

Section 7. Video Maps

3-7-1. TOLERANCE FOR RADAR FIX ACCURACY

Careful attention must be given during commissioning flight checks of a radar to the accuracy of digital maps, video map plates, or overlays to ensure that the plate or overlay markings meet specified requirements relative to permanent targets. In actual practice an aircraft's displayed position can be slightly in error with respect to its geographic position and still meet the requirements of FAAO 8200.1, United States Standard Flight Inspection Manual.

3-7-2. RADAR MAPPING STANDARDS

The minimum radar mapping capability required for commissioning radar services is one of the following:

- a. Dual video mapper.
- b. Adequate map overlay.
- c. Single video mapper plus a map overlay.
- d. AN/GPA-70 at USAF installations.
- e. AN/GPA-91 at Navy installations.
- f. Computer-generated displays.

NOTE-

Grease pencil markings, plastic tape, compass rose grid lines, range marks, or other innovations must not be used in lieu of an adequate digital map, map overlay, or video map.

3-7-3. DISPLAY MAP DATA

To reduce scope clutter and increase operational efficiency, limit data on display maps to the following (except for subparagraph o, facility air traffic managers may delete items not required):

- a. Airports/heliports.
- b. Runway centerline extension and/or final approach course.

REFERENCE-

FAAO JO 7110.65, Para 5-9-1, Vectors to Final Approach Course.

- c. Hospital emergency landing areas.
- d. NAVAIDs and fixes.
- e. Reporting points.

f. Airway/route centerlines.

g. Boundaries (control, special use areas, terminal buffer areas, outer fix holding pattern airspace areas, no transgression zones, etc.).

h. Handoff points.

i. Special use tracks (scramble, recovery, Instrument Departures, etc.).

j. Obstructions.

k. Prominent geographic features (islands, mountains, etc.).

l. Map alignment indicators.

m. Range accuracy marks.

n. Minimum vectoring altitudes in hundreds of feet; e.g., 23-2,300 ft., 100-10,000 ft.

o. Airports immediately outside your area of jurisdiction that are:

1. Within airspace used to receive radar handoffs; and

2. Depicted by the facility having jurisdiction over that airspace.

p. For sites equipped with STARS, facility air traffic managers must specify in a facility directive procedures for using optional maps.

q. Virtual intersection markings for non-intersecting converging runways if the flight paths intersect within 1NM beyond the departure end of both runways.

NOTE-

The intent of subparagraph o is to assist controllers in making emergency airport recommendations when inflight emergencies occur near facility boundaries. There is no intent to establish criteria for airport depiction. However, insofar as facilities having jurisdiction depict airports, then those same airports must be depicted on the adjacent facility's video map.

REFERENCE-

FAAO JO 7110.65, Para 10-2-15, Emergency Airport Recommendation.

3-7-4. INTENSITY

Set the intensity of the video map and the range marks on the CTRD equipment at the minimum intensity that will provide the controller with the necessary

information. Supervisory personnel must ensure that a usable intensity is maintained.

3-7-5. COMMON REFERENCE POINTS

Facility air traffic managers must ensure the adequacy of common reference points on radar maps where such points are used in providing air traffic

control services; e.g., handoff points, etc., between adjacent facilities or between sectors within the facilities using different radar systems. Whenever possible, simultaneous flight checks should be conducted of these radar systems. FAAO 8200.1, United States Standard Flight Inspection Manual, must be used in determining the appropriate tolerances.