

U.S. Department of Transportation

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DEPARTMENT OF TRANSPORTATION

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Advisory Circular

Subject: NATIONAL ROUTE PROGRAM

Date: May 13, 1996

AC No: 90-91A

Initiated by: ATO-100

Change:

- 1. PURPOSE. This Advisory Circular provides guidance to users of the National Airspace System for participation in the National Route Program (NRP).
- **2. CANCELLATION.** Advisory Circular 90-91, dated April 24, 1992, National Route Program, is canceled.
- 3. BACKGROUND. The revised, expanded NRP began a phased implementation on January 9, 1995. To date eight of the original ten phases have been implemented. When all phases are implemented, all flights conducted within the conterminous United States, at and above FL290, regardless of city pair, will be eligible to participate in the NRP.

4. REQUIREMENTS.

- a. This program allows aircraft operators to select minimum time/cost routes for NRP flights.
- b. NRP aircraft are not subject to route limiting restrictions (e.g. published preferred instrument flight rules (IFR) routes) beyond a 200 NM radius of their point of departure (egress) or destination (ingress).

5. PROCEDURES.

- a. Flights should be filed and flown via Standard Instrument Departures (SID), Standard Terminal Arrival Routes (STAR), or published preferred IFR routes for at least that portion of flight which is within 200 NM from the point of departure (egress) or destination (ingress). Published airways may be used for the first and last 200 NM of the route of flight if none of the above is available.
- b. Operators should ensure that the route of flight contains no less than one NAVAID or waypoint (in the fix radial distance (FRD) format) in each delegated area of airspace jurisdiction for each Air Route Traffic Control Center in which a direct route segment traverses. These NAVAID's or waypoints must be located within 200 NM of the preceding

ARTCC's boundary. Additional route description fixes for each turnpoint in the route should be defined.

- c. Operators should ensure that the route of flight avoids active restricted areas and prohibited areas by at least 3 NM unless permission has been obtained from the using agency to operate in that airspace and the appropriate air traffic control facility is advised.
- d. Operators should ensure that "NRP" is entered in the remarks section of each flight plan.

NOTE: "NRP" will be retained in the remarks section of the flight plan if the aircraft is moved due to weather, traffic, or other tactical reasons. In these situations, every effort will be made to ensure the aircraft is returned to the original filed flight plan/altitude as soon as conditions permit. If the route of flight is altered due to pilot requested or controller initiated direct route, "NRP" will be removed from the remarks section of the flight plan.

- e. Operators should not file an NRP route which conforms to published preferred IFR route.
- f. Aircraft that file North Atlantic Routes (NAR) westbound to destinations within the conterminous United States, will be required to file over one of the following inland fixes to be eligible to participate in the NRP: SSM, TAFFY, EBONY, ALLEX, BRADD, TOPPS, TUSKY, YXU, and QUBIS.
- g. International operators (e.g. NAR, North Pacific) may utilize any inland navigation fix west of SSM within 30 nautical miles north of the common Canada/United States airspace geographical boundary to be eligible to participate in the NRP.
- h. NRP flights should be flight planned so as to only penetrate Canadian airspace via published Preferred IFR Routes.
- i. Those users not meeting the guidelines contained within this Advisory Circular will be processed through the non-preferred route program. Those requests will be approved/disapproved on a workload permitting basis.

C\Roger Wall

Program Director for

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Advisory Circular

Subject: NATIONAL ROUTE PROGRAM Date: 4/24/92

AC No: 90-91

Initiated by: ATM-100 Change:

1. PURPOSE. This advisory circular implements the National Route Program (NRP) and specifies limitations and procedures applicable to users participating in the NRP.

- 2. CANCELLATION. Advisory Circular No. 90-82B, dated June 29, 1990, Direct Routes in the Conterminous United States, and Advisory Circular No. 90-90, dated December 6, 1990, Transcontinental Selected Fuel Conservation Routes, are cancelled.
- 3. BACKGROUND. This advisory circular combines the provisions of the direct route and transcontinental selected fuel conservation route programs into one program. Program participation limitations are revised as follows: users may now choose to file the direct route portion of a flight plan in terms of latitude-longitude fixes rather than fix-radial-distance; the requirement to reach flight level 390 (FL390) at or prior to a specific fix for direct route flights is deleted; the requirement to file one fix per 250 nautical miles and at least one fix per air route traffic control center (ARTCC) is deleted for flights which specify a direct route portion in terms of latitudelongitude fixes. It also recommends use of the flight plan remark "NRP" by aircraft operators for flights which are coordinated through the Air Traffic Control System Command Center (ATCSCC) via other than published Preferred IFR Routes.

