



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
8260.55

National Policy

Effective Date:
3/8/10

SUBJ: Special Area Navigation Visual Flight Procedures

- 1. Purpose of This Order.** This order provides guidance to Office of Aviation Safety (AVS) and Air Traffic Organization (ATO) personnel on how to assist aircraft operators with the development of, and operational approval to use special Area Navigation (RNAV) visual flight procedures (RVFP).
- 2. Audience.** The primary audience for this order is Flight Standards District Office (FSDO) and certificate management office (CMO) aviation safety inspectors (ASI) who have responsibility for certificate management oversight of Title 14 of the Code of Federal Regulations (14 CFR) part 121, 129, and 135 operators, as well as air traffic control (ATC) facility managers. The secondary audience includes AFS branches and divisions in the regions and in headquarters.
- 3. Where You Can Find This Order.** You can find this order on the MyFAA employee Web site at https://employees.faa.gov/tool_resources/orders_notices. Inspectors can access this order through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators may find this information on the Federal Aviation Administration's (FAA) Web site at <http://fsims.faa.gov>.
- 4. Background.** Flight operations quality assurance (FOQA) and Aviation Safety Action Program (ASAP) reports indicate flightcrew sometimes descend at excessive rates on approach, resulting in unstabilized approaches. Many of these reports come from flightcrew conducting visual approaches to runways not served by vertically guided approach procedures. However, the events can also occur at airports with vertically guided approach procedures when visual approach operations impose altitude restrictions that interfere with the flightcrew's ability to establish a stabilized approach. Many of the aircraft involved in these events are equipped with RNAV systems capable of providing lateral, vertical, and airspeed guidance/reference. Procedures such as RVFP, which capitalize on the capabilities of these RNAV systems, are beneficial because they promote flight path repeatability, may reduce air traffic communications and enhance safety. The design and implementation of RVFP differ from that of charted visual flight procedures (CVFP) in a number of regards. First, RVFP developed under this guidance are for use only by pilots of aircraft equipped with instrument flight rules (IFR)-approved RNAV systems. Second, these procedures are not "public" in nature, approved via a process similar to that of "special" instrument approach procedures (IAP). RVFP are not "special IAPs" by definition but rather are simply considered "special procedures". Third, a lead operator may design RVFP, through oversight by the Flight Standards Service (AFS) of the FAA.

5. Definitions. The following terms are defined for the purposes of this order.

a. Operator. An operator who holds a certificate issued in accordance with parts 121 or 135 or an air carrier authorized under part 129 operations specifications (OpSpecs).

b. Lead Operator. An operator who acts as a proponent for the development, coordination, and implementation of an RVFP.

c. Area Navigation Visual Flight Procedure. A procedure that capitalizes on RNAV system technology to promote stabilized visual approaches to a designated runway.

d. Accepted Procedure. An RVFP developed and agreed upon by the lead operator and respective ATC facility.

6. Applicability. Inspectors will provide these criteria to operators for the development, processing, and operation of RVFP.

7. Related Publications (current editions).

- Advisory Circular (AC) 20-129, Airworthiness Approval of Vertical Navigation (VNAV) Systems for use in the U.S. National Airspace System (NAS) and Alaska,
- AC 20-130, Airworthiness Approval of Navigation or Flight Management Systems Integrating Multiple Navigation Sensors,
- AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes,
- AC 90-100, U.S. Terminal and En Route Area Navigation (RNAV) Operations,
- AC 90-105, Approval Guidance for RNP Operations and Barometric Vertical Navigation in the U.S. National Airspace System,
- Order 7110.65, Air Traffic Control,
- Order 7110.79, Charted Visual Flight Procedures (CVFP),
- Order 8260.19, Flight Procedures and Airspace,
- Order 8260.43, Flight Procedures Management Program,
- Order 8260.44, Civil Utilization of Area Navigation (RNAV) Departure Procedures, and
- Order 8260.54, The United States Standard for Area Navigation (RNAV).

8. Development and Publication Instructions.

a. Design Considerations.

1) Before designing an RVFP, the operator should consider the potential application of other type procedures designed in accordance with FAA criteria. The operator should also consider anticipated safety benefits and participation levels during the development of RVFP. For example, use of radius-to-fix (RF) path terminators in an RVFP may improve path compliance but reduce participation.

2) Design RVFP to emulate existing visual approach flight paths. These procedures must include all normal operational and/or desired altitude and speed restrictions. Proper coordination between representatives of the lead operator, the local ATC facility, and the AFS will ensure procedural design requirements are satisfied. The lead operator is responsible for ensuring procedure coding accurately defines the desired flight paths, altitudes, and speed restrictions. The operator should use a tool such as Terminal Area Route Generation Evaluation and Traffic Simulation (TARGETS) during the RVFP design process.

