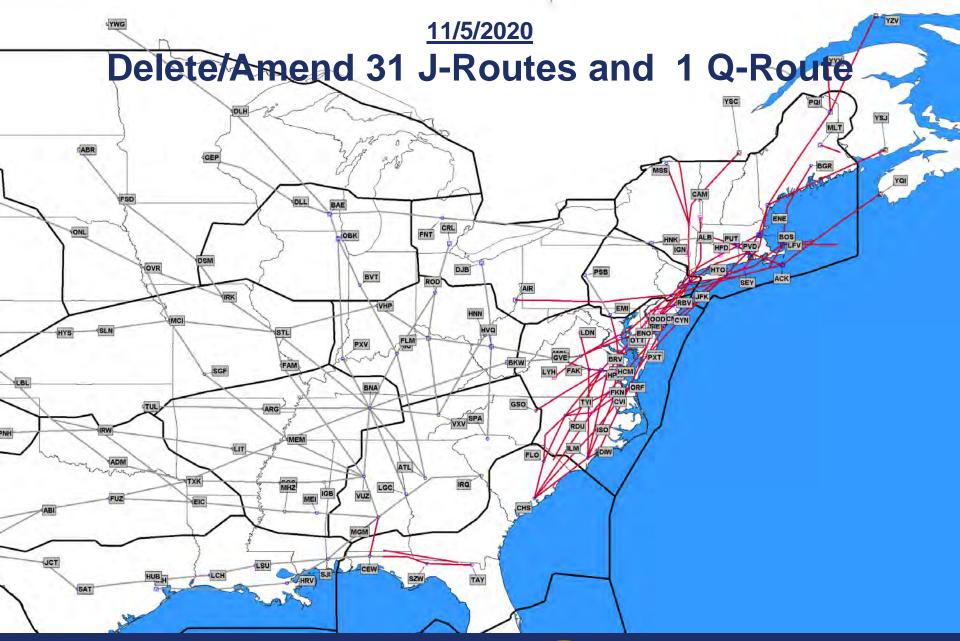
Q119 SCOOB, VA TO WESTMINSTER, MD (EMI) VORTAC ATC ASSIGNED ONLY.

Q127 GORDONSVILLE, VA (GVE) VORTAC TO SMYRNA, DE (ENO) VORTAC ATC ASSIGNED ONLY.

Q129 GARIC, NC TO PYTON, MD ATC ASSIGNED ONLY.

ZILLS, NC TO ZJAAY, MD ATC ASSIGNED ONLY.
CHIEZ, NC TO PONCT, NY ATC ASSIGNED ONLY.
RAPZZ, NC TO CUDLE, NC ATC ASSIGNED ONLY.
ZJAAY, MD TO SSOXS, MA ATC ASSIGNED ONLY.
RIFLE, NY TO LARIE, MA ATC ASSIGNED ONLY.
MRPIT, NC TO WHITE, NJ ATC ASSIGNED ONLY.
BROSS, MD TO DEER PARK, NY (DPK) VOR/DME ATC ASSIGNED ONLY.
ZANDR, OH TO NANTUCKET, MA (ACK) VOR/DME ATC ASSIGNED ONLY.
VILLS, NJ TO KOSPE, VT ATC ASSIGNED ONLY.
BRIGS, NJ TO PRESQUE ISLE, ME (PQI) VOR/DME ATC ASSIGNED ONLY.
PAACK, NC TO KYSKY, NY ATC ASSIGNED ONLY.
HNNAH, NJ TO DEER PARK, NY (DPK) VOR/DME ATC ASSIGNED ONLY.
NO NOTAM TO BE ISSUED.
CONFR, MD TO DEER PARK, NY (DPK) VOR/DME ATC ASSIGNED ONLY.
SAGGY, OA TO CHIEZ, NC ATC ASSIGNED ONLY.
IDOLS, OA TO SKARP, NC ATC ASSIGNED ONLY.
IDOLS, OA TO SKARP, NC ATC ASSIGNED ONLY.
IDOLS, OA TO SKARP, NC ATC ASSIGNED ONLY.





Detailed Route Slides

Click on a link to go to graphic depiction

- 1/30/2020 (33) J-Route/Q-Route Deletions/Amendments
 - Amend J4, J20, J37, J41, J43, J45, J46, J51, J52, J53, J55, J73, J75, J79, J81, J85, J89, J91, J121, J151, J165, J174, J207, J209, J210
 - Delete J47, J103, J113, J119, J208, J614, J616, Q112
- 5/21/2020 (2) Q-Route Amendments
 - Amend <u>Q75</u>, <u>Q475</u>
- 7/16/2020 (8) J-Route Deletions/Amendments
 - Amend <u>J14*</u>, <u>J20</u>, <u>J41</u>, <u>J43</u>, <u>J45</u>, <u>J52*</u>, <u>J73</u>, <u>J85</u>, <u>J89</u>, <u>J91</u>
 - Delete <u>J40</u>, <u>J51</u>, <u>J53</u>, <u>J75</u>, <u>J81</u>, <u>J97</u>, <u>J210</u>, <u>J575</u>
- 9/10/2020 (32) Q-Route/Y-Route Additions/Amendments
 - Publish Q101, Q107, Q111, Q115, Q117, Q119, Q127, Q129, Q131, Q133, Q167, Q220, Q419, Q430, Q437,
 Q439, Q445, Q450, Q481
 - Amend Q22, Q54, Q60, Q64, Q85, Q87, Q97, Q99, Q109, Q113, Q135, Q409, Q480, Y291, Y309, Y319, Y323
- 11/5/2020 (32) J-Route/Q-Route Deletions/Amendments
 - Amend <u>J2</u>, <u>J14</u>*, <u>J24</u>, <u>J37</u>, <u>J39</u>, <u>J42</u>, <u>J52</u>*, <u>J61</u>, <u>J68</u>
 - Delete <u>J55</u>, <u>J62</u>, <u>J79</u>, <u>J109</u>, <u>J121</u>, <u>J150</u>, <u>J165</u>, <u>J174</u>, <u>J191</u>, <u>J193</u>, <u>J207</u>, <u>J209</u>, <u>J222</u>, <u>J225</u>, <u>J230</u>, <u>J506</u>, <u>J561</u>, <u>J563</u>, <u>J570</u>, <u>J573</u>, <u>J582</u>, <u>J585</u>, <u>Q108</u>

Note: J14 and J52 being amended on both 7/16/2020 and 11/5/2020

FAA Points of Contact

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770-363-1718

See Detailed Route Slides Below

1/30/2020

Deleted/Amended 32 J-Routes and 1 Q-Route

Amend 25 J-Routes

J4, J20, J37, J41, J43, J45, J46, J51, J52, J53, J55, J73, J75, J79,
 J81, J85, J89, J91, J121, J151, J165, J174, J207, J209, J210

