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SAFO

Safety Alert for Operators

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http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: North Atlantic High Level Airspace (NAT HLA) Tracks at ½ Degree Latitude Separation, Resulting in Identical Avionics Waypoint Labels for Different Points 30 Nautical Miles (NM) Apart

Purpose: This SAFO warns operators in NAT HLA airspace of the potential for flightcrew confusion associated with the 7-character display label of waypoints on some avionics. Crews are advised that with some avionics, undesignated (not named by Air Traffic Control [ATC]) significant points (used by ATC) entered as geographic coordinates are given a 7-character display label that does not include minutes. This can result in identical 7-character waypoint labels for different points on adjacent tracks.

Background: Undesignated significant points are defined by geographic coordinates, and are being used on the NAT Performance-Based Communication and Surveillance (PBCS) tracks, which are spaced at one-half degree of latitude. Some navigation displays truncate (or, in some cases, round) manually entered or uplinked geographic coordinates to produce a 7-character waypoint label that uses only the degrees (not minutes) of latitude and longitude. With these displays, it is possible for different waypoints to be labeled the same. For example, the illustration below depicts two tracks on a navigation display. For the track shown in a solid line, the points DOGAL and N55°/W020° were entered. For the track shown in a dashed line, the points VENER and N55°30'/W020° were entered. Both tracks include the identical 7-character waypoint label, "N55W020," but are nominally separated by 30 NM.



Discussion: The NAT Central Monitoring Agency reported six Gross Navigational Errors (GNE), defined as lateral deviations greater than or equal to 10 NM, which occurred in the NAT in the 12-month period ending on June 30, 2017. All of the GNEs involved aircraft that had filed a half-degree of latitude track, and subsequently were cleared onto the southerly whole-degree of latitude track.

When initially certified, flight operations in such an environment were not envisioned and displaying only the degrees of latitude and longitude was appropriate for the task. Now, with points defined by half-degrees of latitude, two nearby significant points can have identical waypoint labels. With the GNEs described above, the filed route and the revised route would have had identical waypoint labels. It should be noted that some avionics produce generic waypoint labels when geographic coordinates are entered or uplinked. Such labels, for example “WPT01” or “LL01,” are different from the 7-character waypoint labels described above in that two nearby significant points do not have identical waypoint labels.

Recommended Action: For operators with 7-character waypoint labels who fly in NAT airspace with unnamed points spaced at a half degree of latitude, the Federal Aviation Administration (FAA) recommends operators ensure their oceanic procedures are consistent with the Sample Oceanic Checklist found in Appendix D of [Advisory Circular 91-70B](#), *Oceanic and Remote Continental Operations* (revised in 2016). In addition, flightcrew training should be revised (as needed) to include specific reference to the potential of duplicate waypoint labels and the need to expand the waypoints to see degrees and minutes. More information can be found in the FAA NAT Resource Guide for United States Operators, at: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs470/media/NAT.pdf

Contact: Questions or comments regarding this SAFO should be directed to the Performance Based Flight Systems Branch at (202) 267-8806.