Note: If ATC requires additional waypoints for vectoring purposes, but not required for the actual procedure, they may be depicted on the chart as in-space/floating waypoints.

3) The lead operator must determine RVFP descent gradients and turn angles in coordination with the local ATC facility. The operator should adhere to FAA RNAV design criteria, where practicable. A runway served by an RVFP should also be equipped with a visual or electronic vertical guidance system, e.g., a Visual Approach Slope Indicator (VASI) or instrument landing system (ILS). The vertical path provided in the final segment of the RVFP must be coincident with or steeper than the guidance provided by either the visual or electronic system.

b. RNAV Equipment Requirements and Procedure Flyability. Only RNAV systems compliant with AC 90-100, using distance measuring equipment (DME)/DME/Inertial Reference Unit (IRU) and/or global positioning system (GPS) sensor inputs, are acceptable for use on an RVFP. The operator must demonstrate to the respective principal operations inspector (POI) and ATC facility that all maneuvers required to emulate desired flight paths (lateral and vertical) are flyable with the intended equipment. Simulators or aircraft must be used to validate the procedure design.

c. Weather Requirements. The ceiling and visibility values required to conduct these procedures must equal or exceed the requirements for visual approach operations, as determined by ATC standards (reference Order 7110.65, paragraph 7-4-2) and any local ATC facility policies. The lead operator and local ATC facility must coordinate to determine appropriate ceiling and visibility values for each RVFP.

d. Flight Inspection. Flight inspection is not required because RVFP emulate existing visual approach paths and must be flown in visual meteorological conditions (VMC).

e. Naming Convention. The RVFP naming convention is based on the type of procedure and runway served e.g., "RNAV VISUAL RWY 29". Although RVFP procedure names may

vary among different avionics systems, the names must not conflict with other RNAV procedures to the same runway end.

f. Charting. See Appendix A for charting requirements. Operators must provide their pilots with a graphical depiction of the RVFP.

g. Waypoints. The National Flight Data Center (NFDC) must receive information on any waypoints established to support RVFP. To establish waypoints for an RVFP the lead operator must complete FAA Form 8260-2, Radio Fix and Holding Data Record, along with its supporting Data Worksheet. The operator can create the forms in TARGETS. The operator should forward the Form 8260-2 and Data Worksheet to the RNAV and Required Navigation Performance (RNP) Group support personnel assigned to the Service Center Operations Support Group (OSG). Those personnel will in turn coordinate with, and provide the NFDC the 8260-2 form and worksheet. When using an existing waypoint published for an Instrument Flight Procedure (IFP) the lead operator must forward a completed Data Worksheet to NFDC in order that the intended uses of the waypoint can be updated.

9. Processing and Operational Acceptance. Operators seeking to design and/or obtain approval to use an RVFP must use the following processes. In order to conduct RVFP operations, operators must have authorization to use U.S. RNAV Standard Terminal Arrivals (STAR), in accordance with AC 90-100 and applicable OpSpecs. Appendix B provides a process “job aid.”

a. Process for the Lead Operator.

1) The lead operator should initiate the RVFP process by contacting their POI and the respective ATC facility to present their proposal for the RVFP. The operator, POI and ATC personnel should review the design considerations, equipment requirements, and weather minimums relating to the proposed RVFP, as outlined in paragraph 8 of this order.

2) The operator, with the assistance of the regional All Weather Operations (AWO) and the RNAV and RNP Group personnel assigned to the OSG, must assess the capability of the local DME infrastructure to support all segments of the procedure. The operator should use “RNAV-Pro” for this assessment. If the local DME infrastructure is inadequate to support DME/DME/IRU operations, annotate the RVFP chart with “GPS required.” The operator must also document the RVFP procedure on FAA Form 8260-7, Special Instrument Approach Procedure, with an amended title of RNAV Visual.

Note: Use Level 2.0 (per Order 8260.44) for the assessment criteria unless terrain and obstacles become an issue, in which case Level 1.0 should be used. In both cases, the operator should assess the procedures via a centerline-only evaluation.

3) The operator must submit its completed, proposed RVFP design to the local ATC facility and POI for their acceptance. The ATC facility manager will subsequently provide the respective AFS region AWO Program Manager, the Air Traffic Service Area office for terminal operations, and the lead operator with written notification of procedure acceptance.

Note: A letter of authorization (LOA) from the ATC facility is not required. However, ATC facilities may use LOAs associated with RVFPs.