Delete 7 J-Routes

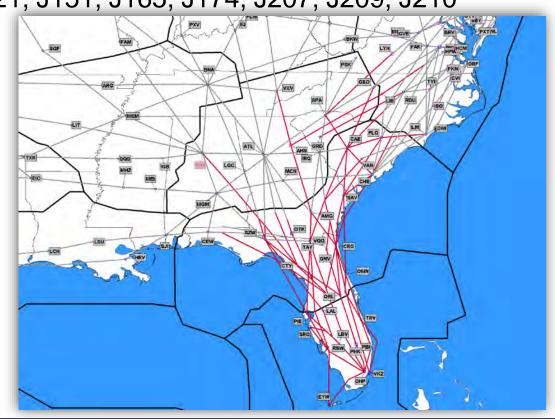
J47, J103, J113, J119,J208, J614, J616

Delete 1 Q-Routes

- Q112

4 ARTCCs

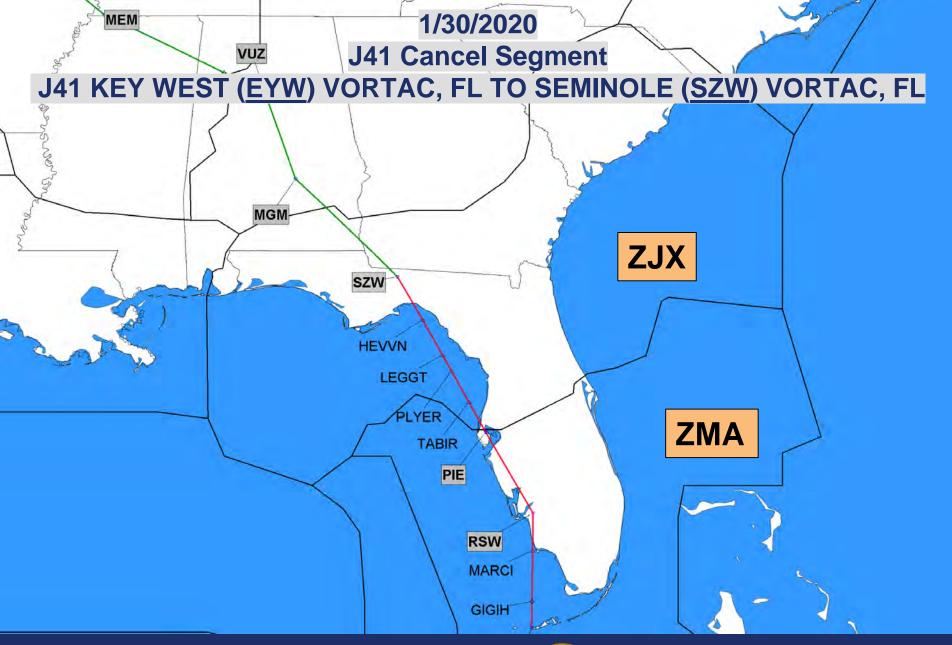
- ZMA, ZJX, ZTL, ZDC



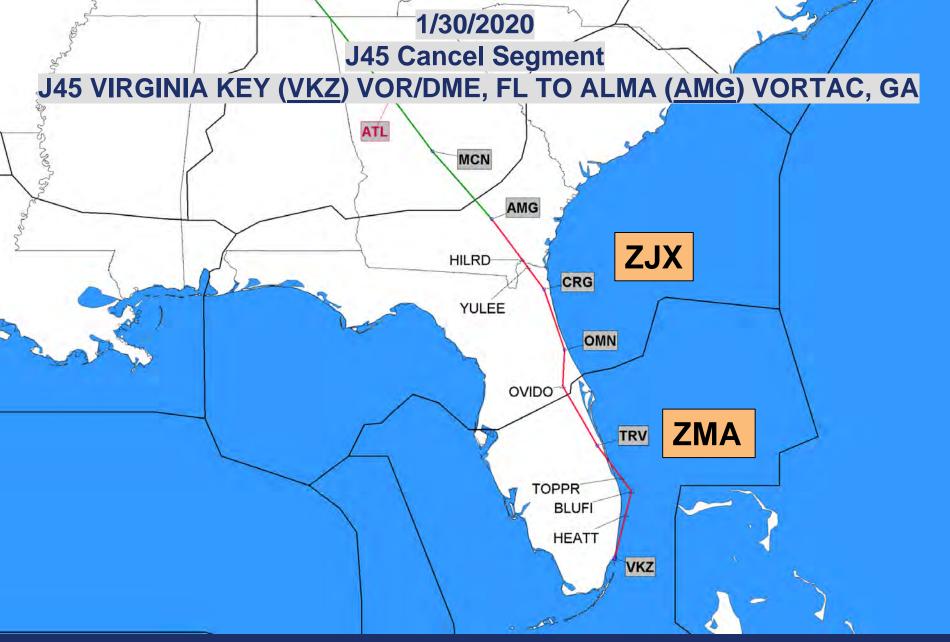










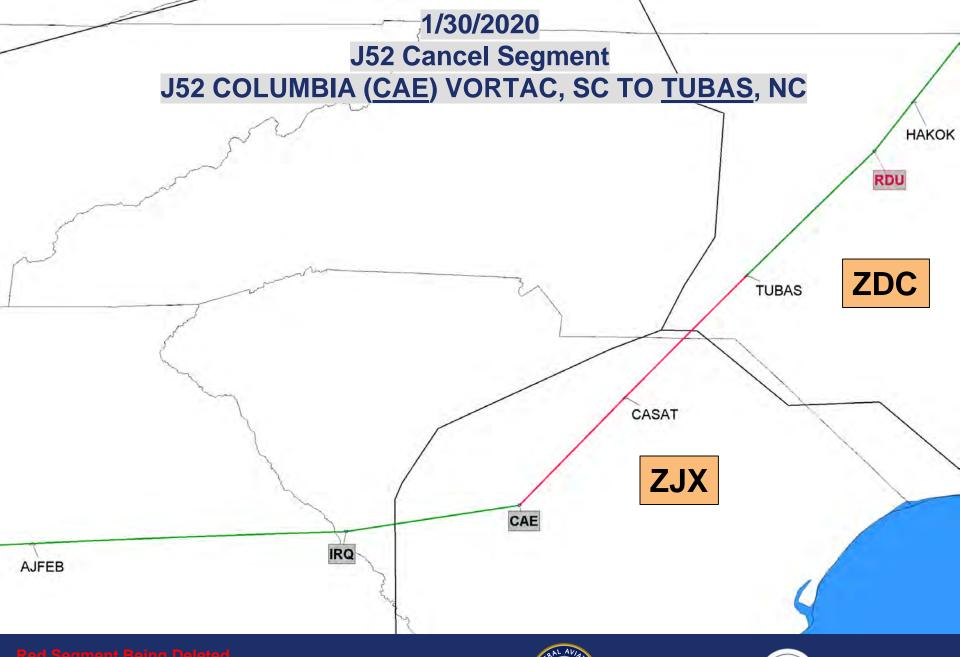


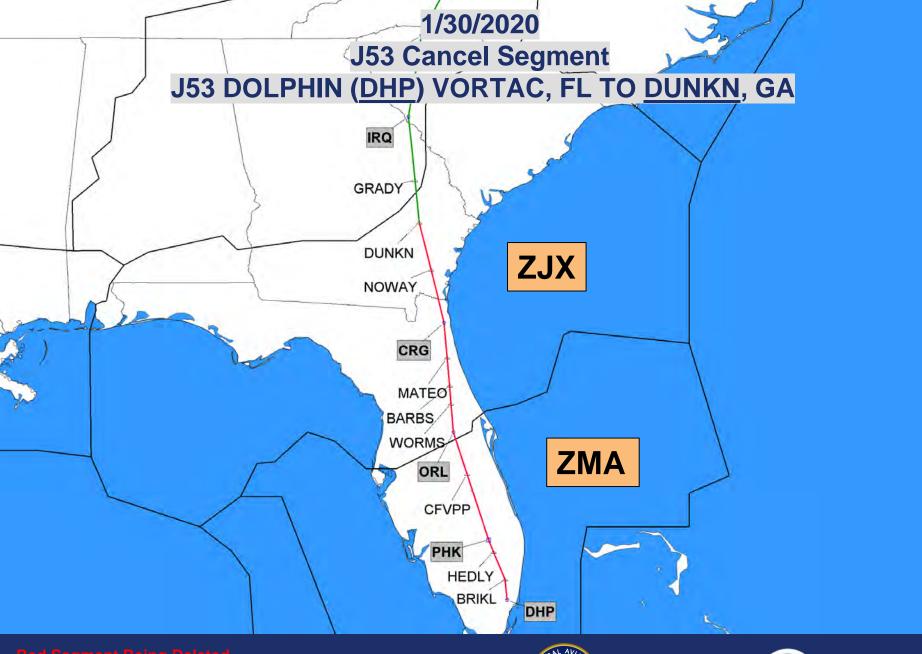




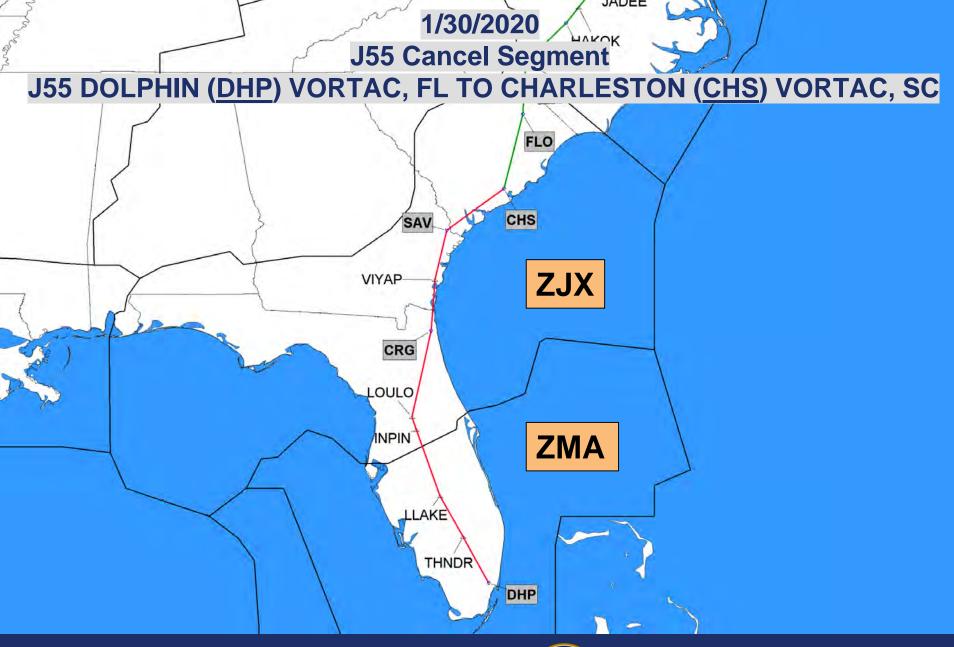


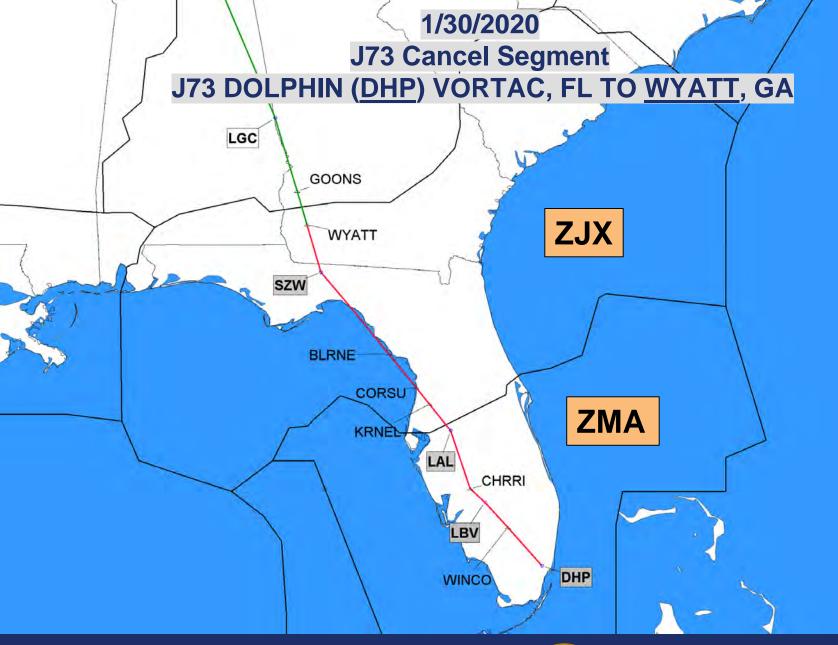






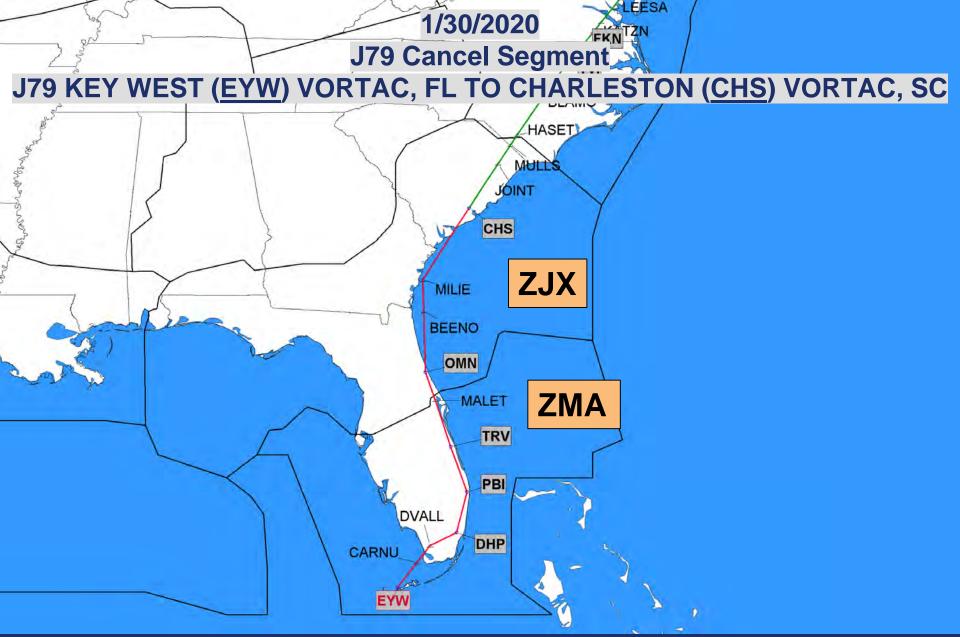




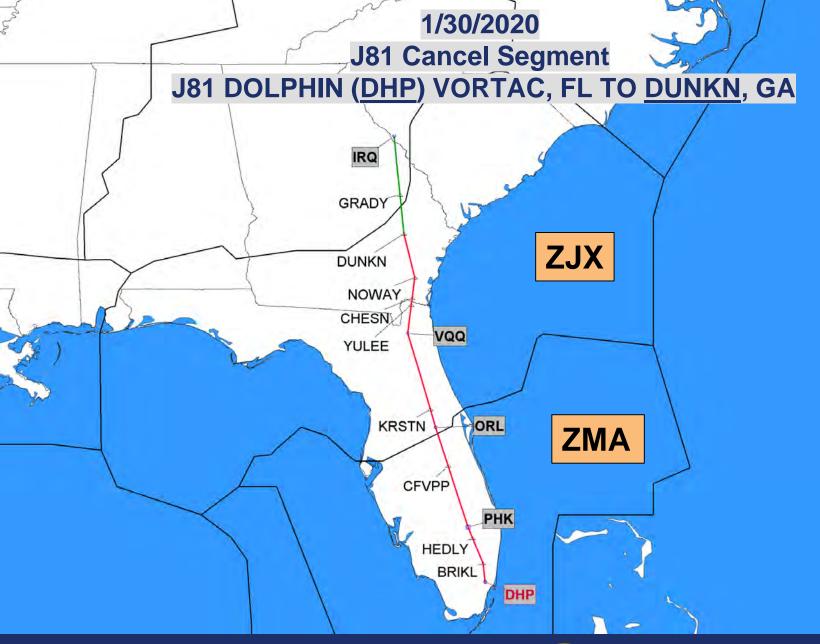


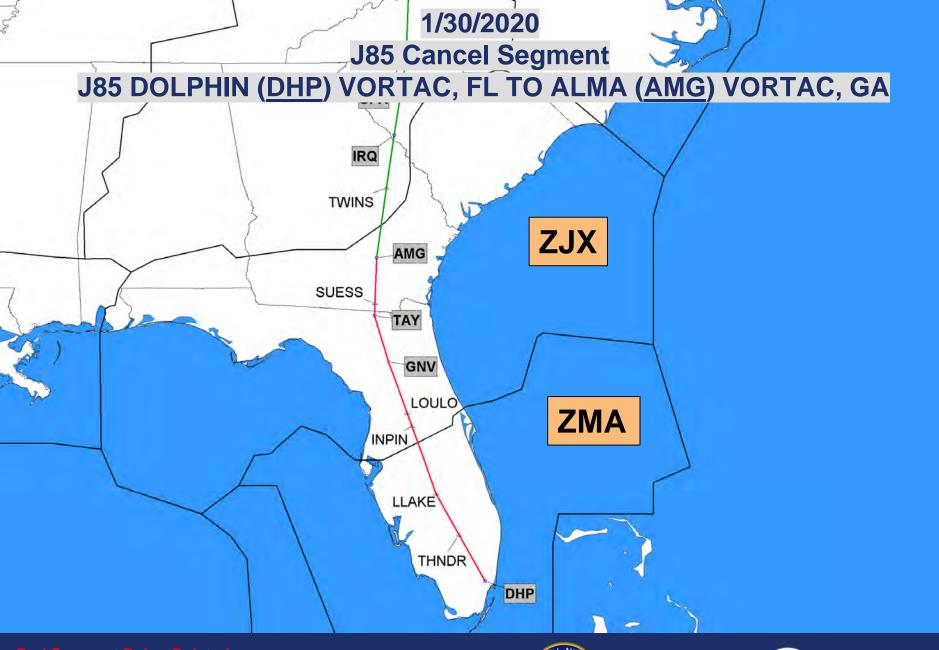


























1/30/2020 **J103 Completely Deleted** J103 ORMOND BEACH (OMN) VORTAC, FL TO SAVANNAH (SAV) VORTAC, GA SAV MILIE ZJX BEENO OMN





Federal Aviation

1/30/2020 **J113 Completely Deleted** J113 VIRGINIA KEY (VKZ) VOR/DME, FL TO CRAIG (CRG) VORTAC, FL ZJX CRG DRUDJ **ZMA** DEARY LLNCH ARKES VKZ







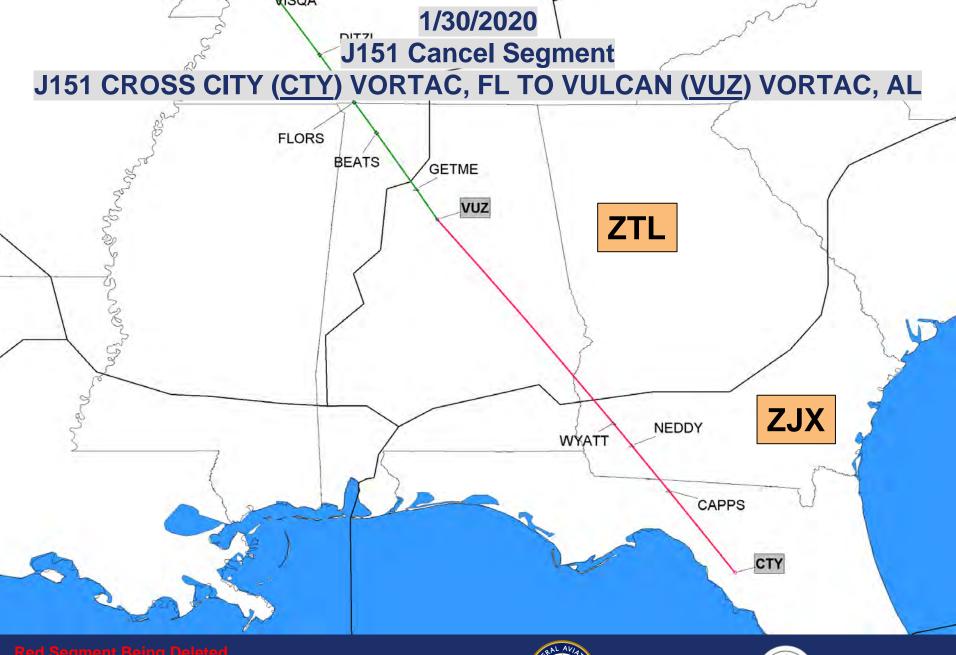
1/30/2020 **J119 Completely Deleted** J119 ST PETERSBURG (PIE) VORTAC, FL TO TAYLOR (TAY) VORTAC, FL TAY ZJX FAGAN CORSU **ZMA** PIE



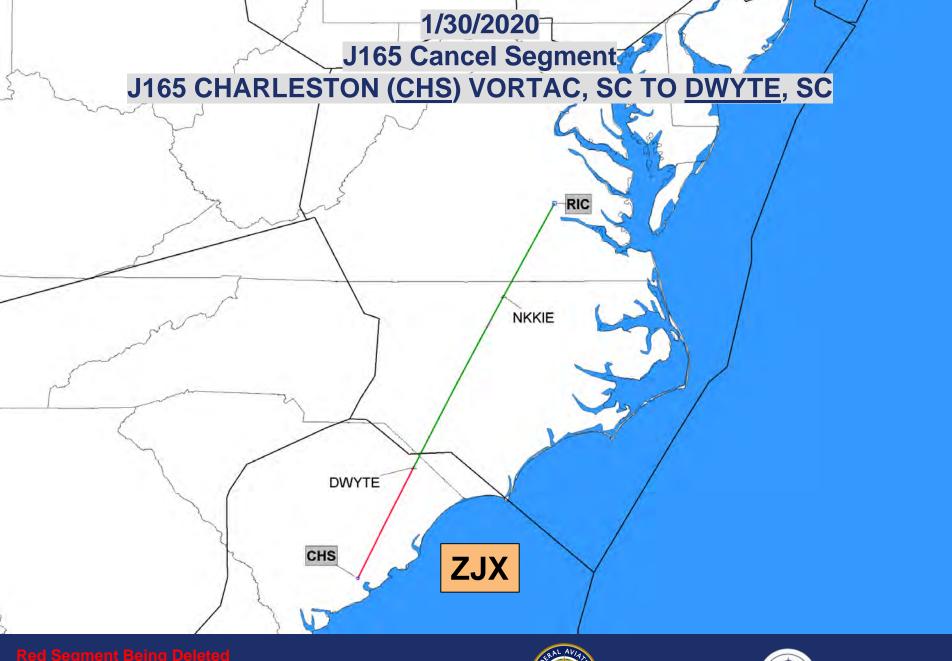




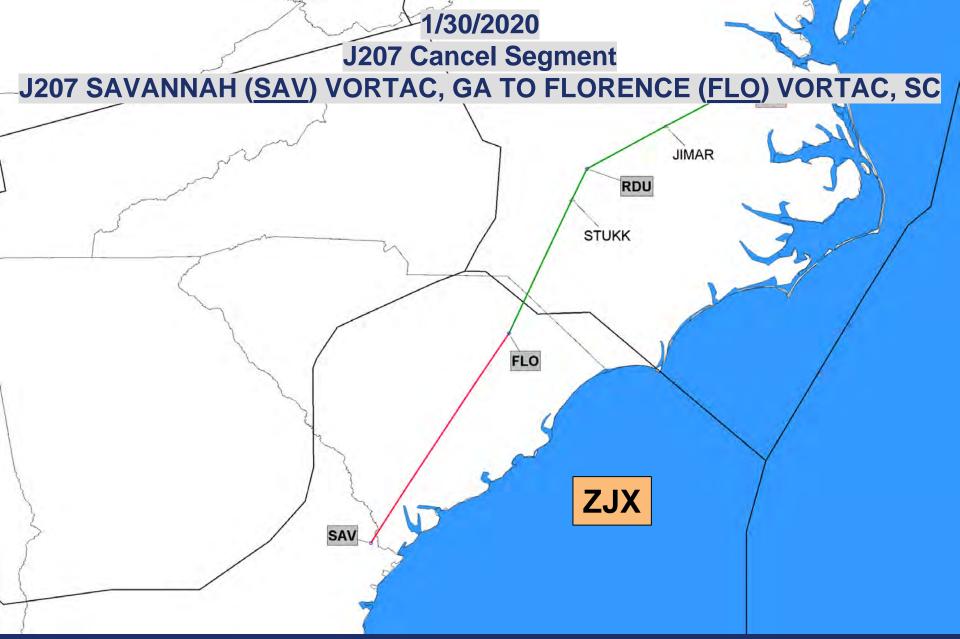




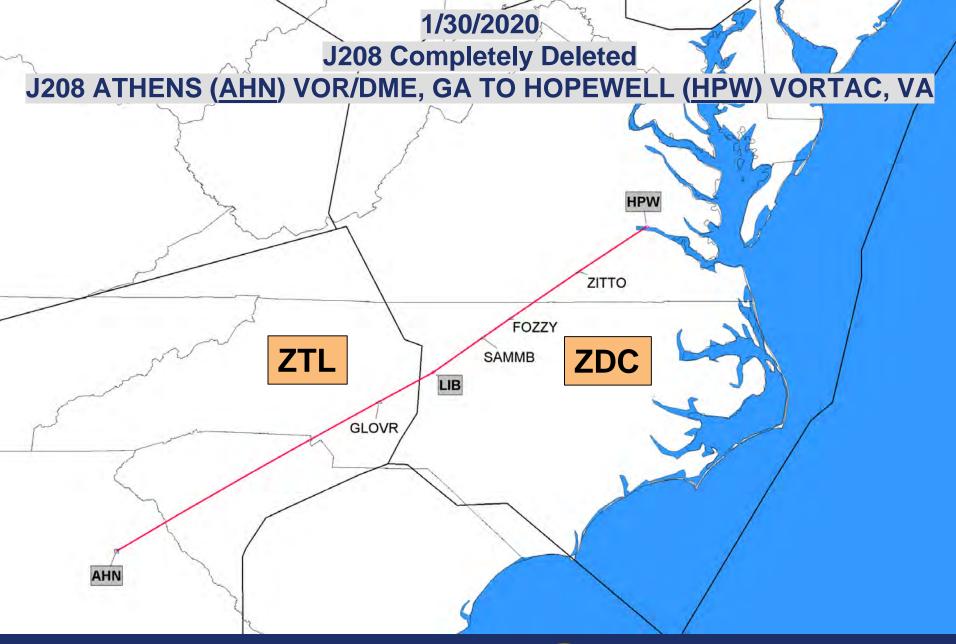








Federal Aviation









1/30/2020 J614 Completely Deleted J614 SARASOTA (SRQ) VOR/DME, FL TO DOLPHIN (DHP) VORTAC, FL SRQ RSW KUBIC DHP **ZMA** OHOFO





