

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7910.3A

9/3/92

SUBJ: **POSITION DISPLAY MAP PROGRAM**

1. **PURPOSE.** This order establishes procedures for the preparation and procurement of position display maps (PDM's) for use in air traffic control facilities equipped with electroluminous panels or similar backlighted display units.
2. **DISTRIBUTION.** This order is distributed to branch level in Washington and regional air traffic offices, Federal Aviation Administration (FAA) Academy, and air traffic terminal facilities.
3. **CANCELLATION.** Order 7910.3 dated October 14, 1983, is cancelled.
4. **BACKGROUND.** Increased installation and use of electroluminous panels and similar display units in Air Traffic Control facilities has generated a requirement for photonegative graphics to complement the static display systems. Due to general nonavailability of these specialized products at the local level, a national program has been established for the development and procurement of required graphic materials. The Airspace-Rules and Aeronautical Information Division, ATP-200, has developed the standards and procedures in this directive to assist facility personnel in planning for, obtaining, and revising display unit graphics.
5. **EXPLANATION OF CHANGES.** The Order has been updated to reflect changes in organizational titles.
6. **GRAPHICS DISPLAYS.** The basic photonegative graphic produced under this program will be 15 1/2"x27 1/4"; however, photographic reduction processes will be used to size graphics to smaller dimensions consistent with individual facilities needs. Because each air traffic control facility has its own unique requirements, best utilization can only be determined and implemented by those who know and understand those requirements. However, the maps should present an accurate representation of the runways, runway centerline extensions, approach courses, Instrument Approach Procedures fixes, nav aids, obstructions, limited special use airspace; DME distances, codes, frequencies, etc., to meet the individual unique

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A-Y(AI)-3; A-FAT-2/8 (LTD)

Initiated By: ATP-220

requirements of each facility for approach and departure control. The information must be stable in nature and standard symbology as depicted in Appendix 1 Stand. Symbols- FAA ATC Pos. Display MAPs (PDM) must be utilized.

a. Coordination. Facilities may initially acquire PDM's through the Cartographic Standards Branch, ATP-220. ATP-220 will coordinate these initial requests and establish delivery schedules with the National Ocean Service (NOS), which produces the PDM's. After initial procurement, facilities must coordinate routine PDM changes directly with NOS in accordance with paragraph 8 below, also ensuring that a copy of each request is forwarded to ATP-220.

b. Responsibility.

(1) Data to be shown on each individual map are the responsibility of the air traffic manager, consistent with facility operational requirements and guidelines established in Appendix 1.

(2) After an air traffic facility and its regional office have agreed that standardized maps will replace those obtained from local sources, the facility shall submit their new map requirements to ATP-220. ATP-220 will ensure that requirements are satisfied to meet new map standards for accuracy and compatibility of data.

c. Map Standarization. Technological advances and improved techniques in map production have created strict requirements for map standardization, because the final product will be a computer generated graphic.

(1) Symbology. All map data symbols shall be in accordance with the standard symbology (Appendix 1) for depiction on FAA ATC maps. These symbols were developed and adopted as standards. This was necessary for computer produced maps, training air traffic controllers and cartographers, and improved map production capability. It is recognized that there may be a requirement for map symbols to portray special criteria not reflected in these standards. All recommendations for deviations from these standards shall be submitted to ATP-200 for approval.

(2) Lineweights. Standardization is required to give uniformity for controlling proper lineweights and compatibility of data between FAA ATC facilities.

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7. FORM AVAILABILITY. Use FAA Form 7910-3 (Request for Position Display Map) to submit proper data and to request position display maps. Forms are stocked in the FAA Logistics Center and may be ordered through normal supply channels: NSN 0052-00-887-6000; unit of issue: set.

8. SUBMISSION REQUIREMENTS. Two additional copies of page 1 (three in all) are in each set. Submit one copy of the form to National Ocean Service, 6010 Executive Blvd., Room 517, N/CG314, Rockville, Maryland 20852, phone (301) 443-8376. Send one information copy to ATP-220; retain one copy for later use in preparing revisions.

a. New Maps. Facilities submitting initial PDM requests shall forward to ATP-220 FAA Form 7910-3, along with sketches of existing graphics for reference, copies of jurisdictional airspace from operational handbooks, and special procedural data.

b. Revised Maps. Facilities submitting revisions to PDM's shall use FAA Form 7910-3, identifying the items being changed by referring to the paragraph grouping under which it appeared in the original request. Include a paper print of the map indicating the desired revisions by marking in red for additions and blue for deletions.

c. Time for Obtaining Maps. Allow sufficient time in planning for and ordering maps. Seven weeks from date of receipt of data is required for the initial map and 3 weeks for revisions. In cases of emergencies, when time is critical, coordinate the request through ATP-220.


