

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 04-02

October 27-28, 2004

Recommendation Document

Subject: Lack of routine aeronautical data maintenance in association with Non-directional Beacons (NDBs) that are used to define enroute airways.

Background/Discussion: When a LF/MF airway or a "victor" airway segment that utilizes an NDB is established, the path of the airway is described in the Federal Register by True course. NACO uses the assigned NDB variation to convert the True course to magnetic for charting of the airway magnetic course. Because the legal description of an airway using an NDB is described by True course, there is no need for an active trigger mechanism to revise the published airway as there is for an airway that uses VORs with specific ground-track defined radials. When the actual magnetic variation at a VOR changes by 5 degrees, the VOR is required to be electronically rotated to match the actual variation and all the airways and airspace based on that VOR have to be revised. Because of this lack of a regulatory triggering mechanism for airway NDBs, there has not been a good history of maintenance (updating) of the magnetic variation that is assigned to airway defining NDBs. This lack of updating of NDB "assigned variation," leads to charted magnetic courses on NDB defined airways that can be substantially different than the actual magnetic airway course. More importantly, because NDBs do not have ground-track specific radials, use of an outdated charted magnetic course from an NDB can take an aircraft out of the airway protected airspace.

Recommendations: NDBs that are used to define airways should have the NDB assigned magnetic variation updated, and the charted airway magnetic course revised, whenever the actual magnetic variation at an NDB changes by one degree.

Comments: Recently, NACO received a NASA ASR on this subject concerning airway A-1 in Alaska. In this particular case, the actual airway magnetic course and the charted magnetic course are 5 degrees different. In addition, according to the reporting pilot, use of the charted magnetic course would take an aircraft into high terrain at the airway MEA. A spot check of other airway NDBs in the same area resulted in differences of 3 to 5 degrees, with some of them last updated in the 1960s.

Submitted by: Eric Secretan
Organization: FAA, AVN-502
Phone: 301-713-2631
FAX: 301-713-1960
E-mail: eric.secretan@faa.gov
Date: September 29, 2004

04-02 MEETING: Mr. Eric Secretan, NACO, submitted this issue. Mr. Secretan withdrew the issue stating the NACO will work with NFPO to resolve.