1/30/2020 J616 Completely Deleted J616 SARASOTA (SRQ) VOR/DME, FL TO DOLPHIN (DHP) VORTAC, FL SRQ MMDUQ CHRRI LBV WINCO DHP **ZMA**













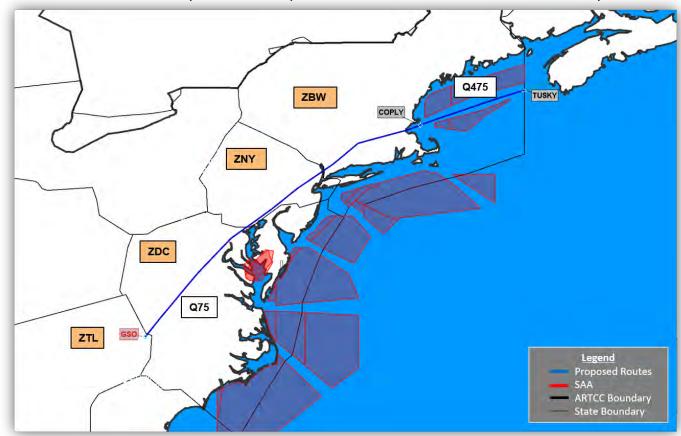
5/21/2020 Amend 2 Q-Routes

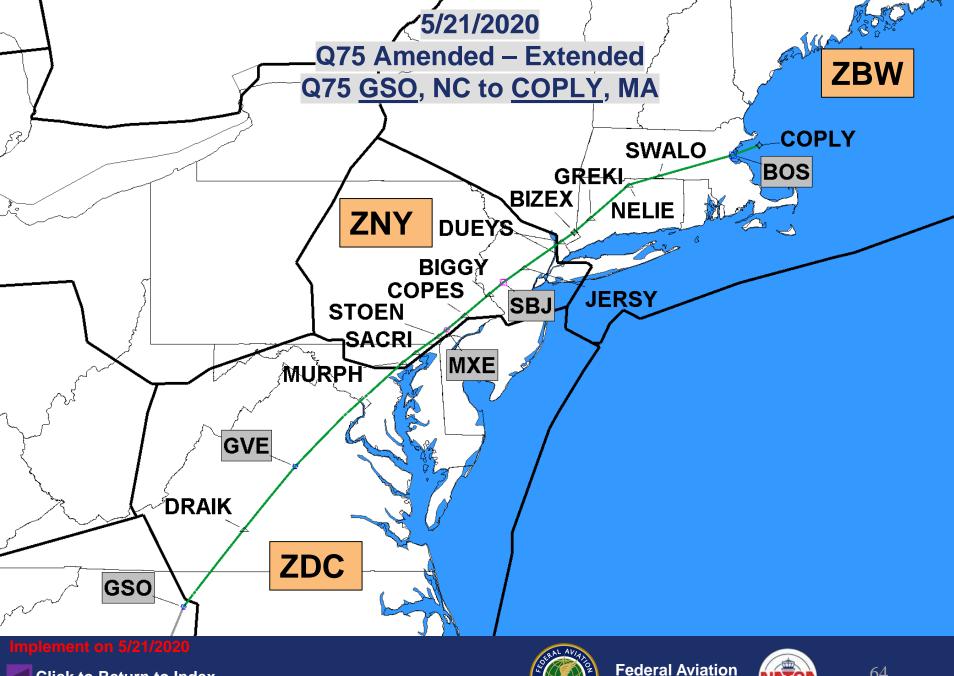
Amend 2 Q-Routes

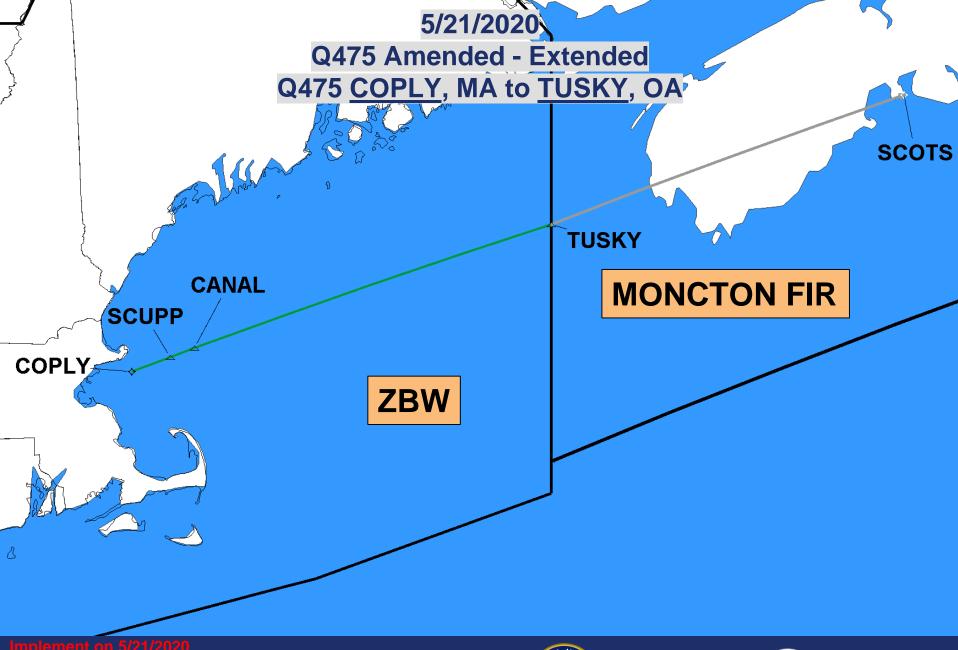
Q-75 (extend GSO-COPLY), Q475 (extend COPLY to TUSKY)

• 4 ARTCCs

- ZTL
- ZDC
- ZNY
- ZBW









7/16/2020

Delete/Amend 18 J-Routes

Amend 10 J-Routes

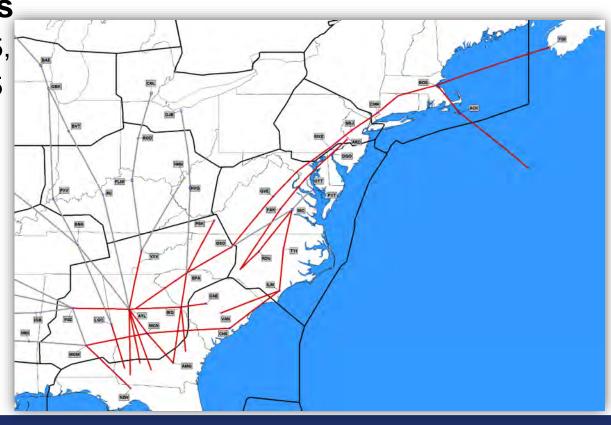
- J14, J20, J41, J43, J45, J52, J73, J85, J89, J91