4. OPERATION.

- This program allows aircraft operators to select minimum time/cost routes for NRP flights while managing the impact of these routes upon the air traffic system.
- b. Aircraft capable of direct navigation will be authorized to file and navigate via direct routes for specified portions of flights at and above FL390. The direct route procedures contained in this advisory circular are applicable only to aircraft certified for IFR flight with area navigation (RNAV) equipment.

c. Aircraft operating under this program will be subject to normal air traffic control separation and traffic management initiatives.

5. PROCEDURES.

- a. Procedures in this advisory circular are limited to flights specified in paragraph 6. Filing for, and operation under, the NRP is subject to the following conditions:
- (1) A standard flight plan in accordance with this advisory circular is filed.
- (2) The abbreviation "NRP", preceded by a clear weather symbol, is entered in the flight plan remarks block.
- (3) That portion of the route of flight not covered by paragraph 6c of this advisory circular is filed in terms of direct route segments defined by navigational aid (NAVAID) three-letter identifier(s) and/or waypoint(s) in the fix-radial-distance (FRD) format and/or waypoint(s) in the latitude-longitude format; and/or jet routes for flights conducted at and above FL390; or in terms of NAVAID's and jet routes for flights conducted at and below FL370.
- (a) NAVAID's used for direct route segments are VHF Omnidirectional Range/Tactical Air Navigation aids with a standard high altitude service volume (High VOR/TACAN).
- (b) FRD, for direct route segments, is a radial/distance from a High VOR/TACAN.
- (c) Latitude/Longitude coordinates are filed in degrees and minutes as follows: four figures describing latitude in degrees and minutes, followed by a solidus (/), and five figures describing longitude in degrees and minutes (Example: 3559/11451).
 - (4) The route of flight contains:
- (a) No less than one waypoint or NAVAID per each ARTCC that a direct route segment traverses, if the direct route segment is filed in terms of NAVAID's or FRD's.
- (b) No less than one waypoint or NAVAID for every 250 nautical miles of a direct route segment, if the direct route segment is filed in terms of NAVAID's or FRD's.
- (5) The route of flight avoids active restricted areas and prohibited areas by at least 3 nautical miles (NM) unless permission has been obtained from the using agency to operate in that airspace and the appropriate air traffic control facility is advised.

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(6) All direct routes/route segments are flown on great circle tracks.

- b. Approval of the requested routes will be based upon controller workload and system capacity.
- c. Aircraft operators participating in the stored flight plan program are responsible for advising the appropriate ARTCC when the selected route is a modification to the permanent stored flight plans. Such notification shall be in accordance with the established procedures for route of flight modification.
- 6. LIMITATIONS. Participation is limited to:
- a. Flights, regardless of point of departure, destination, or filed altitude, which are coordinated via other than published High Altitude Preferred IFR Routes through the ATCSCC.

b. Flights:

- (1) Filing and flying at and above FL310 westbound between the following airport pairs:
- (a) John F. Kennedy International Airport (JFK) to Los Angeles International Airport (LAX)/San Francisco International Airport (SFO)/Seattle-Tacoma International Airport (SEA)/San Diego-Lindbergh International Airport (SAN)/Denver-Stapleton International Airport (DEN)/Phoenix Sky Harbor International Airport (PHX)/Houston Intercontinental Airport (IAH)/Houston-Hobby Airport (HOU).
- (b) Boston-Logan International Airport (BOS) to LAX/SFO/DEN.
- (c) Newark International Airport (EWR) to LAX/SFO/SEA/SAN/DEN/PHX/IAH/HOU.
 - (d) La Guardia Airport (LGA) to DEN/IAH/HOU.
- (e) Philadelphia International Airport (PHL) to LAX/SAN/DEN/PHX/IAH/HOU.
- (f) Teterboro Airport (TEB) to LAX/SAN/DEN/PHX/IAH/HOU.
- (g) Westchester County Airport (HPN) to LAX/SAN/DEN/PHX/IAH/HOU.
 - (h) Bradley International Airport (BDL) to DEN.
 - (i) Providence-Green State Airport (PVD) to DEN.

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(j) Chicago O'Hare International Airport (ORD) to SFO/LAX

