

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7110.79D

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NOV 15 2001

SUBJ: **CHARTED VISUAL FLIGHT PROCEDURES**

- 1. PURPOSE.** This order establishes criteria for developing charted visual flight procedures (CVFP) when required for environmental/noise considerations and/or, when necessary, for the safety and efficiency of air traffic operations.
- 2. DISTRIBUTION.** This order is distributed to the division level of the Air Traffic and Flight Standards Services in Washington headquarters; Office of Airport Safety and Standards; Office of Communications, Navigation, and Surveillance Systems; division level of the regional Air Traffic and Flight Standards Services, National Flight Procedures Office (NFPO); the Regulatory Standards and Compliance Division at the Mike Mom-oney Aeronautical Center; all air traffic control (ATC) facilities; and special military and public addresses.
- 3. CANCELLATION.** Order 7 110.79C, Charted Visual Flight Procedures, dated January 29, 1985, is cancelled.
- 4. ACTION.** When local airport management has identified noise sensitive areas resulting from aircraft operations, or that safety and efficiency may need to be improved, and the ATC facility manager determines that a CVFP would mitigate aircraft noise or improve safety and efficiency, action may be initiated in accordance with Paragraph 8, Program. The regional Air Traffic Division (ATD) shall review proposed and existing CVFPs to ensure compatibility with paragraph 8 and Paragraph 9, Criteria.
- 5. BACKGROUND.**
 - a. The Aviation Noise Abatement Policy and Order 1050.11, Noise Control Plans, place primary responsibility on the airport proprietor for planning and implementing action designed to reduce the affect of noise on residents of the surrounding area. Under this authority, airport proprietors may propose arrival noise abatement flight tracks which may be adopted by the Federal Aviation Administration (FAA) if they are safe and consistent with efficient airspace management.
 - b. Visual approaches have been in use for many years. They are an operational technique designed to safely and expeditiously move air traffic. In addition to conventional visual approach procedures, it has been necessary to specify routes/altitudes to enhance noise abatement or improve safety and efficiency at some locations. CVFPs have been developed to provide a pictorial display of these visual arrival routes.

6. EXPLANATION OF CHANGES. This order incorporates the application of waypoints to assist in the identification of landmarks, and includes more explicit instructions for processing requests. The purpose of this order is expanded to include safety and efficiency as a reason to develop a CVFP, and to align its purpose with the Aeronautical Information Manual.

7. RELATED PUBLICATIONS:

- a. Order 1050.1, Policies and Procedures for Considering Environmental Impacts.
- b. Order 1050.11, Noise Control Plans.
- c. Order 7110.65, Air Traffic Control
- d. Order 8260.19, Flight Procedures and Airspace.
- e. Aeronautical Information Manual.
- f. FAA Annex to IACC-4, United States Government Specifications for Charted Visual Flight Procedure Charts, First Edition.

8. PROGRAM. CVFPs will be jointly developed by FAA management and the National Air Traffic Controllers Association (NATCA) at the local level in accordance with the following:

- a. Determine that the number of aircraft operations and complexity of the visual arrival routes require the use of a CVFP, and that this would not cause an operational hardship to the ATC facility or users of the ATC system. The ATC facility shall include the NATCA in the development process.
- b. Design procedures to minimize fuel use and flight time.
- c. Ensure that the visual arrival route and altitudes are in accordance with local flow traffic management and are compatible with ATC operational requirements.
- d. Coordinate proposed procedures with the responsible Flight Standards District Office (FSDO) to ensure that new or revised procedures are compatible with aircraft flight characteristics.

9. CRITERIA. Comply with the following criteria to ensure safety is not compromised:

- a. Radar control required.
- b. Operating airport traffic control tower required at airport served by a CVFP.
- c. CVFPs shall be contained within controlled airspace.
- d. CVFPs shall be developed to a specific runway. A runway to which a CVFP is published shall be equipped with a visual or electronic vertical guidance system.

e. CVFPs shall originate at or near, and be designed around, prominent visual landmarks.

When a determination is made that a landmark cannot be readily identified at night, the procedure shall be annotated "Procedure Not Authorized at Night."