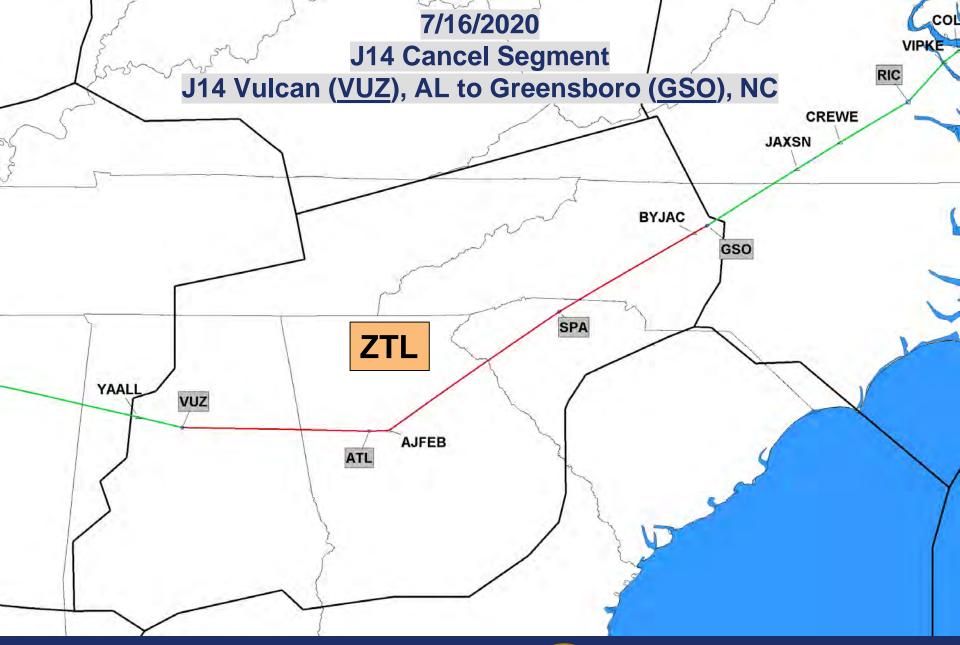
Delete 8 J-Routes

J40, J51, J53, J75,J81, J97, J210, J575

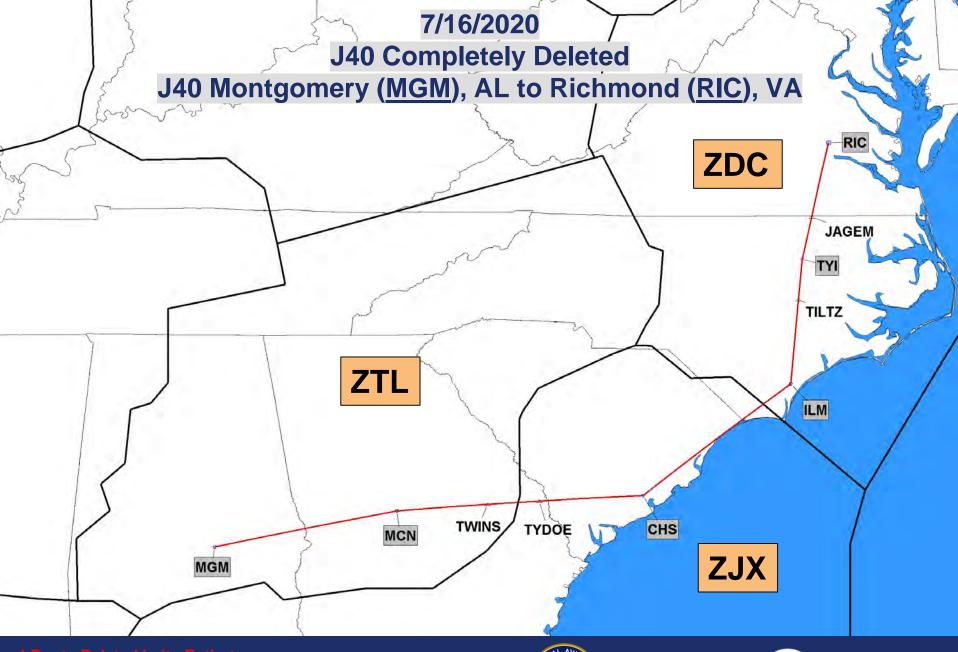
• 5 ARTCCs

- ZJX
- ZTL
- ZDC
- ZNY
- ZBW





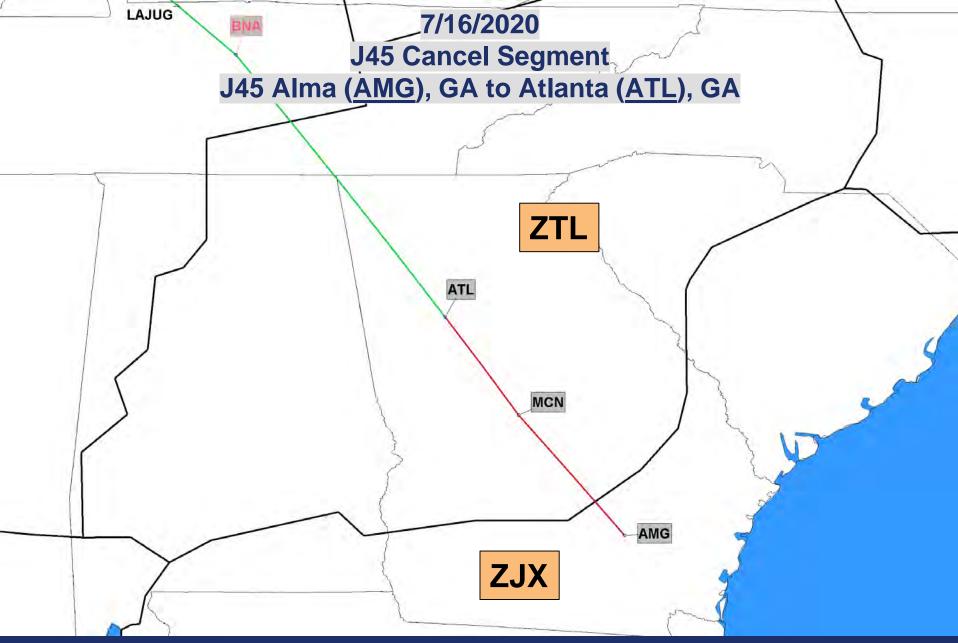




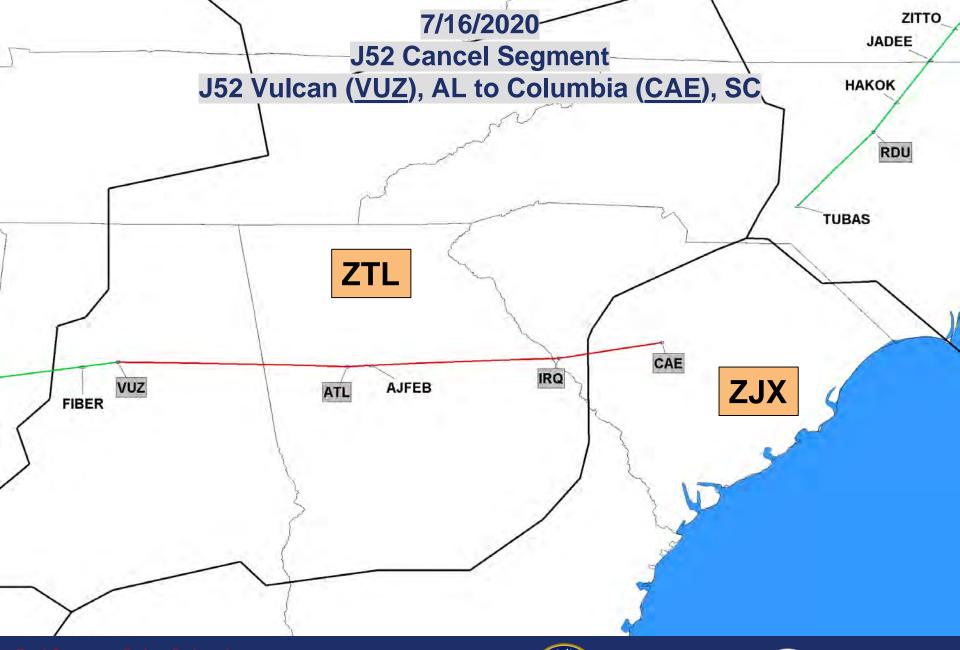


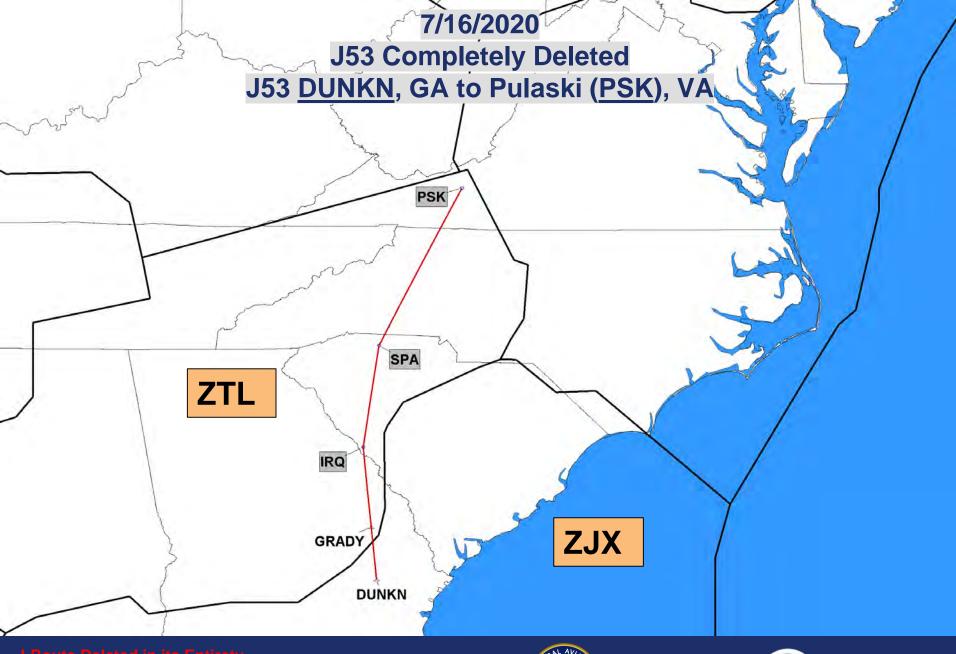






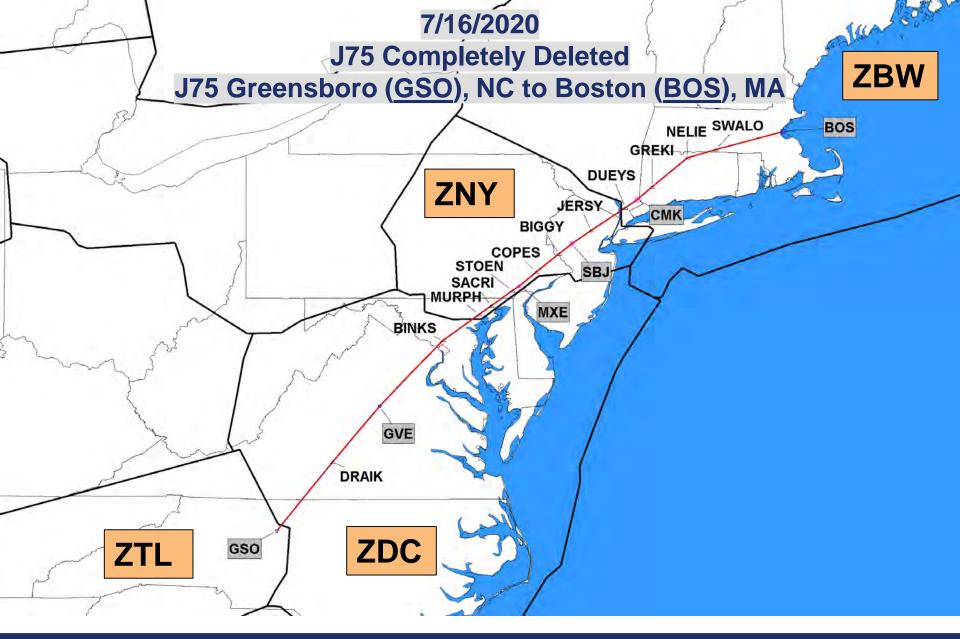


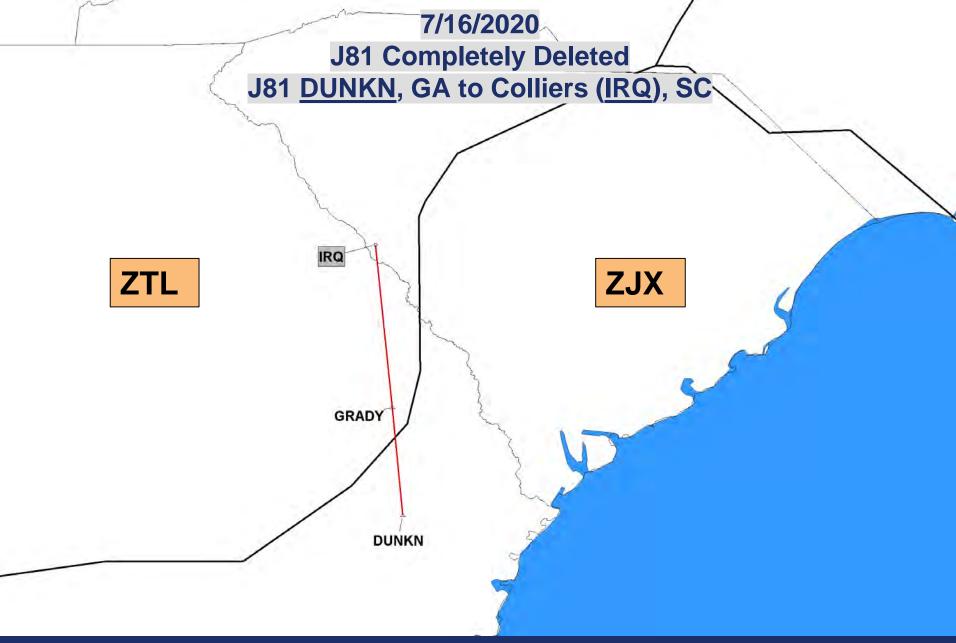




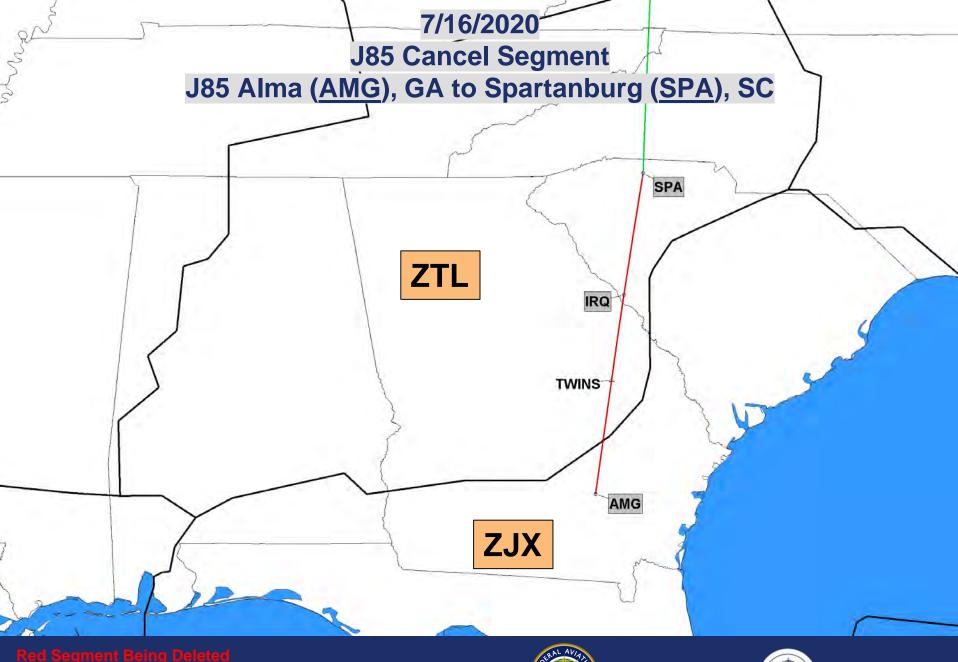




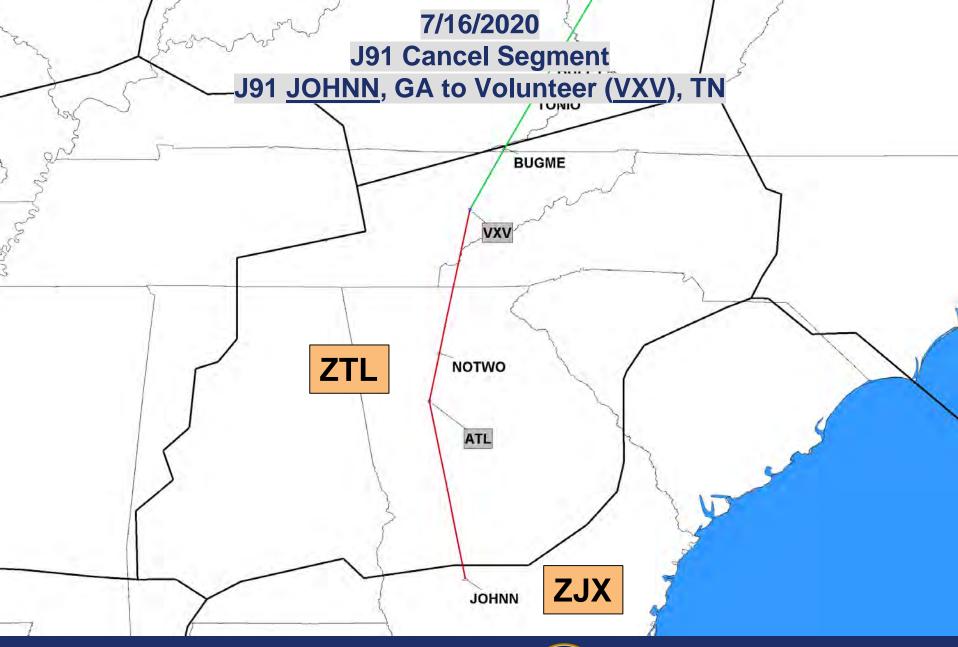




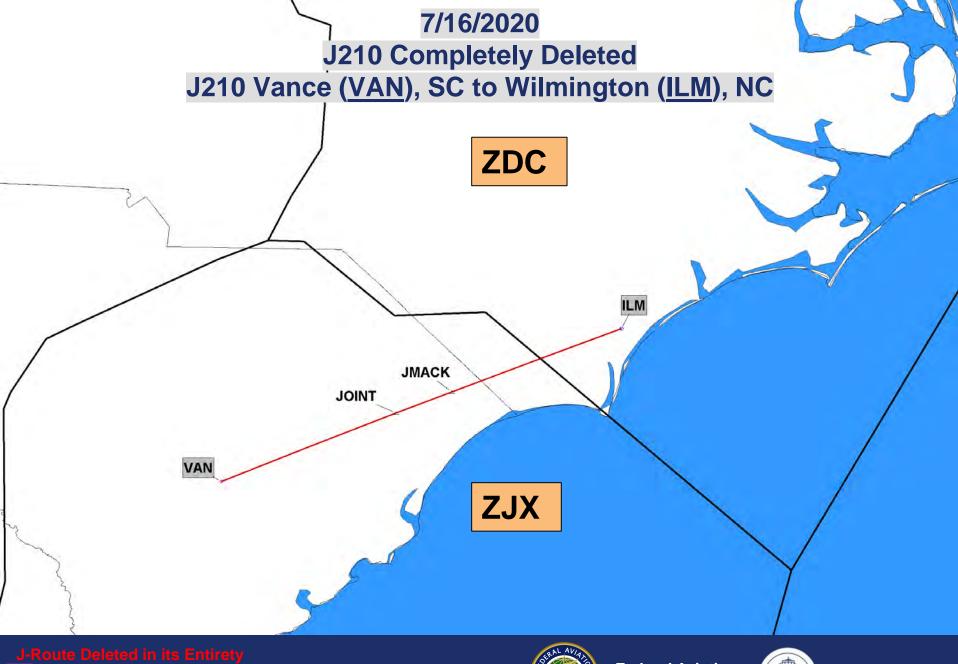


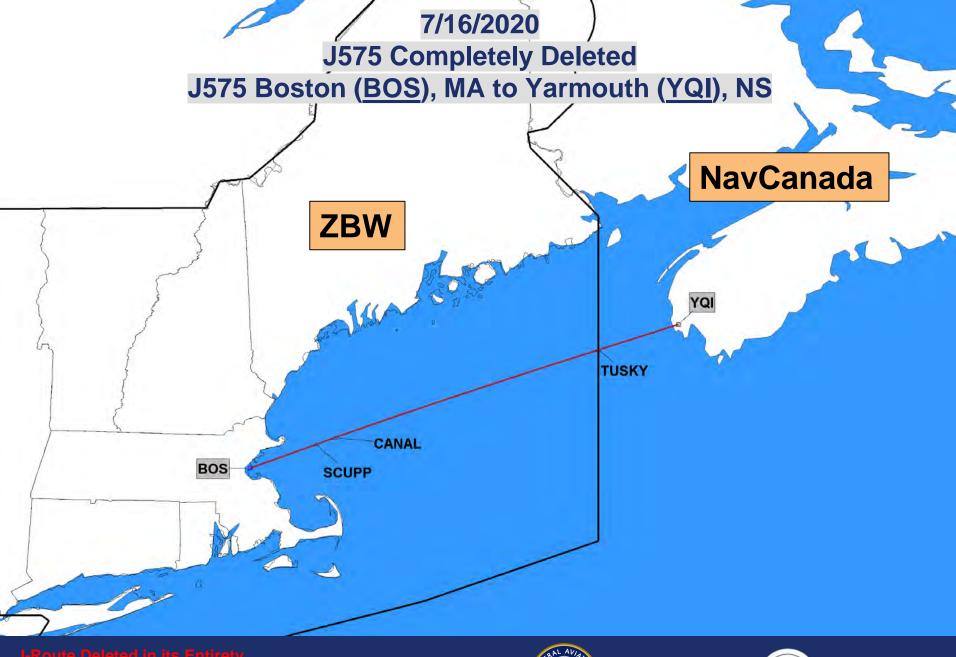












9/10/2020

Publish/Amend 32 Q-Routes and 4 Y-Routes

Publish 19 New Q-Routes

Q101, Q107, Q111, Q115, Q117, Q119, Q127, Q129, Q131, Q133,