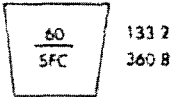


L. Lane Speck
Director, Air Traffic
Rules and Procedures Service

APPENDIX 1 STANDARD SYMBOLS - FAA ATC
POSITION DISPLAY MAPS (PDM)**STANDARD SYMBOLS**
FAA ATC POSITION DISPLAY MAPS (PDM)

AERONAUTICAL INFORMATION	SYMBOL OR MARK	DETAILED DESCRIPTION
Airports with extended runway centerline/s, as required shall be portrayed by distinctive runway pattern		Useable runway/s and centerline/s drawn to scale. Extend runway centerline/s where appropriate from approach end of runway. Dashes are 1 NM long and first dash starts 1 NM from end of runway. Spaces between dashes are 1 NM long. Procedure approach bearings as required.
Airport by distinctive runway pattern		To scale
This symbol shall be used for all minor airports		Standard Charting Symbol
VOR VORTAC, TACAN VOR DME	ORD 113.9	Name, Ident & Frequency as required
Outer Marker, Middle Marker	WILLI 111.1	Name, Localizer Ident & Frequency as required
Compass Locator NDB	PINE 230 KHz	Name & Frequency as required
Reporting Point, Fix or Intersection		Identify by name. Place 2 NM long hash marks as shown perpendicular to extended centerline/s at the proper distances to mark the final approach course intercept. Arrow points to end of runway and indicates distance from runway end.
RNAV - Waypoint		Standard Charting Symbol
Fixed obstruction that is a potential hazard to aircraft such as tower, building, mountain peak, etc.	Location	Standard Charting Symbol

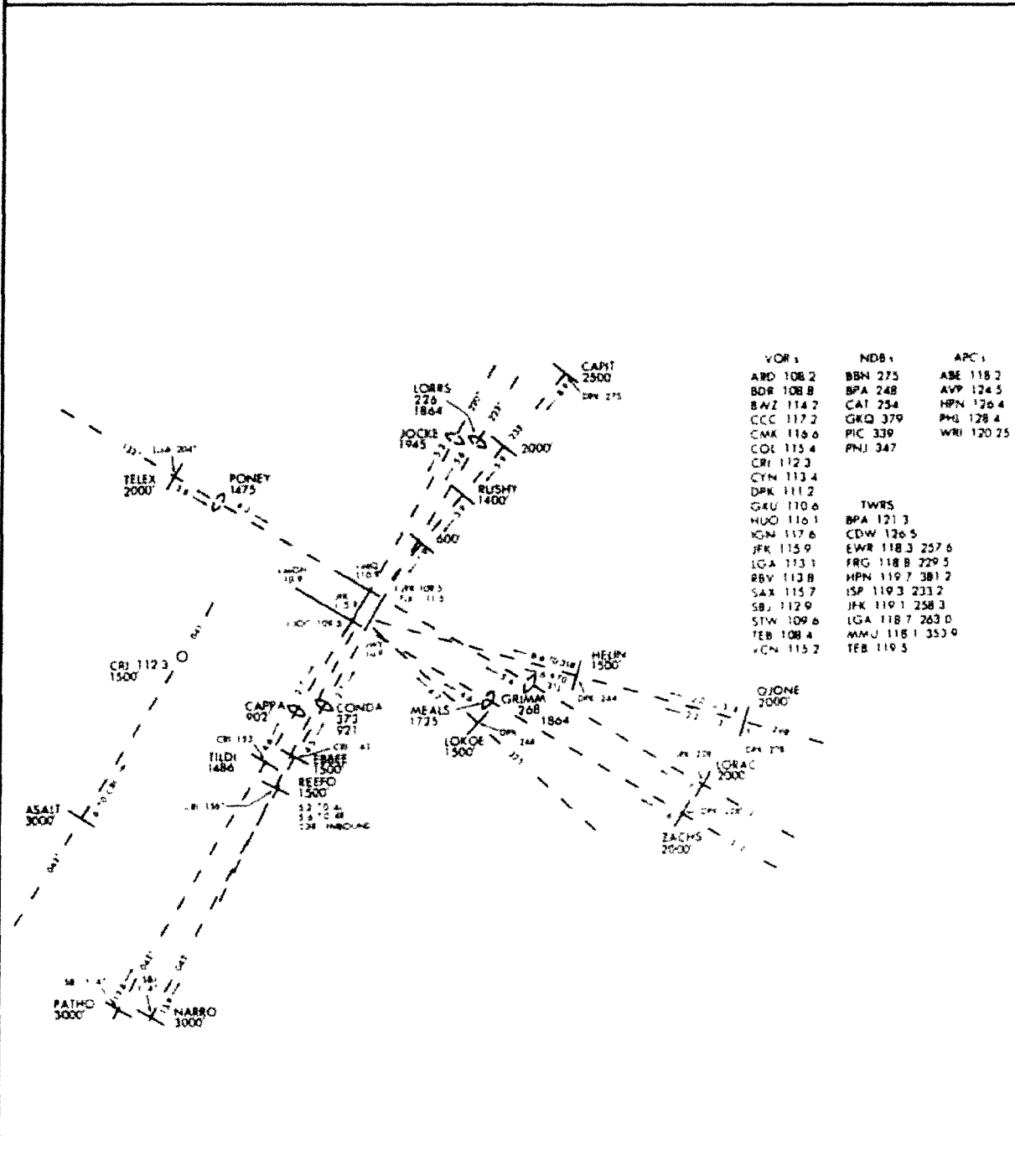
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AERONAUTICAL INFORMATION	SYMBOL OR MARK	DETAILED DESCRIPTION
Visual Checkpoint		Standard Charting Symbol
ATC assigned Airspace areas, sectors, special operating areas, jurisdictional airspace, etc.		Drawn to actual shape Solid lines enclosing area. Altitudes as required Center and tower frequencies as required

