

U.S. Department of Transportation **Federal Aviation**

Administration

InFO

Information for Operators

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An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

SUBJECT: Position Errors Using the High-Latitude VORTAC at Thule, Greenland.

Purpose: To inform operators at Thule or within range of the Thule VORTAC (THT) of position errors that can result from intentional or unintentional use of THT for position updating by Class II navigation systems using VOR signals for automatic updating.

Background: Thule AFB is located at 76° 32' North latitude. At this high latitude, large variation exists between true and magnetic north (about 60°). The airfield operator at Thule has changed the orientation of THT VORTAC from the normal magnetic north to true north.

Discussion: The reorientation of THT to true north has complicated navigation for some enroute aircraft flying over THT or flying in the service volume of THT. Position errors can result from the use of the THT VORTAC if it is used as an updating source for inertial navigation systems (INS) or long range navigation systems (LRNS). If a LRNS is updated either automatically or manually using the THT signal, the 60° disparity between the THT VORTAC and other VORTACs may cause a position error, or even a gross navigation error.

Recommended action: Directors of operations, directors of maintenance, directors of safety, training managers, chief pilots, and pilots operating to/from Thule or in range of the THT VORTAC should be familiar with the possible hazard described in this InFO. They should collaborate to develop procedures and training to ensure that THT VORTAC is de-selected before an airplane enters its service volume, and remains de-selected until the airplane leaves its service volume, so as to prevent position errors caused by Class II navigation systems using VOR signals for automatic updating.

Approved by: AFS-200