 Q167, Q220, Q419, Q430, Q437, Q439, Q445, Q450, Q481

Amend 13 Q-Routes

— Q22, Q54, Q60, Q64, Q85, Q87, Q97, Q99, Q109, Q113, Q135,Q409, Q480

Publish 4 New Y-Routes

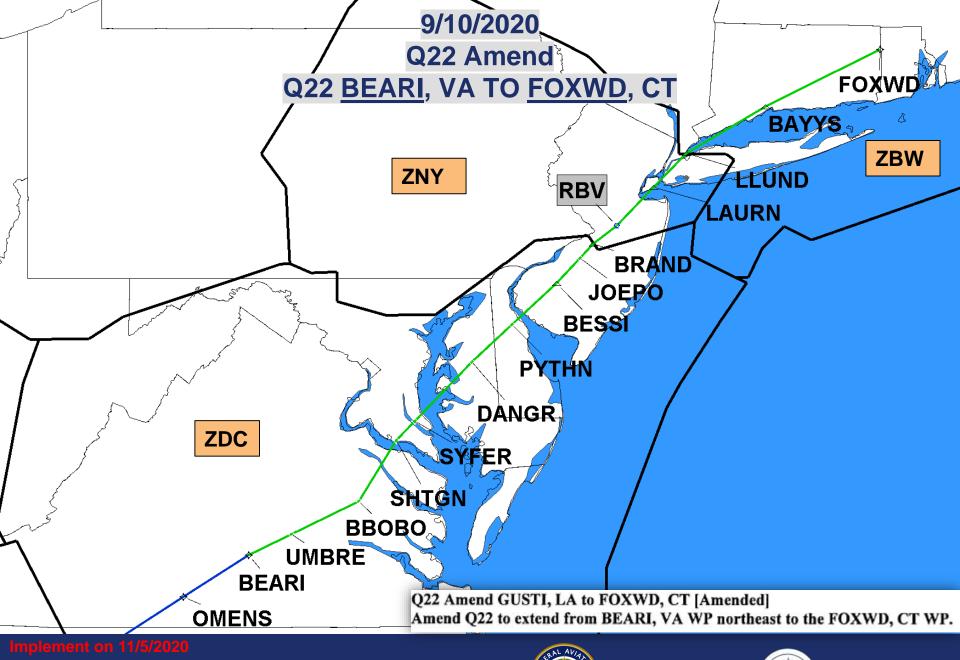
- Y291, Y309, Y319, Y323

Cancel NA NOTAM

6 ARTCCs

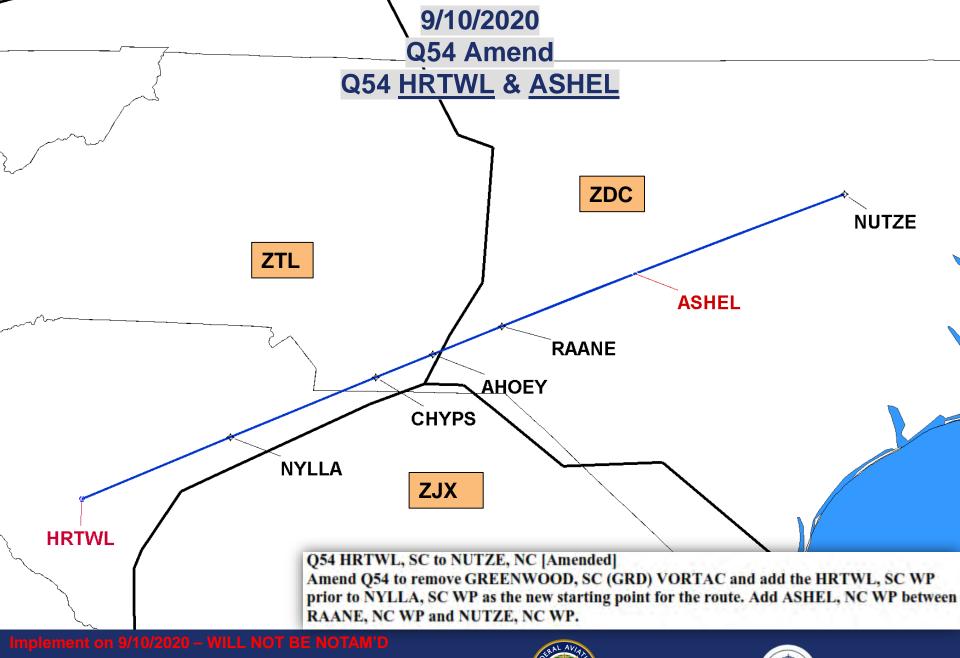
ZJX, ZTL, ZDCZNY, ZBW, ZOB







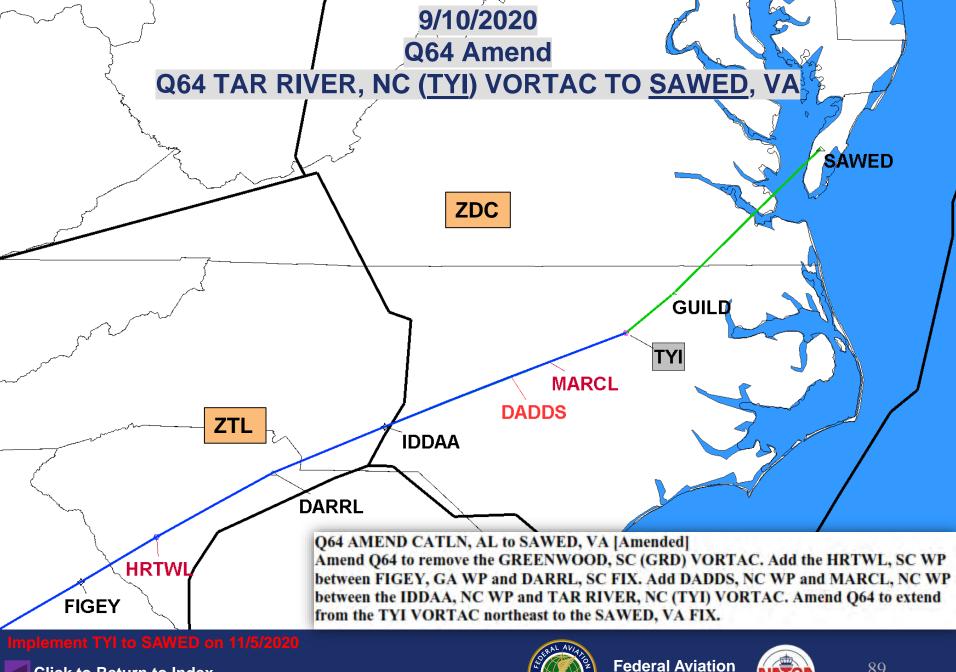
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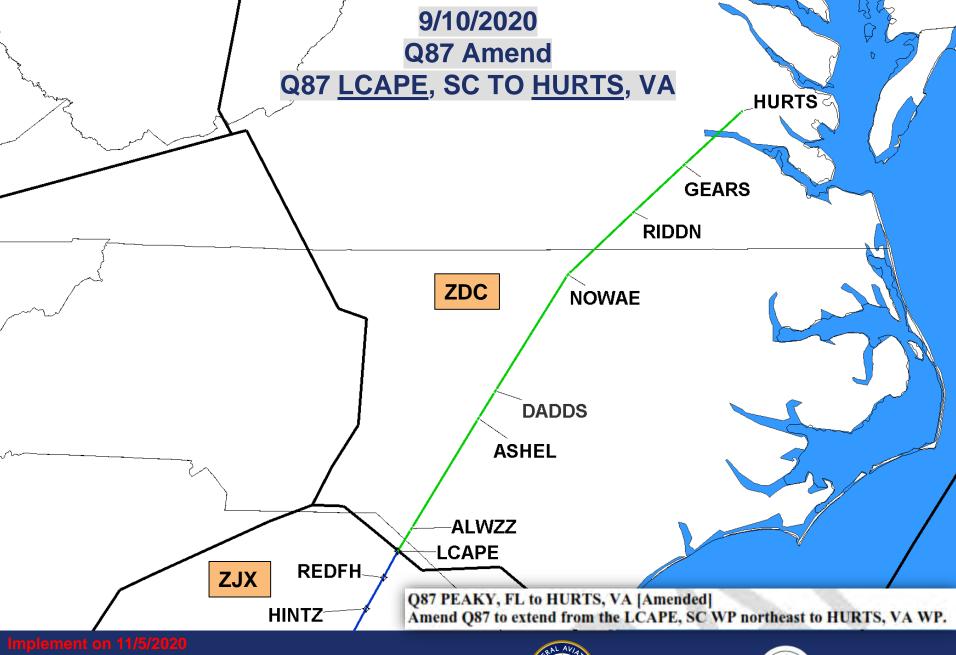






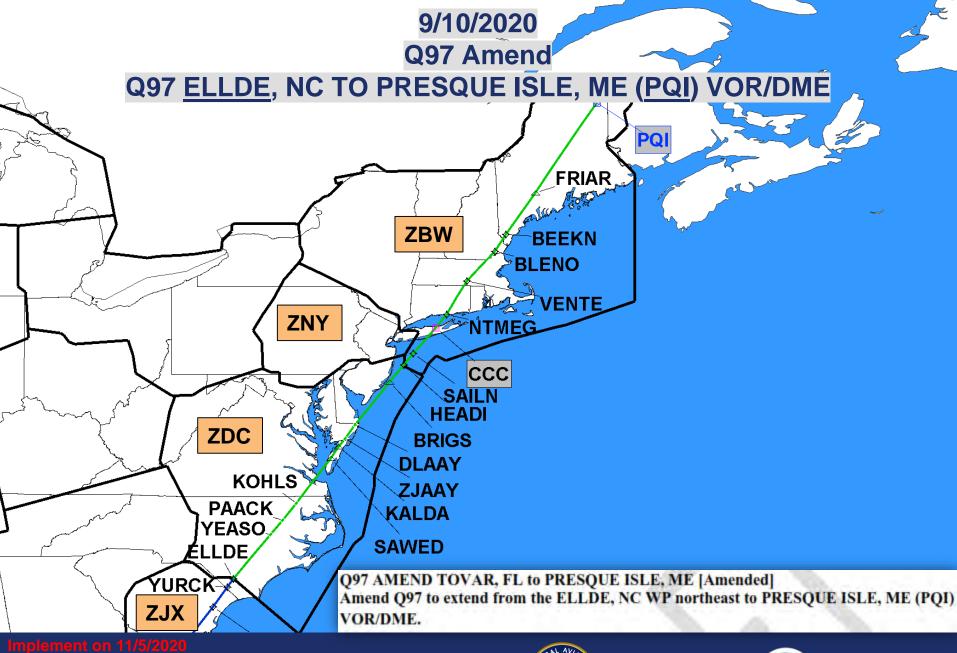








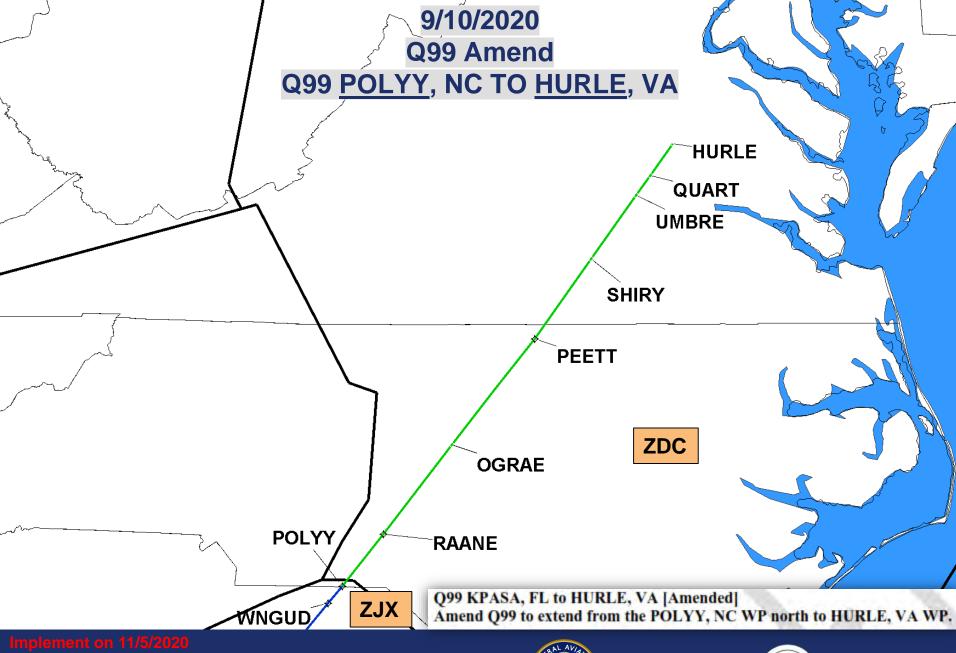








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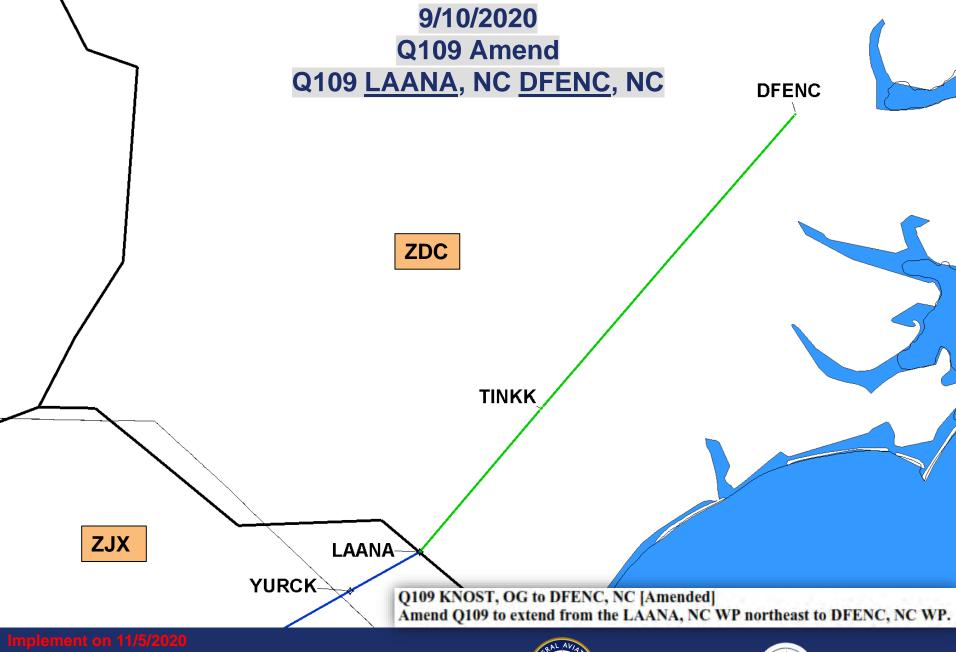