- (k) Detroit Metro Wayne County Airport (DTW) to SEA/SFO/LAX.
- (2) Filing and flying at and above FL330 eastbound between the following airport pairs:
 - (a) SEA to JFK/EWR.
 - (b) SFO to BOS/JFK/EWR.
 - (c) LAX to BOS/JFK/EWR.
- (d) Dallas/Fort Worth International Airport (DFW) to JFK.
- c. Flights operating between city pairs listed in 6b. above via published Standard Instrument Departure (SID) or Preferred IFR Route to a fix at least 200 NM from the point of departure; thence via published jet routes to a fix not less than 200 NM from the destination to join the published Standard Terminal Arrival Route (STAR) at the first fix of the applicable transition or the Preferred IFR Route to the destination airport, except as follows:
- (1) For flights conducted at and above FL390, that portion of the route of flight between 200 NM from the point of departure and 200 NM from the destination airport may be filed in terms of NAVAID three-letter identifier(s), and/or waypoint(s) in the fix-radial-distance (FRD) format, and/or waypoint(s) in the latitude-longitude format rather than jet routes.
- (2) NRP flights should only penetrate Canadian airspace via published Preferred IFR Routes.
- (3) Between Mina, NV (MVA) and Salt Lake City, UT (SLC) aircraft should file and fly MVA.J158..J154.SLC (or SLC.J154..J158. MVA westbound).
- (4) Aircraft destined JFK from SEA, SFO or LAX via northerly routes through the Cleveland ARTCC (ZOB) should join the published Preferred IFR Route via J100 or J94 to Dubuque, IA (DBQ) thence via the published Preferred IFR Route, or at Green Bay, WI (GRB) thence via GRB.J106.JHW and the published Preferred IFR Route if departure time is 0730-0930 Pacific Standard Time (PST) or Pacific Daylight Time (PDT) (1530-1730Z for PST or 1430-1630Z for PDT). Aircraft departing other times, via ZOB, should join the published Preferred IFR Route at Salem, MI (SVM) thence via SVM.J70.JHW and the published Preferred IFR Route or at Carleton, MI (CRL).

- (5) Aircraft destined JFK from SEA, SFO or LAX via southerly routes through Washington ARTCC (ZDC) should join the published Preferred IFR Route at Liberty, NC (LIB) thence via LIB..RDU.J209 and the published Preferred IFR Route if departure time is 0630-1030 PST or PDT (1430-1830Z for PST or 1330-1730Z for PDT). Aircraft departing other times, via ZDC, should join the published Preferred IFR Route via LIB..RDU.J209 and the published Preferred IFR Route or at Beckley, WV (BKW) via BKW.J42.MOL.J24.HCM.HCM090R..J121.SIE.CAMRN STAR.JFK.
- (6) Aircraft destined JFK from DFW via northerly routes through ZOB should join the published Preferred IFR Route via J100 or J94 to Dubuque, IA (DBQ) thence via the published Preferred IFR Route, or at Green Bay, WI (GRB) thence via GRB.J106.JHW and the published Preferred IFR Route if departure time is 1100-1300 Central Standard Time (CST) or Central Daylight Time (CDT) (1700-1900Z for CST or 1600-1800Z for CDT). Aircraft departing other times, via ZOB, should join the published Preferred IFR Route at Salem, MI (SVM) thence via SVM.J70.JHW and the published Preferred IFR Route or at Carleton, MI (CRL).
- (7) Aircraft destined JFK from DFW via southerly routes through ZDC should join the published Preferred IFR Route via LIB..RDU.J209 and the published Preferred IFR Route if departure time is 1000-1400 CST or CDT (1600-2000Z for CST or 1500-1900Z for CDT). Aircraft departing other times, via ZDC, should join the published Preferred IFR Route via LIB..RDU.J209 and the published Preferred IFR Route or via BKW.J42.MOL.J24.HCM. HCM090R..J121.SIE.CAMRN STAR.JFK.
- (8) Aircraft destined EWR should join the published Preferred IFR Route at CRL if departure time is 0730-0930 PST or PDT (1530-1730Z for PST or 1430-1630Z for PDT). Aircraft departing other times should join the published Preferred IFR Route at Slate Run, PA (SLT).
- (9) Westbound aircraft should not file or fly J82, J217, J190, J584, J146, J152, J70, J554 or J106 through ZOB.
- (10) Aircraft should not file or fly via Mason City, IA (MCW).
- (11) Aircraft destined LAX should not file or fly routes which cross the Denver ARTCC/Albuquerque ARTCC common boundary west of Farmington, NM (FMN). Aircraft destined LAX from DTW should arrive via TBC.J64.PGS then the appropriate STAR or BCE.J60.HEC then the appropriate STAR or DRK.J78.PKE then the appropriate STAR.
- (12) Aircraft destined DEN should not arrive via Kiowa, CO (IOC).

- (13) Aircraft destined IAH/HOU from the New York area (EWR/LGA/JFK/PHL/TEB/HPN) should file and fly published Preferred IFR Routes to Pulaski, VA (PSK).
- (14) Aircraft departing ORD should file and fly published Preferred IFR Routes via Iowa City, IA (IOW); Dubuque, IA (DBQ) or Badger, WI (BAE) to a fix at least 200 NM from the point of departure.
- (15) Aircraft destined PHX should join the published STAR at Gallup, NM (GUP) or Zuni, AZ (ZUN).

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