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Appendix 1

EXAMPLE OF INSTRUMENT APPROACH MAP

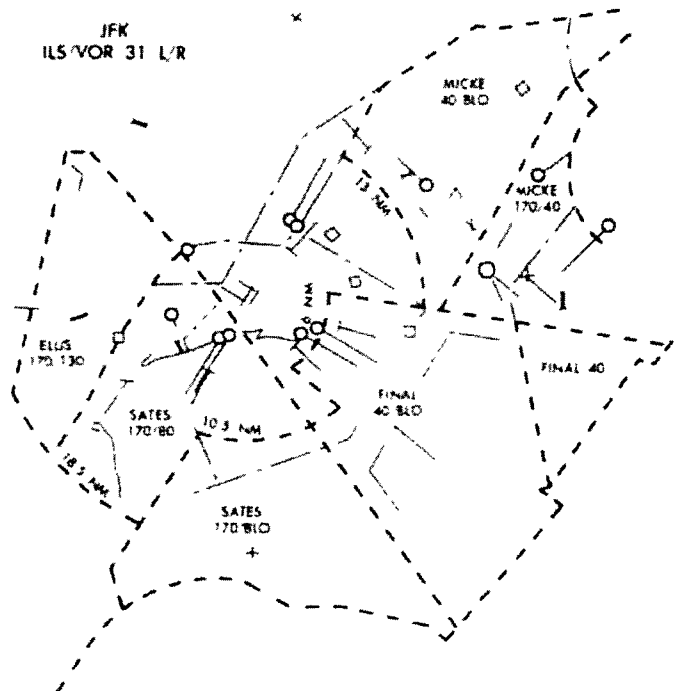


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EXAMPLE OF JURISDICTIONAL AIRSPACE MAP

VORs	NDBs	APCs
ARD 108.2	BBN 275	ABE 118.2
BDR 108.8	BPA 246	AVP 124.5
BWZ 114.2	CAT 254	HPN 126.4
CCC 117.2	GKD 379	PHL 128.4
CMK 116.6	PIC 339	WRI 120.25
COE 115.4	PNJ 347	
CRJ 112.3		
CTN 113.4		
DWE 111.2		
GXL 110.6		
HUO 116.1		
IGN 117.6		
JFK 115.9		
LGA 113.1		
PHV 112.8		
SAX 115.7		
SBT 112.9		
STW 109.6		
TEB 108.4		
VCH 115.2		

TWRS
BPA 121.3
CDW 126.5
EWR 118.3 257.6
FRG 118.8 229.5
HPN 119.7 381.2
SP 119.3 233.2
JFK 119.1 258.3
LGA 118.7 263.0
MMU 118.1 353.9
TEB 110.5



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Appendix 2

APPENDIX 2. REQUEST FOR POSITION
DISPLAY MAP
FAA FORM 7910-3

REQUEST FOR POSITION DISPLAY MAP	
TO (Contractor) _____ _____ _____	
Date Requested _____	Date Required _____
1. SIZE OF STATIC DISPLAY	
8 1/2" X 11" _____	10" X 18" _____
12" X 24" _____	9" X 24" _____
15 1/2" X 27 1/4" _____	OTHER (indicate size) _____
QUANTITY OF NEGATIVES REQUIRED _____	
QUANTITY OF POSITIVES REQUIRED _____	
QUANTITY OF PAPER PRINTS REQUIRED _____	
FROM: FAA/AAT FACILITY _____ _____ _____	
MAILING ADDRESS _____ _____ _____ _____	
SUBMITTED BY _____	DATE _____
TITLE _____	TELEPHONE _____

FAA Form 7910-3 (7-82)

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Appendix 2

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