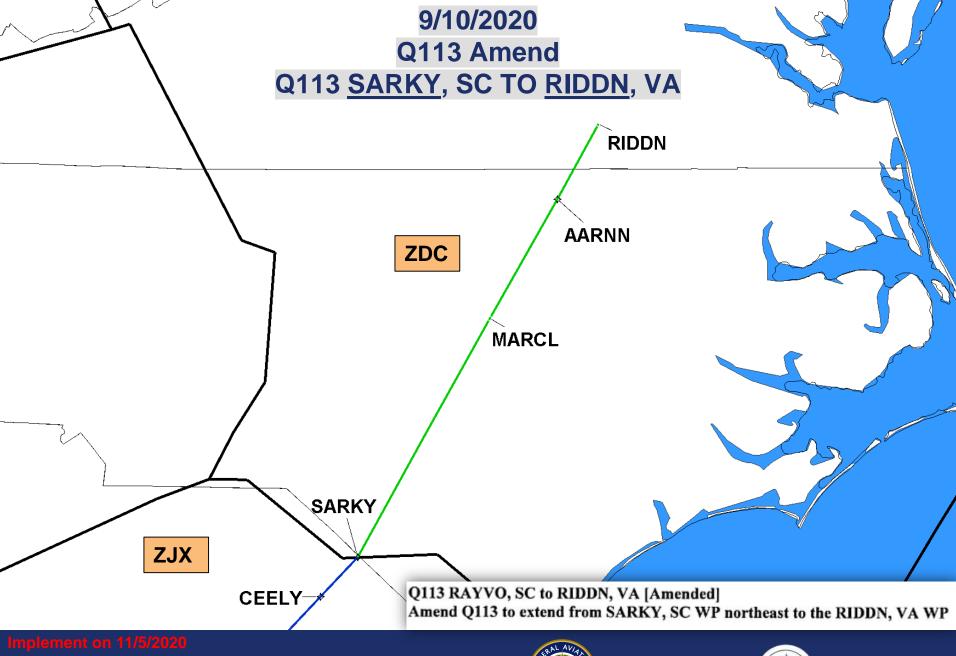
































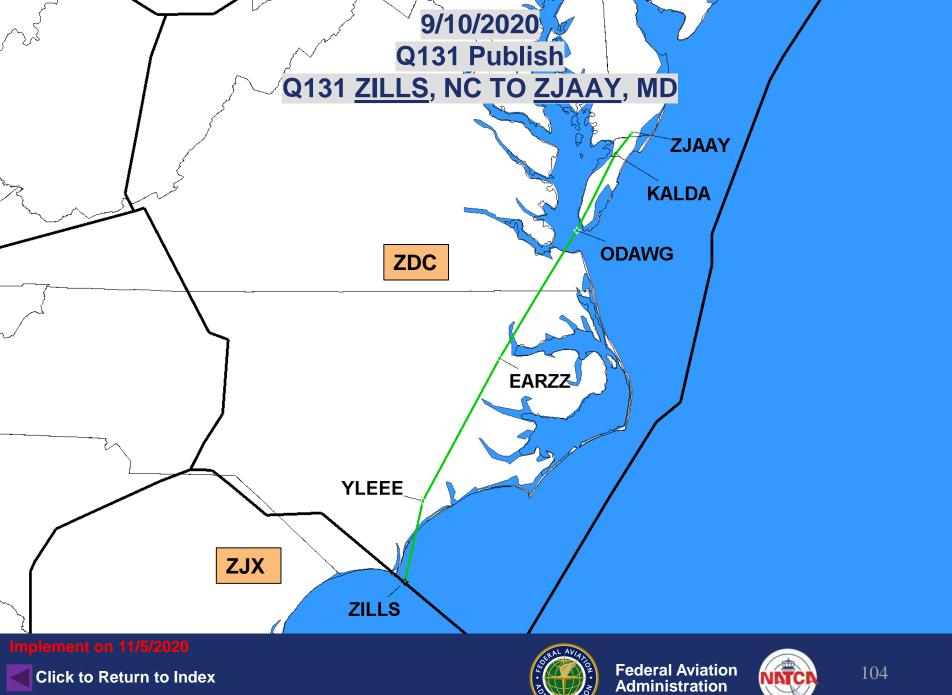












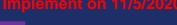










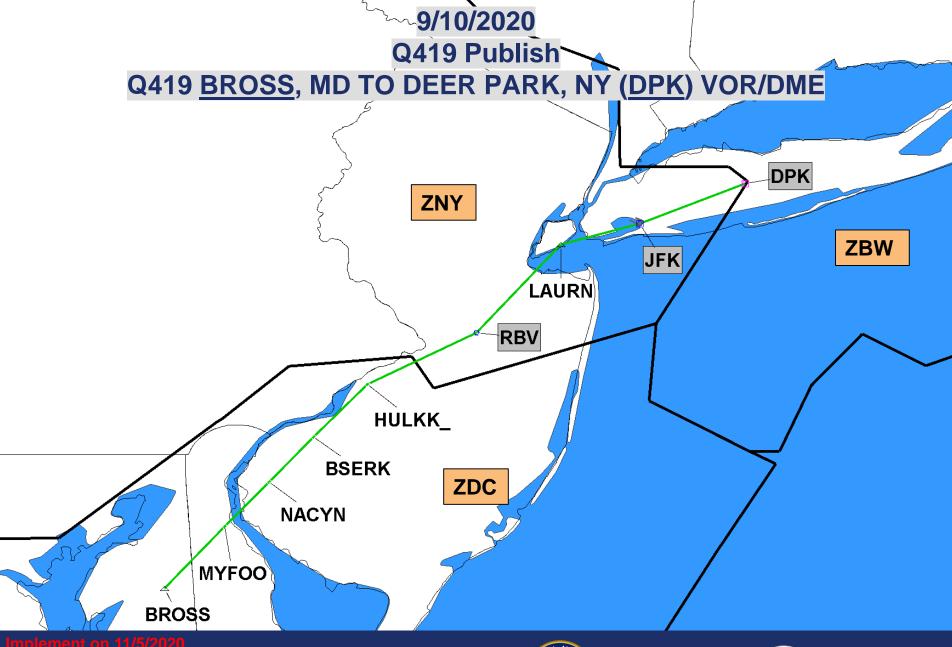


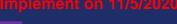
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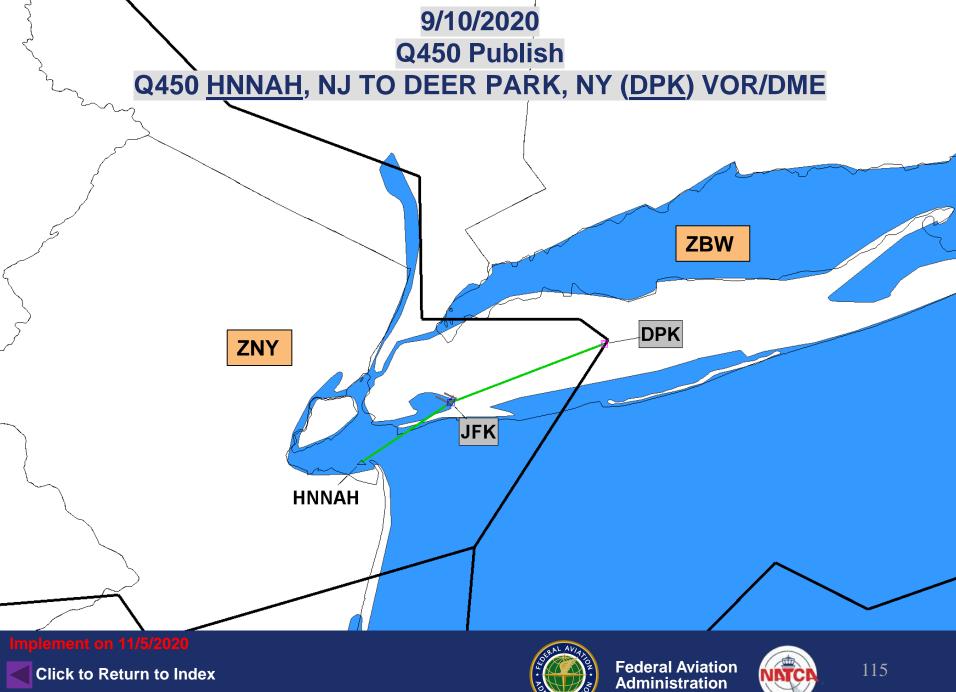


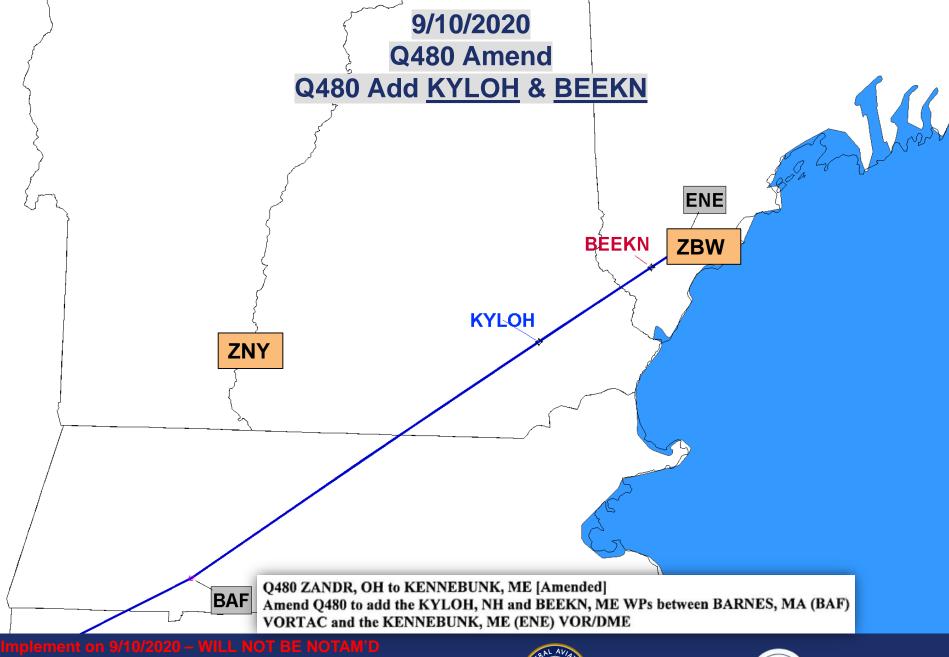














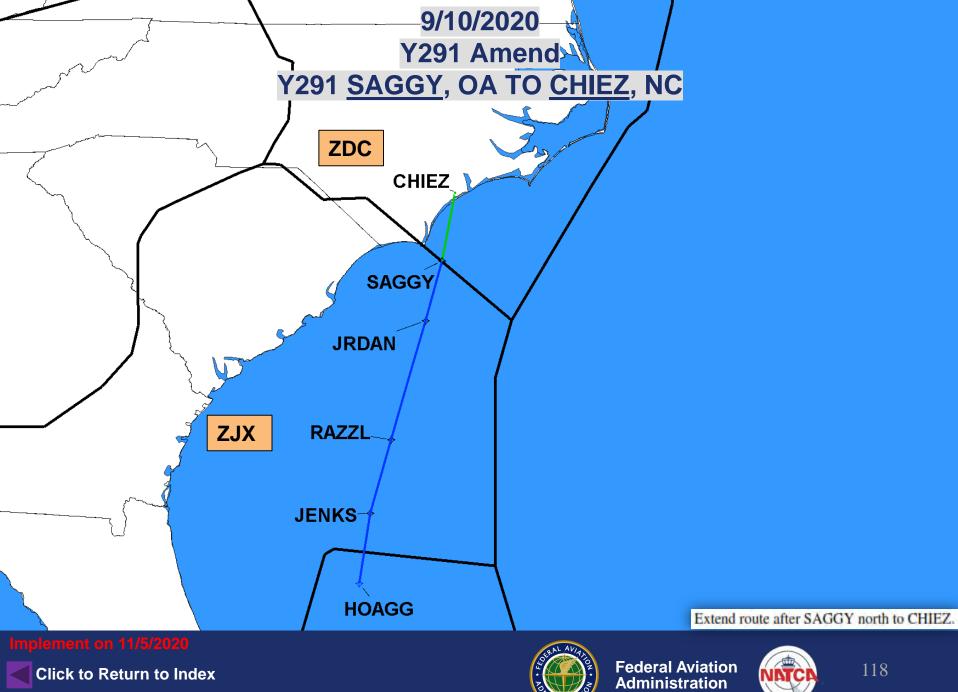


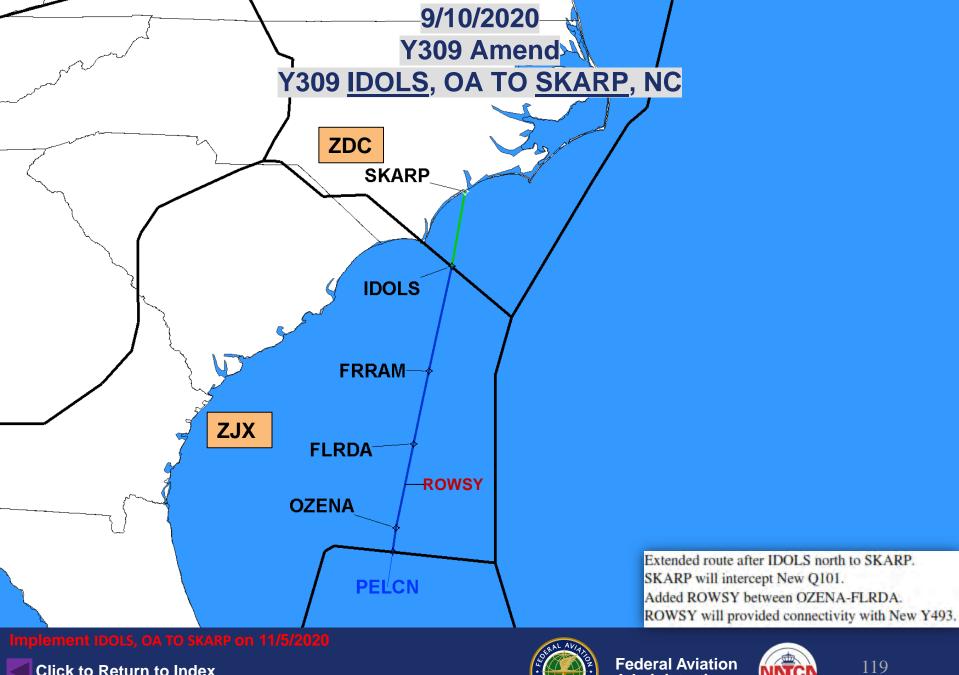


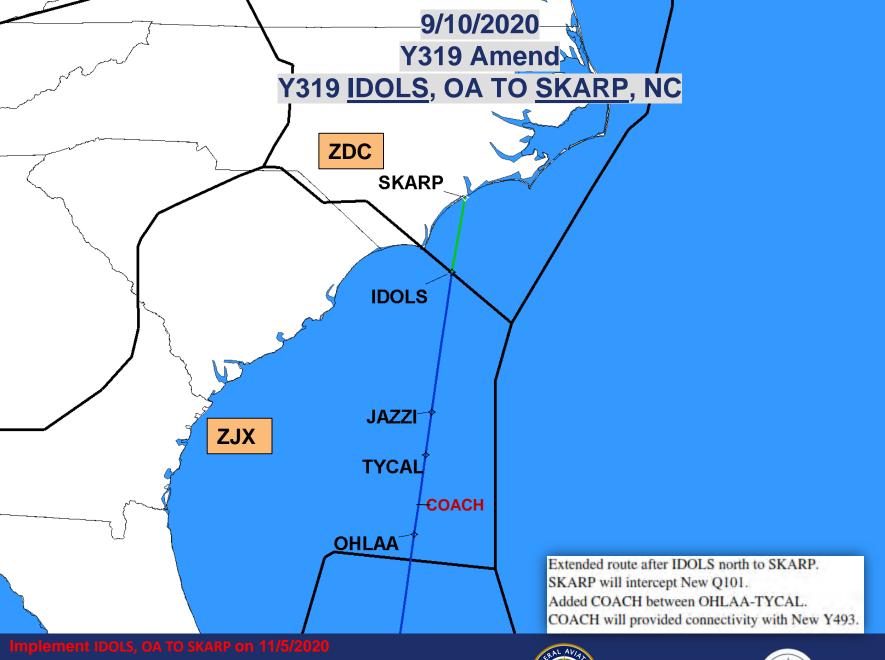
























11/5/2020

Delete/Amend 32 J-Routes/Q-Routes

Delete 22 J-Routes

J55, J62, J79, J109, J121, J150, J165, J174, J191, J193, J207,
 J209, J222, J225, J230, J506, J561, J563, J570, J573, J582, J585

Amend 9 J-Routes

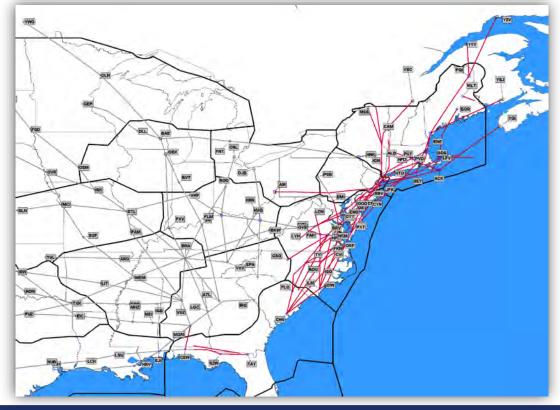
J2, J14, J24, J37, J39J42, J52, J61, J68