Note-

Waypoints or navigational aids (NAVAID) may be used to aid in identifying landmarks. The use of waypoints or NAVAIDs alone does not supercede the requirement for visual identification.

f. CVFPs usually begin within 20 flying miles from the airport.

g. Use electronic NAVAIDs as supplementary information only.

h. For radial/distance measuring equipment fixes, limit use to one NAVAID, excluding the NAVAID used for final approach vertical guidance.

i. For waypoints on CVFPs, use fly-by waypoints to aid in the identification of prominent visual landmarks only. Waypoints will be charted using the landmark name(s) and a five-letter identifier(s). Five-letter identifiers are for database use only, the actual landmark name is to be used in pilot/controller communications.

j. Course information between landmarks along the proposed flight path may be provided for general orientation.

k. When altitudes are deemed necessary, recommended altitudes may be established to indicate the noise abatement profile; minimum altitudes may be established to contain an aircraft above the floor of Class B airspace. Chart the minimum number of altitudes required to accomplish the procedure. Altitudes shall not be established for air traffic separation.

1. Establish weather minimums for the procedure as follows:

(1) Ceiling of at least 500 feet above the minimum vectoring altitude.

(2) Visibility of at least 3 miles.

(3) Greater ceiling/visibility values may be required if determined necessary for the safe completion of a CVFP.

(4) Published ceiling and visibility values must be reported at the airport for authorized use of the procedure.

m. Missed approach procedures will not be published.

n. CVFPs shall be named by the use of a primary landmark, such as, "River Visual Runway 18," "Stadium Visual Runway 25," etc.

10. GUIDELINES.

a. All new and revised CVFPs require a preliminary environmental review to indicate whether a potential exists to affect the human environment. Changes in ATC procedures which routinely route air traffic over noise sensitive areas at less than 3,000 feet above ground level (AGL) require an environmental assessment/finding of no significant impact or environmental impact statement/record of decision, as defined in Order 1050.1, Policies and Procedures for Considering Environmental Impacts. Changes in preferential arrival routes between 3,000 to 7,000 feet AGL which routinely route traffic over noise sensitive areas require that a noise screening be performed to **determine** the need for further environmental consideration. The Air Traffic Noise Screening (ATNS) Model should be used for this purpose (see ATNS Version 2.0 User Manual, FAA-AEE-99-01, dated January 1999). Close coordination is required with the local airport authorities and the regional air traffic environmental specialist to ensure compliance with applicable environmental policies.

b. Chart format and symbology shall be in accordance with the criteria established by the Aeronautical Information Division, ATA- 100, consistent with applicable charting policies (reference: FAA Annex to IACC-4).

c. Training for air traffic control personnel necessary for new and revised CVFPs may be jointly developed between the FAA and NATCA at the local level.

d. Regions shall ensure that procedures are contained within controlled airspace, including Class B airspace, as appropriate.

e. Facility managers shall document new and revised CVFPs for each charted visual flight on a separate Form 7 **110-8**, Charted Visual Flight Procedures. (See appendix 1.) When establishing waypoints, coordinate with the serving air route traffic control center to obtain the five-letter names, complete Form 8260-2, Radio Fix and Holding Data Record, in accordance with Order 8260.19, Flight Procedures and Airspace, for each **waypoint** being established. Prepare a visual flight rules (VFR) sectional chart(s) depicting the CVFP. Forward the original package including completed Form **7110-8**, Form(s) 8260-2, VFR Sectional Chart(s), and an environmental checklist to the regional ATD. Add VFR sectional chart drawing.

f. The ATD shall review each new or revised CVFP procedure to ensure accuracy and compliance with the provisions of this order. After approval of the procedure by the ATD and the Regional Airspace Procedures Team, the region shall forward the original signed procedure, two copies of Form 7 **110-8**, applicable F&m(s) 8260-2, an environmental checklist, and any other appropriate documents to the Flight Procedures Office (FPO).

g. The FPO shall review the procedure package for completeness, review the CVFP for criteria compliance, and transmit the CVFP package to the NFPO. The NFPO will forward the **CVFP** to Flight Inspection Central Operations (FICO) for coordination of flight inspection. After completion of flight inspection, NFPO will forward documentation of the satisfactory flight inspection and completed Forms 7 100-4, STAR - Standard Terminal Arrival, and 8260-2 to the National Flight Data Center, with a copy to the ATD, for processing.

h. The FICO will determine the flyability of the CVFP.

i. Form 7110-8 will be stocked at the depot. Copies may be ordered through normal supply channels (NSN: 0052-00-890-3000:U/I:SH).