4) After generating a prototype chart, and documenting the proposed procedure as “RNAV Visual” on FAA Form 8260-7, the operator must submit the complete RVFP package to the regional AWO via the respective POI. The package must include the ATC facility manager’s written acceptance of the procedure, the completed FAA Form 8260-7, TARGETS documentation (if applicable), and the prototype chart. The regional AWO will coordinate a review of the package with the Regional Airspace and Procedures Team (RAPT) as necessary, before endorsing and forwarding the procedure package to Flight Procedure and Implementation Oversight Branch, AFS-460. AFS-460 will coordinate a review of the RVFP by the Procedures Review Board (PRB), and subsequently forward the complete package to AFS-400.

5) The Performance Based Flight Systems Branch (AFS-470) will document any special aircraft, operational, and/or training requirements on FAA Form 8260-10, Continuation Sheet. AFS-400 will return the complete, approved procedure package, including associated 8260-10 forms, to the regional AWO. The regional AWO will coordinate with the POI and operator to review the approved procedure package, associated 8260-10 forms, and any comments from the PRB.

a) The operator must ensure aircraft equipage, operating procedures, and training are in place as required.

b) Once satisfied with the operator’s aircraft equipage, procedures, and training program, the POI will issue written approval for use of the RVFP. Appendix C contains a sample letter of approval.

c) The operator must provide the respective ATC facility and AWO with the final version of the RVFP chart. Establish implementation date with ATC Manager.

b. Approval Process for Other than the Lead Operator.

1) The operator must submit a written request to use an RVFP to the regional AWO, via their POI.

2) The regional AWO will provide the operator and the POI with all applicable procedure documentation.

3) The operator must ensure the required aircraft equipage, operating procedures, and training are in place. The operator must also validate flyability of the procedure in a simulator approved for each make, model and series of aircraft intended for use of the RVFP.

4) Once satisfied with the operator’s aircraft equipage, procedures, and training program, the POI will issue written approval to use the RVFP. Appendix D contains a sample letter of approval for other than a lead operator.

5) The operator should provide the applicable AWO and ATC facility with a copy of the signed letter approving use of the RVFP.

10. ATC Use of RVFP. ATC may use an RVFP only when visual approaches are in use and upon request by participating flightcrew. ATC may suspend RVFP operations at any time. Appendix E contains example phraseology and procedures for use with RVFP.

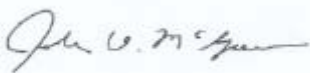
11. Roles and Responsibilities.

a. Operator and Pilot.

- 1) Operators must train their pilots on RVFP. This training must include RVFP phraseology, procedures, and requirements specified on any associated 8260-10 forms.
- 2) The RVFP must be coded in the aircraft RNAV system database and retrievable by name (i.e., line-selectable). Pilots are not authorized to build these procedures manually.
- 3) Pilots must request the RVFP on initial contact with the controlling agency, unless previously coordinated.
- 4) Pilots must report the airport or preceding traffic in sight to receive clearance for an RVFP.
- 5) Pilots must fly the published RVFP route and, unless otherwise cleared by ATC, comply with charted mandatory altitudes and speeds.
- 6) By accepting an RVFP clearance, pilots also accept the requirements and responsibilities associated with a visual approach clearance, e.g., visibility minimums and cloud clearances.

b. Local ATC.

- 1) Controllers must receive training on these procedures, including:
 - a) RVFP phraseology,
 - b) Intervention policies and procedures, and
 - c) Actions to be taken if a pilot has not reported the airport or preceding traffic in sight by the beginning of the procedure.
- 2) Controllers may allow an aircraft to join the procedure at other than the initial fix. However, ATC may not vector an aircraft to the initial fix of an RF leg, nor to any intermediate location on the RF leg.
- 3) The controlling facility must radar monitor (as defined in the Pilot/Controller Glossary) aircraft operating on any portion of an RVFP. The Pilot/Controller Glossary can be found at www.faa.gov/air_traffic/publications/ATpubs/PCG.



for

John M. Allen
Director, Flight Standards Service

Appendix A. Charting Requirements for RVFP

1. The procedure must be charted and be available in the navigation database. The following items must be included on the chart:

a. Procedure name, e.g., *RNAV Visual RWY 29*;

Note: The title must match the procedure name coded in the aircraft RNAV system database and be retrievable by name (i.e., line-selectable). Pilots are not authorized to build these procedures manually.

b. A note “RADAR REQUIRED;”

c. Either of the following notes: “DME/DME/IRU or GPS required” or “GPS required;”

d. Dashed lines to depict the RVFP flight segments; the charts may also include waypoints commonly used by ATC during RVFP operations but not part of the actual procedure, to aid pilot awareness;

e. For procedures with radius-to-fix (RF) path terminators, the note: “RF Required” (either for the whole procedure or individual portions, as appropriate);

f. Ceiling and visibility requirements;

g. Altitude and speed restrictions;

h. A statement requiring pilots to request the RVFP on initial contact with the controlling ATC facility; and

i. A statement requiring pilots to advise ATC, as soon as practical that the airport or preceding traffic is in sight.