Delete 1 Q-Route

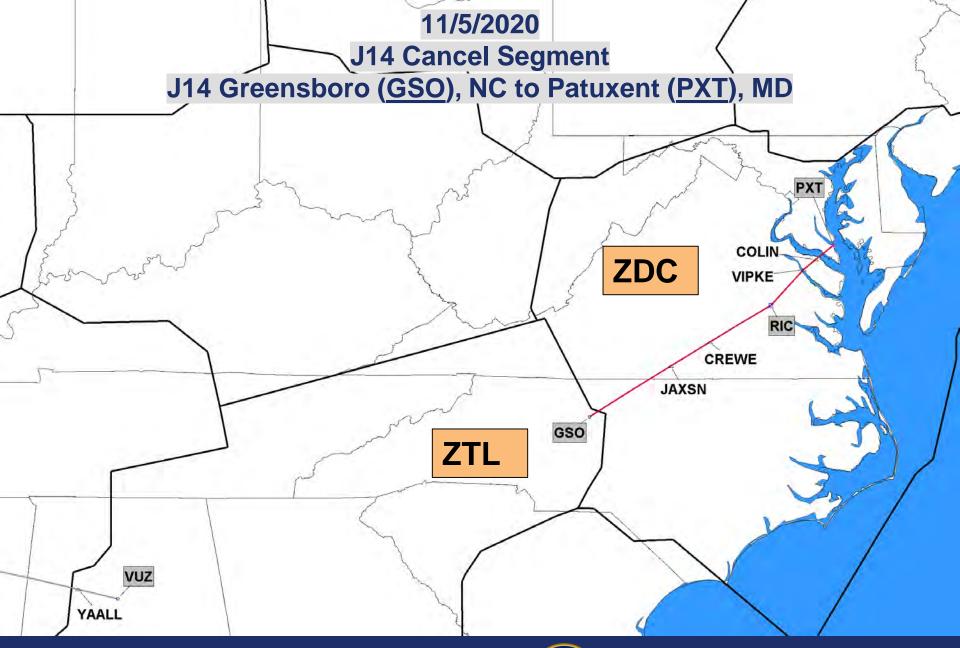
- Q108

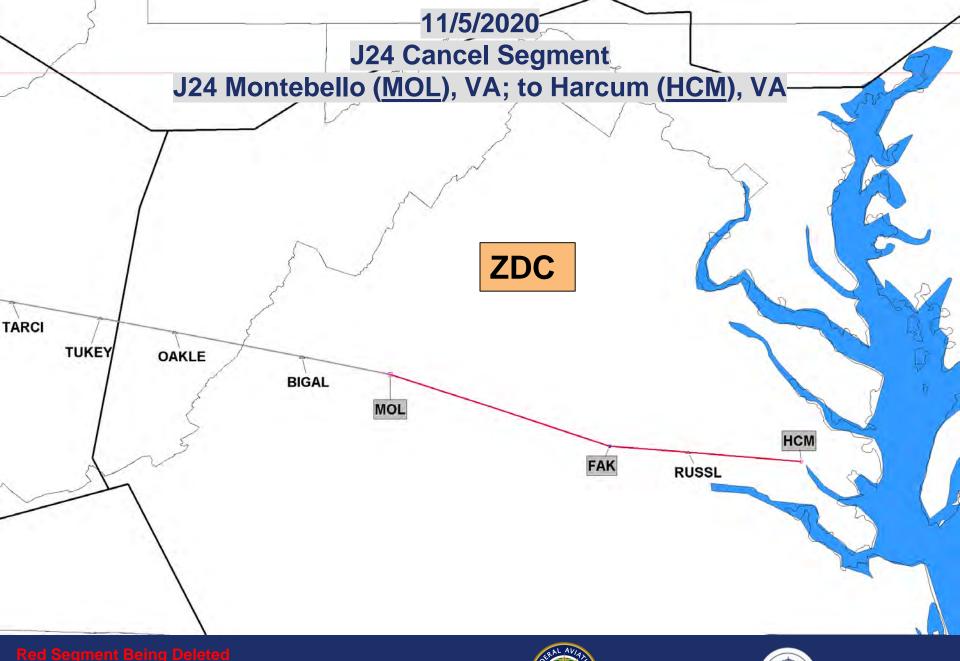
6 ARTCCs

ZBW, ZNY, ZDC, ZTLZJX, ZOB

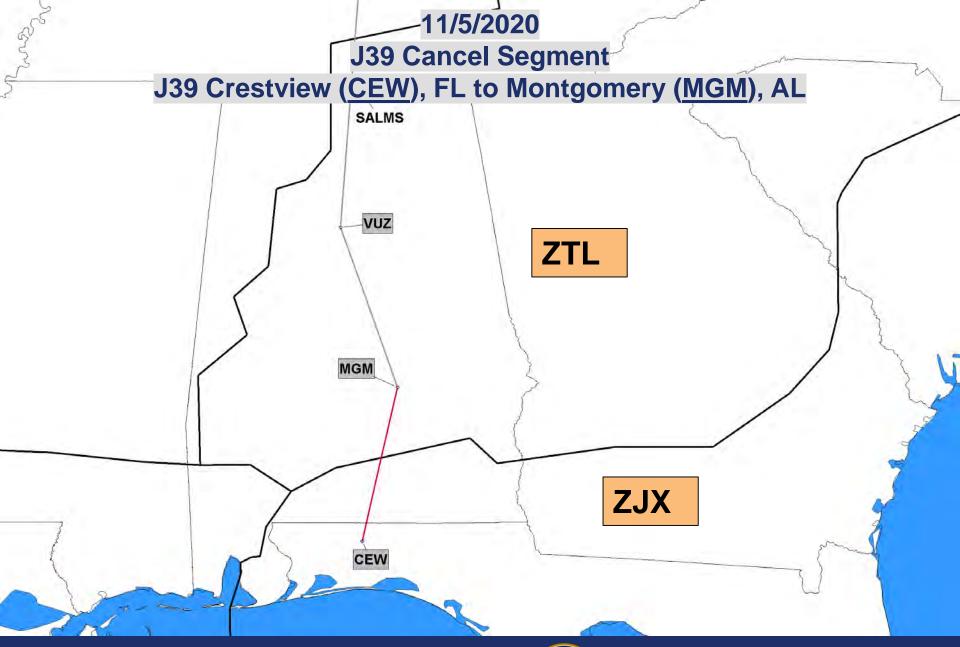






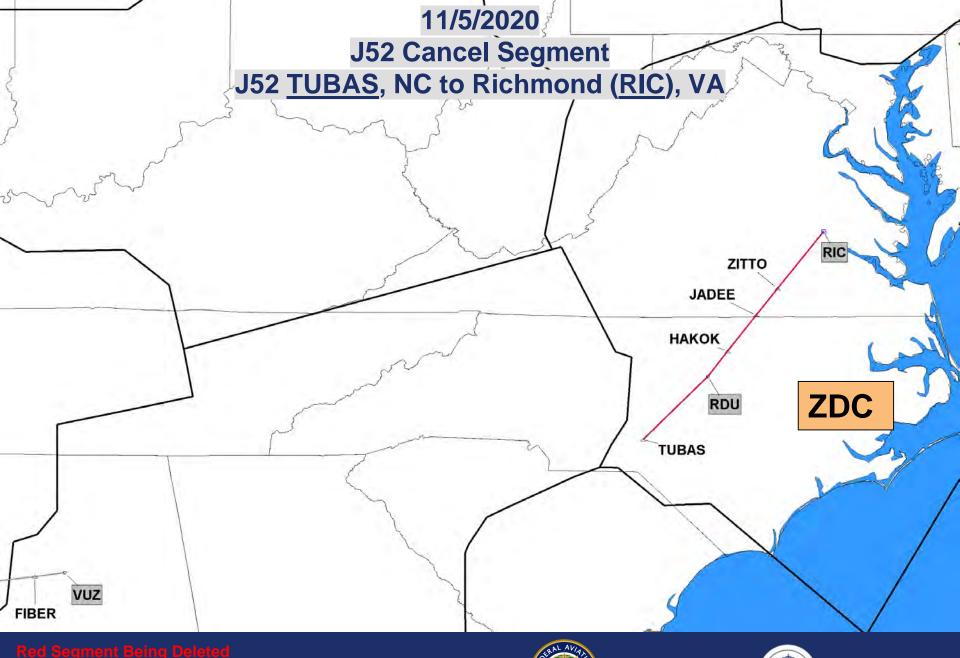


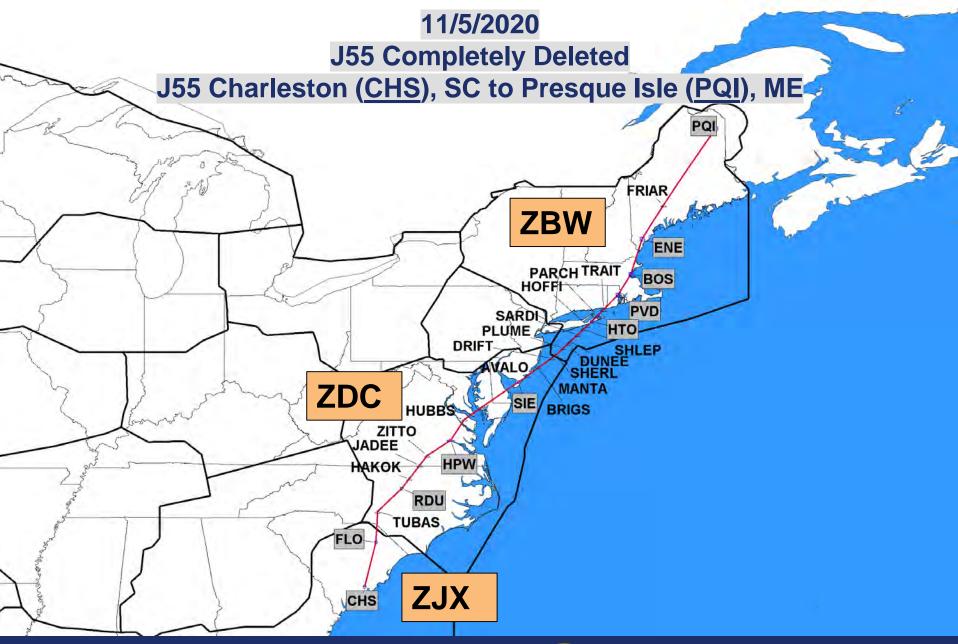




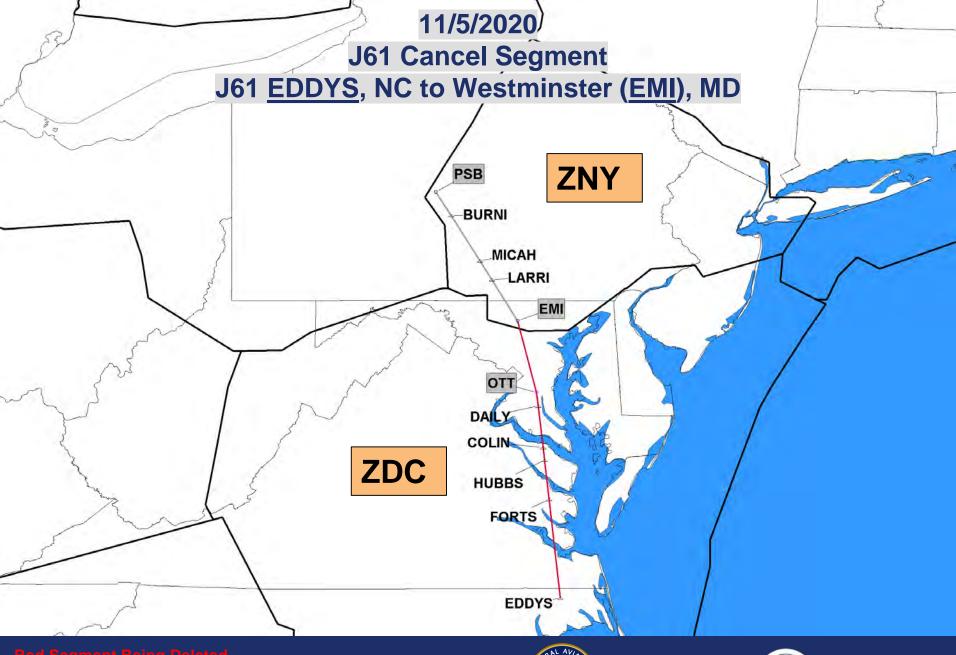








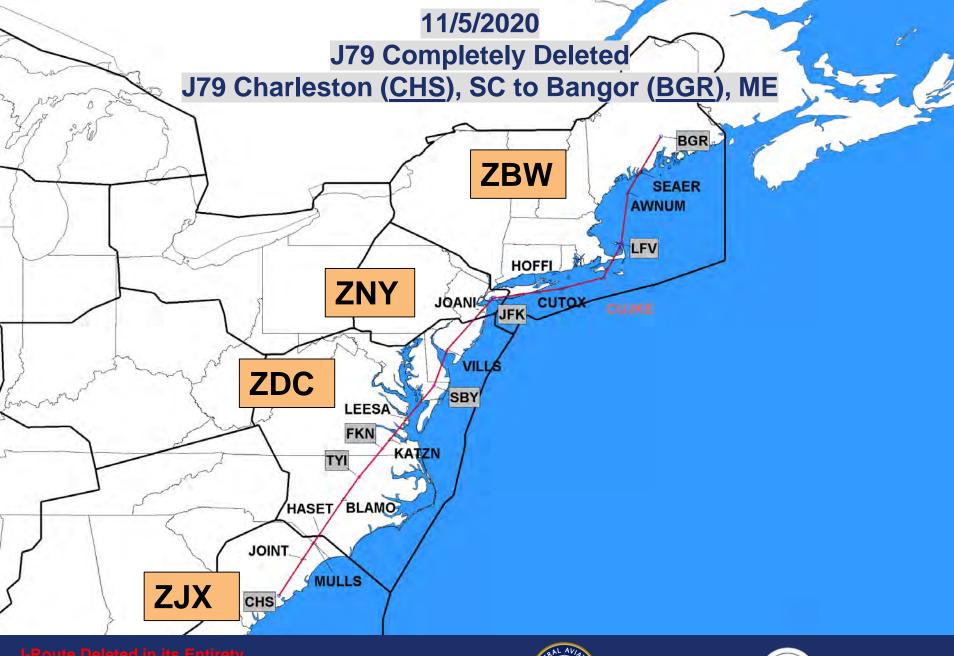
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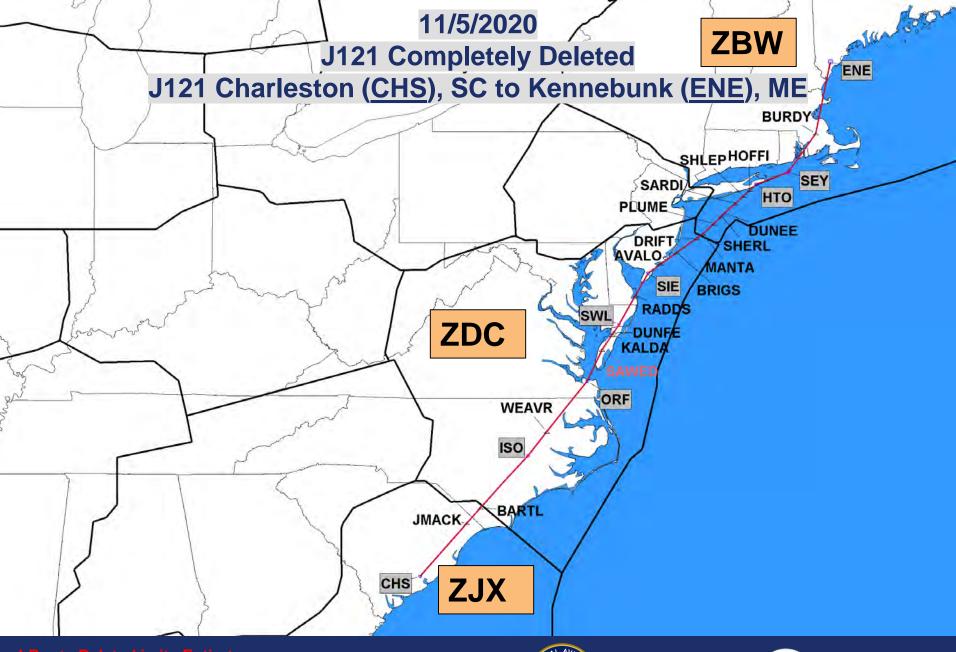








