Transition to Point to Point Navigation

Meeting 16-02:

Rune Duke, AOPA, briefed the audience on the charting concerns that have or will emerge from the transition to Point to Point Navigation. Rune highlighted the different efforts underway that impact charting (Slide #2) and identified several items for ACF consideration that may lead to new ACF Recommendation Document submissions in the future (Slides #3 and #4). He commented that Radio Technical Commission for Aeronautics (RTCA) and MITRE have been working with the FAA to discern how pilots fly IFR. He stated that in 2014, of the 4 million flight plans filed, less than half were filed using airways. Additionally, AOPA has found that over 80% of their pilot population utilizes electronic flight bags (EFB) in the cockpit. Rune proposed the formation of an ACF-sponsored subcommittee to research challenges facing point to point navigation and to formulate and present charting recommendations.

Rune proposed four primary topics to be considered by the ACF Subcommittee:

- Providing Minimum IFR Altitude (MIA) to Pilots
- Waypoints for Low Altitude Environment
- Low/High Airspace Altitude Threshold of FL230 vs FL180
- Charting of Air Traffic Control Assigned Airspace (ATCAA)

The first item for consideration is the replacement of the existing Off Route Obstruction Clearance Altitude (OROCA) values with Minimum IFR Altitude (MIA) values. Rune described a number of benefits to providing an MIA grid on Enroute charts (see Slides #6-8). He then reviewed several concepts of MIAs applied to both US and Alaska charts (Slides #9-#15).

Valerie Watson, FAA/AJV-553, asked if the publication of MIAs on the chart would assure pilots of communications reception and RADAR coverage. Rune replied no.

Ted Thompson, Jeppesen, suggested that the Subcommittee take into consideration looking at adjacent countries. He added that Jeppesen creates worldwide a 1 degree altitude grid. If the proposal is to move forward, the grid reference system needs to be considered in an international context.

Gary Fiske, FAA/AJV-82, asked Rune whether AOPA has looked at what ATC is already doing for point to point navigation. Rune replied that yes, they have talked to ATC and will continue to have ATC as part of the discussion. Rune is hopeful that ATC will join the Subgroup and provide input.

Rich Boll, NBAA, asked if these issues are already being worked in other groups. Rune responded yes, but in the other groups, charting experts are not part of the discussion. Rich suggested that this workgroup should be advertised to a wider audience so that efforts are not being duplicated. He mentioned the Performance Based Operations Aviation Rulemaking

Committee (PARC), Technical Operations Committee and the NextGen Advisory Committee. Valerie asked Jill Olson, FAA/AJV-553, to conduct outreach to these other groups. Jill agreed to do so.

Tom Schneider, FAA/AFS-420, commented that the issue of OROCAs was first introduced in 1996, with <u>ACF-IPG RD # 96-01-155</u> - Operational Status for OROCAs and Implementation of GPS TAAs. Tom stated that the topic generated a 6 year discussion before being closed out, without OROCA use being authorized for off-route RNAV operations.

The second topic for discussion addressed the need to retain a system of waypoints within low enroute airspace to further the ability for pilots to file and fly Point to Point Navigation (Slide #20).

Dale Courtney, FAA/AJW-292, commented that through the VOR MON Program, where there is a VOR that has been identified for decommissioning, the DME will often remain with the 3 letter identifier retained. That DME can be used as a waypoint.

Ted commented that there are currently 10,000 floating waypoints, including the National Reference System (NRS) grid waypoints, in existence and databased. Many of these floating waypoints lack any defined association. He emphasized that the group needs to take caution in adding more waypoints to the NAS. Ted added that the topic appeared to him to be less about charting depiction and more related to an operational issue. Ted suggested that the group attempt to define the end state and then work to figure out how to get there.

Rune then briefed the idea of revising the Low and High Altitude Enroute Charts at FL230 rather than the existing FL1800. This was discussed and is documented later in the minutes as part of a new Recommendation Document (<u>ACF RD 16-02-308</u>).

Rune briefly introduced the idea of charting ATCAAs on Enroute charts. This will be discussed by the Subcommittee.

The Subcommittee signup sheet was circulated and the following individuals volunteered to participate:

Transitioning to Point to Point Navigation Workgroup				
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ACTION: Rune Duke, AOPA, will report on progress of the Point-to-Point Navigation ACF Subcommittee and propose any Requirement Document proposals that are supported and generated by the group.

<u>ACTION:</u> Jill Olson, FAA/AJV-553, will determine where this subject is currently being discussed within other groups (PARC, NextGen Advisory Committee, etc.) so that the Subgroup's time/work is not wasted on redundant activity or working at cross-purposes.

MEETING 17-01

Meeting was cancelled.

MEETING 17-02

Rune Duke, AOPA, <u>briefed the issue</u>. Rune stated that goal of this ACF Subcommittee is to look at the challenges to point-to-point navigation and present recommendations. He reviewed the actions taken since last ACF. The working group held several meetings, out of which, three issues were identified: Minimum IFR Altitude to pilots; Communication gaps along an airway; and Waypoint naming and organization. For the first item, a Recommendation Document (RD) was submitted which was briefed later in the ACF (Ref. <u>ACF RD 17-02-316 Improving OROCA to Meet FAR 91.177 Requirements</u>). The other items are still in discussion within the workgroup.

MEETING 18-01

Rune Duke, AOPA, reviewed the issue and provided an update on progress made since last meeting. He again stressed that the implementation of the VOR MON program will result in fewer conventional land-based NAVAID routes available, making point-to point navigation more important. He stated that the goal of the Subcommittee is to look at the challenges to point-to-point navigation, find ways to facilitate it, and present recommendations. The first piece out of the Subcommittee was the submission of a recommendation for improving OROCA, to be

discussed later in the meeting (refer to RD 17-02-316). He said that the other issues being worked by the subcommittee have paused for the time being.

Rune then <u>presented a slide</u> regarding the Performance Based Navigation (PBN) National Airspace System (NAS) Navigation Strategy goals. One of those goals is that by 2025, the FAA will complete the transition to digital delivery of chart data. Rune expressed the following questions regarding this goal: How will this be accomplished? What more needs to be done? Should the ACF help steer this goal?

Valerie Watson, FAA/AJV-553, said that there have been internal FAA discussions about adding a separate data aspect to this bi-annual meeting that could specifically address this sort of issue. She asked the audience if there is support for the idea and whether or not another day should be added to the existing three day meeting for that purpose. Brian Murphy, FAA/AJV-562, stated that, in his view, the data discussions should be incorporated into the charting and instrument procedures discussions. Rune agreed. Ted Thompson, Jeppesen, said that there are already other meetings in place that work with chart data providers. He agreed that there need not be a separate day specifically dedicated to data issues and that data aspects should be discussed in concert with the respective charting/procedure subjects. Rich Boll, NBAA, expressed agreement. Jill Olson, FAA/AJV-553, stated that if data is going to be included, it may have to be written into Order 7910.5 that supports this meeting.