Michael A. Cirillo
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APPENDIX 1. INSTRUCTIONS FOR COMPLETION OF FORM 7110-8, CHARTED VISUAL FLIGHT PROCEDURES

<u>Section</u>	<u>Description</u>
CVFP Name	The name should be in accordance with subparagraph 9n of Order 7110.79D. It should be short, concise, and contain the runway number.
Airport Name	Should be the same as on instrument approach procedure charts.
City and State	Should be the same as on instrument approach procedure charts.
From	These are the landmarks used to describe the routing on the chart. If the flight path will be near, but not over a landmark, state the direction and distance the landmark should be from the intended point on the route of flight; e.g., "1 mile north of stadium" or "2 miles east of bridge."
To	Same as the "From" landmarks. Each segment of the landmarks listed as "To" should also be listed as "From" on the next segment; e.g., <div style="margin-left: 40px;">From: 1 mile east of stadium To: golf course</div> <div style="margin-left: 40px;">From: golf course To: race track</div> <p>This allows for insertion of a change in course or altitude between landmarks.</p>
Course	This is optional but may be helpful to the pilot, and is sometimes instrumental in achieving the desired ground track. The course can be described as a magnetic heading or a geographical course; e.g., "110 degrees," "middle of river," or "parallel the coast line 1 mile to the east."
Altitude	All altitudes entered in this block will be published as recommended altitudes unless annotated otherwise. As stated in Order 7 110.79D, the only minimum altitudes that may be published are those designed to contain an aircraft in Class B airspace. Annotate these altitudes by placing a "for Class B" in parentheses to the right of the altitude; e.g., "3,000 (for Class B)."
Weather minimum	Insert ceiling and visibility, established under guidance of subparagraph 91 of Order 7110.79D.

<u>Section</u>	<u>Description</u>
Notes	This block is for listing notes to be published on the chart. Notes should be kept to a minimum and should not be used to describe the route. All charts are required to include the language “radar required.” Other notes may include wording such as, “procedure not authorized at night” or “simultaneous visual approaches may be in use to Runway 18.”
Supplementary NAVAID Information and Additional Landmarks Chart	(Note: These blocks are separated on the form, but are intended to be one.) This block is for listing navigational aids (NAVAID), and geographical references (other than those already listed in the “From” or “To” blocks that may assist the pilots. Also this is where to annotate the one NAVAID to be used for supplemental navigation information. (See subparagraph 9g of Order 7110.79D.) When waypoints are used to aid in identification of a landmark, list the geographical name and associated waypoint five-letter name.
Vertical Guidance	List the NAVAID that provides vertical guidance and angle; e.g., “Instrument Landing System glide slope 3.00 degrees” or “visual approach slope indicator 3.00 degrees”.
Description of Route	This will not be printed on the chart. The sole purpose of this information is to assist the cartographer in drawing the chart. All information in the description must be consistent with the other data presented on the form.
Amdt. No. or Orig.	List the amendment number unless the name of the procedure changes. If the procedure has a new name, it is an original.
Effective Date	Coordinate with the National Flight Data Center for a specific date. If no specific date is needed, insert “routine” in the block.
Supersedes	List the procedure that is being cancelled or amended.
Amdt. No.	List the amendment number of the chart that is being superseded.
Dated	Annotate the date of the chart that is being superseded.
Graphic Depiction	The purpose of the block is to assist the cartographer. It should contain all the data listed on the front side of the form under the “Visual Arrival Route” section. Do not include any additional data in this drawing. The graphic with only the data listed will assist to ensure that all necessary information as be provided. This drawing will be published as is in the National Flight Data Digest and should as neat as practical.
Communications	This will normally be the same as listed for an instrument approach procedure.

CVFP Name POINT LOOKOUT VISUAL RWY 09	Airport Name Anytown Municipal Airport	City and State Anytown, FL
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VISUAL ARRIVAL ROUTE

FROM (Visual landmarks)	TO (visual landmarks)	COURSE (if desired)	ALTITUDE (if needed) Show if for Class B
From SOUTH: Ocean Island	Point Lookout	Direct to Point Lookout	At or above 2000 until over water
From EAST: Direct to Point Lookout	Point Lookout	XYZ VOR 270R	At or above 2000 until over water
Point Lookout	Sea Cove	Remain offshore and turn final over Sea Cove	

Weather Minima: Ceiling 3500 Visibility 5	Supplementary Navaid/Waypoint Information and Additional Landmarks Chart:
Notes: Radar Required. Procedure not authorized at night.	Lighthouse PATTY LOM XYZ VOR Ocean Island Waypoint - JONNY Point Lookout Waypoint - SUSIE Sea Cove Waypoint - TOMMY

Vertical Guidance Navaid and Angle LOC I-ANY (G.S. 3.0")

Description of route (will not be printed on chart)

From South or East proceed direct to Pt. Lookout (SUSIE) then remain offshore and turn final over Sea Cove (TOMMY).

Amdt. No. or Orig. orig.	Effective Date Jan 01, 2002	Supersedes	Amdt. No.	Dated Apr 01, 2001
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POINT LOOKOUT VISUAL RWY 09