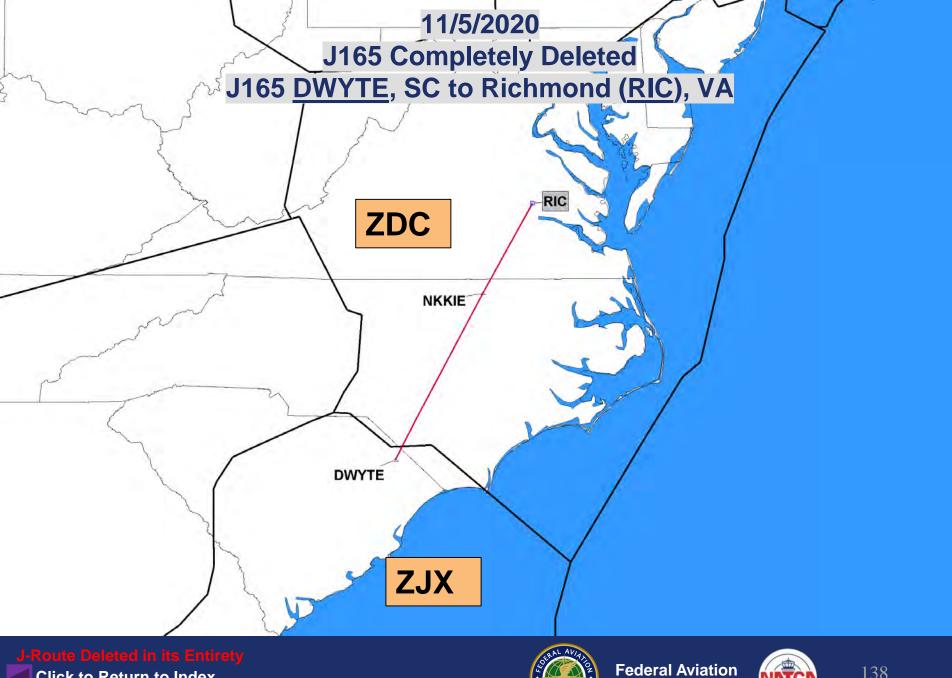








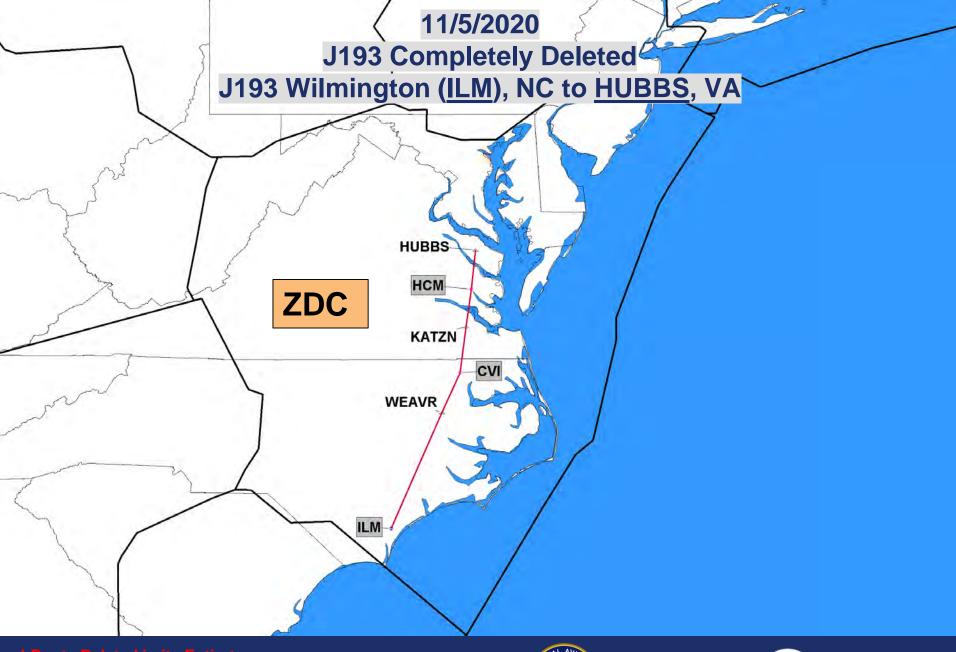


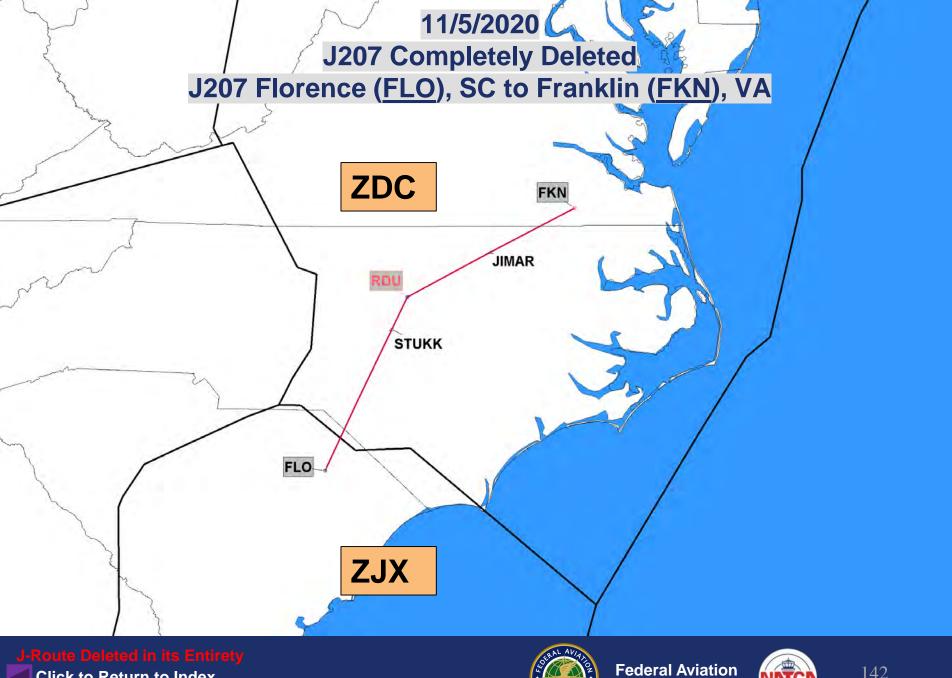


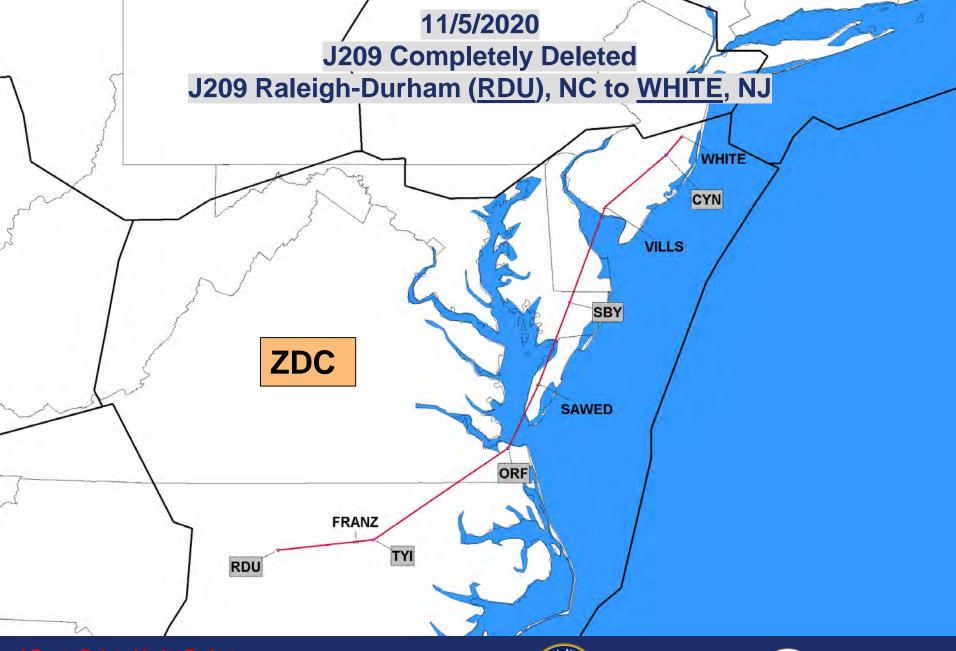


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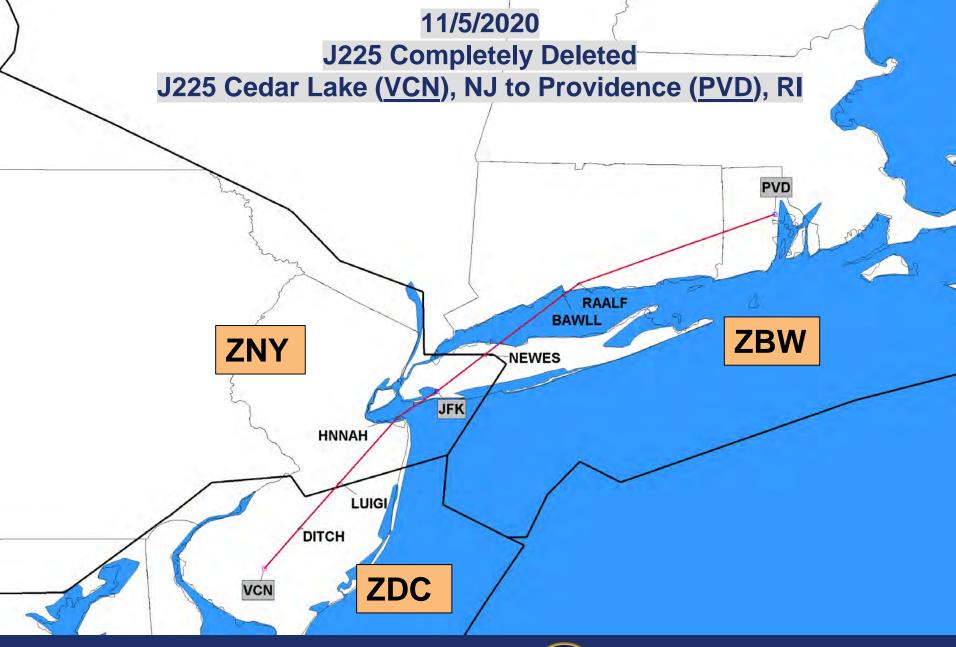


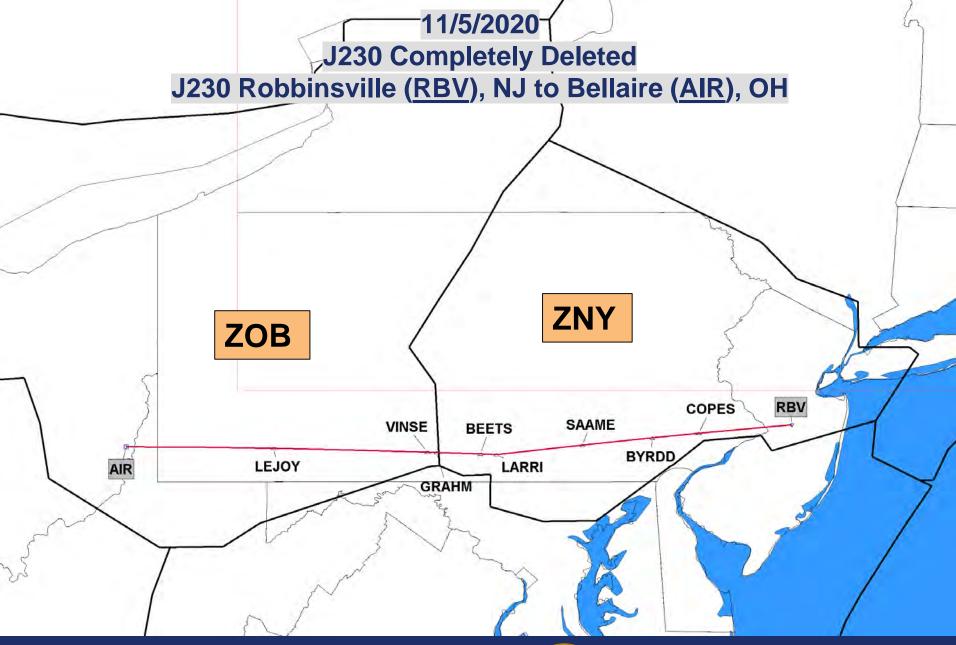


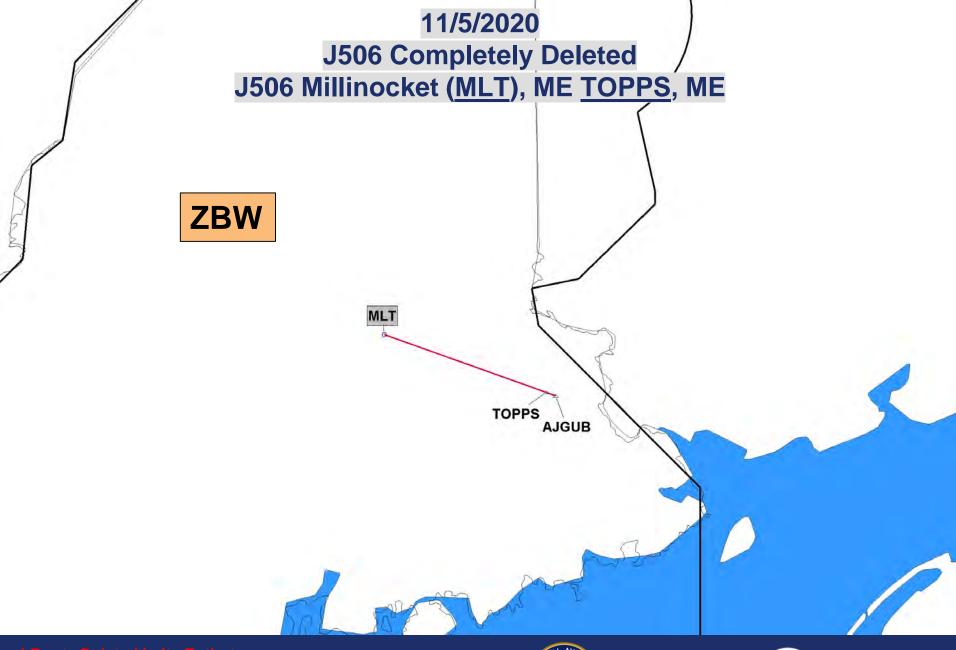




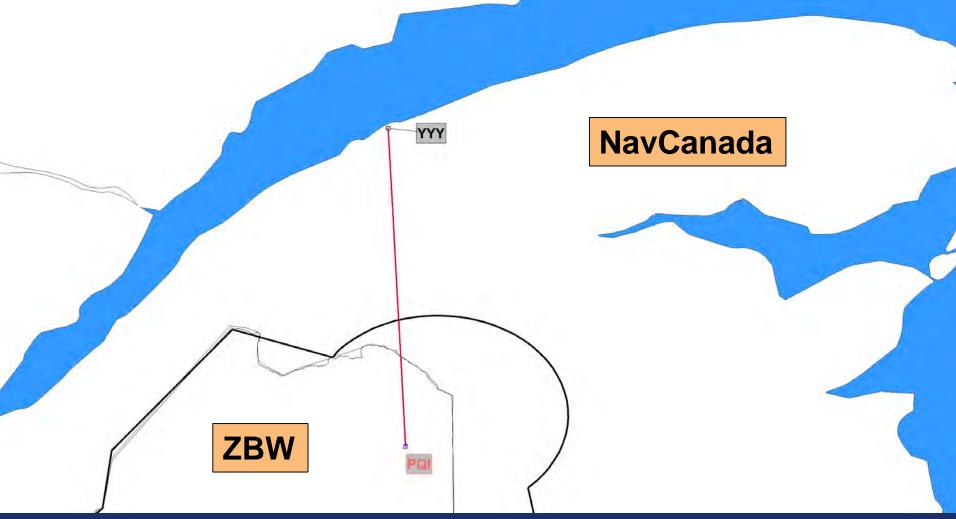


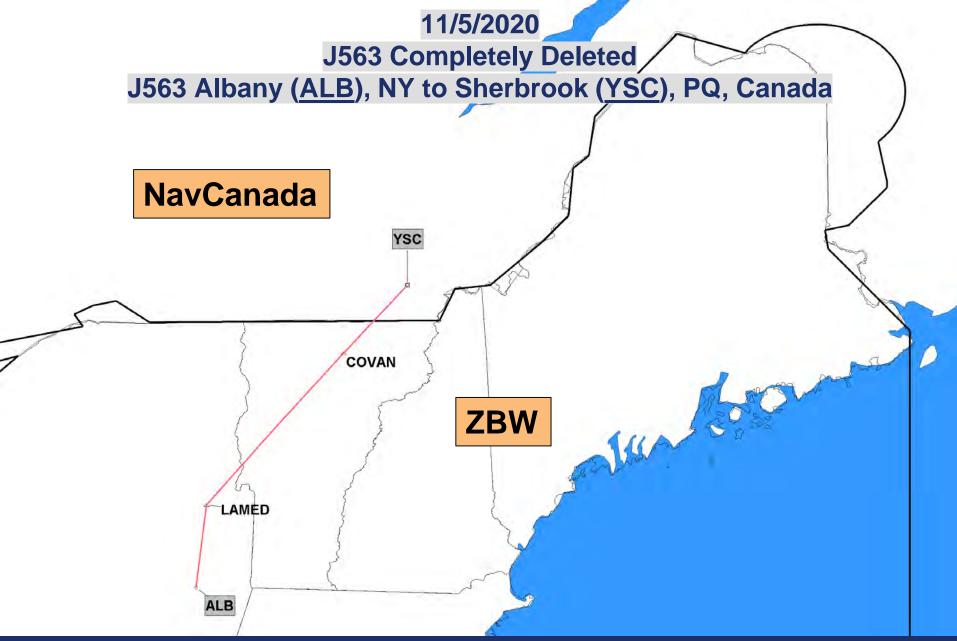


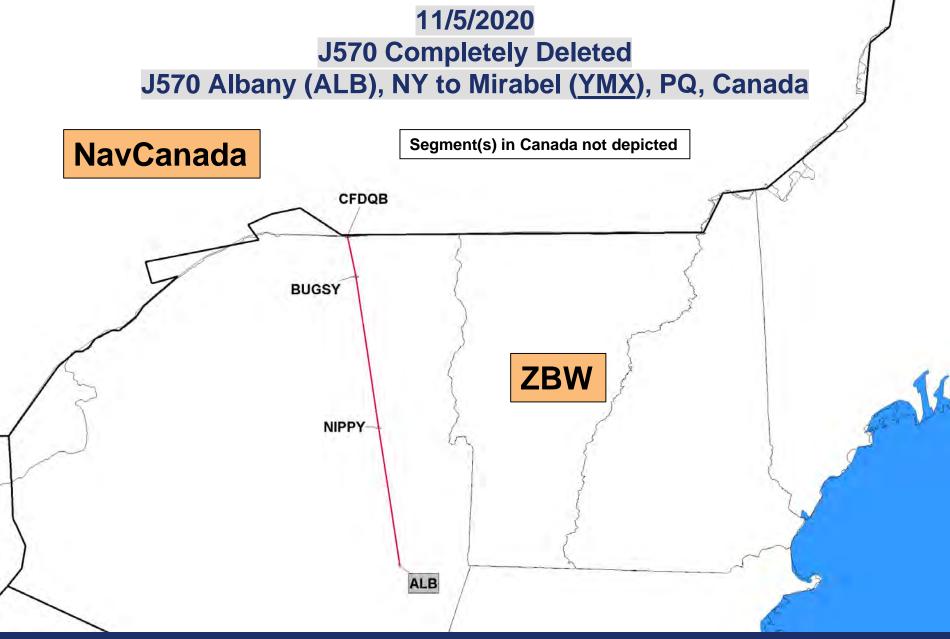




11/5/2020 J561 Completely Deleted J561 Presque Isle (PQI), ME to Mont Joli (YYY), PQ, Canada











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11/5/2020 J582 Completely Deleted J582 Presque Isle (PQI), ME to Sept Isle (YZV), PQ, Canada



