Subject: Removal of Grid variation from US Instrument Approach Procedure Charts

Background/Discussion: During the ongoing review of Magnetic Variation (MagVar) issues, questions were raised concerning the charting of Grid values on Instrument Approach Procedures. The origin of charting Grid comes from a 1953 document. The IACC specification specifies dual charting of Grid and Magnetic variation on instrument charts above 67 degrees North Latitude. At first this was thought to be an enroute charting requirement that was extended to include IAPs, however, Grid is not charted on IFR enroute charts. Procedures cannot be coded in Grid.

Research into the operational uses of Grid revealed that once the aircraft navigation systems were switched to Grid, they likely could not be switched back to magnetic in flight, so at some point in time, it was logical to chart the instrument approach procedure in Grid.

Continued discussion has not identified any current users of Grid on public charts. USAF uses Grid in Antarctica, but those charts are only for authorized users with special training. Grid navigation is no longer taught at USAF navigator training, which today includes Navy navigators as well. There is also very little information available concerning the use of Grid in FAA, or other documents, and during the discussions many pilots were confused that Grid was the same as True, based on how the definition is often written.

Due to these factors, publication of Grid variation appears to be a potential source of confusion on the charts, and is not being used. The crew could misread the Grid course as magnetic, or misinterpret it as True. Removal of the requirement will also reduce chart clutter, and eliminate the workload of adding unused information to the charts.

Recommendations: Take necessary action to remove requirements from the IACC specification, and any associated materials, mandating the charting Grid variation on US aeronautical charts. Guidance could be established by the DoD/NGA to support operations in Antarctica, or as needed.

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MEETING 15-01:

Tom Schneider, AFS-420, briefed the issue on behalf of the submitter, Steve Jackson. Tom stated that there is currently a requirement to chart both magnetic and grid variation on approach procedures above 67 degrees North latitude. Tom pointed out that the USAF and USN no longer teach grid variation in their instrument pilot training and that the Canadians do not use grid variation on their instrument charting products. Ted Thompson, Jeppesen, also noted that Jeppesen does not show grid variation on any of their products.

Tom recommends that the requirement to chart grid variation be removed from the FAA charting specifications. Tom asked the audience if they use grid variation or know of any pilots who do. No one in the audience claimed to use grid variation.

Kevin Bridges, AIR-131, stated the proposal was circulated around the Alaskan Airman’s Association, Alaskan Air Carriers Association, PBFA, and the DoD Policy Board on Federal Aviation. Kevin recommended that the ACF hold off on making a decision until those groups have a chance to respond to the proposal. Mike York, AAL-03, offered to also reach out to the Center and give them the opportunity to respond.

TSgt Sarah O’Brien, USAF – AFFSA, voiced that she would like to see the charting guidance remain in the IACC specifications in case the military needs to utilize it. Valerie responded that the IACC specifications are standardized guidance for the construction of FAA charts. If the requirement for grid charting on FAA approaches is no longer necessary, the guidance must be removed from IACC 4, though of course the military is free to retain the information in their version of the specification.

STATUS: OPEN

ACTION: Kevin Bridges, AIR-131, to report back on the feedback from Alaskan associations and groups.

ACTION: Mike York, AAL-03, to reach out to Anchorage Center and report back.