2. Charts should adhere as closely as possible to standard charting conventions but may be tailored as necessary to meet user needs. The charts should also contain terrain and other prominent features.

3. The National Flight Data Center must publish, in the National Flight Data Digest, information on any fix/waypoint established for the RVFP prior to the fix/waypoint being included in an aircraft navigation database.

Appendix B. Job Aid

Step	Order 8260.55 Guidance Paragraph	Action	POC
1	9.a.	Contact local ATC facility and POI.	Lead Operator
2	8.	Design procedure	Lead Operator in conjunction with ATC Manager
3	9.a.2)	RNAV Pro assessment	Lead Operator, AWO, RNP Group
4	9.a.3)	Provide written acceptance of procedure to: AWO Air Traffic Service Area Office Lead Operator	ATC Manager
5	Appendix A	Generate prototype chart	Lead Operator
6	9.a.2) 8.g.	Document RVFP as RNAV Visual on Form 8260-7. Prepare Form 8260-2 and Data Worksheet if required.	Lead Operator
7	9.a.4)	Submit following documentation to POI: ATC facility acceptance Completed Form 8260-7 and, if required, the Form 8260-2 and Data Worksheet TARGETS documentation Prototype chart	Lead Operator
8	9.a.4)	Forward package to AWO.	POI
9	9.a.4)	Coordinate review of package by RAPT as necessary. Submit package to AFS-460 for PRB review; include any recommended special aircraft, operational and training requirements for Form 8260-10.	AWO
10	9.a.4)	Review package and forward recommendations to AFS-400.	AFS-460/PRB
11	9.a.5)	Document any special aircraft,	AFS-470

Step	Order 8260.55 Guidance Paragraph	Action	POC
		operational, or training requirements on Form 8260-10.	
12	9.a.5)	Forward approved package, with 8260-10 forms, to AWO.	AFS-400
13	9.a.5)	Forward package, with concurrence memo, to the POI.	AWO
14	9.a.5) a)	Ensure equipage, procedures, and training are in place.	Lead Operator
15	8.b.	Validate procedure design in aircraft or simulator (if not completed earlier).	Lead Operator in conjunction with POI and ATC manager
16	9.a.5) b)	Issue final approval to lead operator.	POI
17	9.a.5) c)	Forward final version of RVFP chart to ATC facility and AWO; establish implementation date with ATC.	Lead Operator, ATC manager

Appendix C. Sample Letter of Approval (Lead Operator)

ABC Airlines, Inc.
Director of Operations
417 Oakton Boulevard
Enid, OK 78154

Dear Mr./Ms.:

ABC Airlines is approved, as lead operator, to use the following special area navigation (RNAV) visual flight procedures (RVFP):

[Name of approved procedures]

ABC Airlines must train its pilots on RVFP phraseology, procedures, and requirements specified on FAA Form 8260-10 (if applicable).

The effective date of this approval is November 3, 2008.

Principal Operations Inspector

Appendix D. Sample Letter of Concurrence (Other than Lead Operator)

DEF Airlines, Inc.
Director of Operations
148 Peachtree Boulevard
St. Louis, MO 63044

Dear Mr./Ms.:

DEF Airlines is approved to use the following special area navigation (RNAV) visual flight procedures (RVFP) originally developed and approved for use by [Lead Operator]:

[Name of approved procedures]

DEF Airlines must train its pilots on RVFP phraseology, procedures, and requirements specified on FAA Form 8260-10 (if applicable).

The effective date of this approval is November 10, 2008.

Principal Operations Inspector

**Appendix E. Example Phraseology and Procedures Notional Scenario for a Pilot
Requesting RNAV Visual Runway 29 at
Newark Liberty International Airport (EWR)**

Pilots and controllers should use established local procedures. The following phraseology is only an example:

Pilot: On initial contact with approach control include, “REQUEST RNAV VISUAL RUNWAY TWO NINE.”

Approach controller: “EXPECT RNAV VISUAL RUNWAY TWO NINE, REPORT AIRPORT [OR PRECEDING TRAFFIC] IN SIGHT.”

Pilot: “AIRPORT IN SIGHT.”

Approach controller: “PROCEED DIRECT GIMEE, CROSS GIMEE AT TWO THOUSAND FIVE HUNDRED, CLEARED FOR RNAV VISUAL RUNWAY TWO NINE.”

Note: Other instructions may be included in this clearance per Air Traffic Control current edition of Order 7110.65, chapter 7, section 4.

Pilot executes the RVFP in accordance with all charted routes, altitudes, and speeds.