## **Atlantic Coast Route Project (ACRP)**

## Meeting 16-01

Ray Spickler, FAA/AJV-142, presented a <u>briefing on the Draft PBN Route Structure Concept of Operations (ConOps)</u>. Ray stated that in the future, PBN is envisioned to be the primary means of navigation through the NAS. He discussed the benefits a PBN Route Structure by use of strategically placed PBN ATS Routes (See <u>Slides 13</u> and <u>14</u>).

Ray reviewed previous efforts to establish PBN-based routes. He stated those efforts were perhaps not well coordinated and therefore resulted in low to near zero utilization. This new effort strives to ensure that the routes established will be more heavily utilized and will more efficiently optimize airspace in the NAS. The Atlantic Coast Route Project (ACRP) will be the first of five phases of implementation of the new PBN Route Structure across the U.S. and is scheduled to be completed in 2017. See the <u>presentation slides</u> for a detailed explanation of the ACRP.

Lt. Col Jen Scott, USAF, expressed concern, stating that the U.S. military does not have 100% GPS capability and that much of their operations rely heavily on the conventional NAS. She stated her belief that a large shift from a conventional route structure to a GPS route structure would impact the military's ability to safely navigate through the NAS.

Rob Goodson, NGA, asked about the implementation plan. Ray stated that the intent is to publish all of the new PBN routes on the Enroute charts, leaving the existing conventional routes in place. After a trial period of 56 to 112 days (2 ARINC cycles), many of the conventional routes would then be removed. Valerie Watson, FAA/AJV-553, expressed her concerns regarding the impact this would likely cause to chart congestion. She stated that this approach would likely cause a tremendous amount of congestion that could result in a safety issue if the charts become unreadable. She voiced that a large number of Enroute chart users continue to utilize paper charts and the success of the project depends upon those charts being easily decipherable by users.

Ted Thompson, Jeppesen, echoed the concern expressed by Valerie regarding the overlay of a large number of new routes on the existing and already congested East Coast structure. Ted said that there is the potential to generate a high degree of chart clutter to the point where the charts become unusable. It was suggested by several people in the audience that the FAA may have to adjust the scale or the coverage or possibly even create duplicate charts to be able to accommodate this project. Valerie expressed her doubt regarding these options, stating that it would be extremely unlikely, if not impossible, for the FAA to produce extra RNAV-only charts or increase the scale of existing Enroute charts in time for the expected October implementation. Ray voiced that he recognizes the concerns of charting and is willing to explore other solutions.

Ray also briefed that his office wants the new routes published on the charts prior to them being made operational. Valerie voiced concern over this and asked the purpose/logic of deliberately publishing regulatory routes that are not intended for use and asked how this was foreseen to

be accomplished. Ray responded that the publication would allow pilots and ATC to "become accustomed" to the routes by seeing them on the charts for a cycle or more until they become operational. The current plan is to publish 30 to 40 Q Routes and then immediately NOTAM them out on the day they become effective. Valerie commented that in the 1970s the NTSB issued a recommendation that IFR procedures should not be published with the express intent to immediately NOTAM them out and assumed that this also pertained to airways (which are essentially IFR procedures).

The group discussed the issues regarding premature publication of non-operational routes, publication of a new series of routes on top of already congested underlying existing structure and the charting and operational problems that may ensue. Various solutions were suggested. Valerie suggested that an incremental implementation of the route project be investigated and suggested publication of a few new routes, deletion of a few old ones, publication of a few more new, deletion of a few more old ones, etc., until the area is restructured according to plan. Barring a stepped approach, she suggested it would be preferable to make all of the new routes effective and deletion all of the old routes effective for the same ARINC cycle.

Ray stated that he will look into these issues and committed to engaging with AJV-5 regarding an implementation strategy and possible charting solutions. Lance Christianson, NGA/XCF, expressed concern and requested that Ray's office also engage DoD charting individuals in the discussion as the NGA has a vested safety interest in the compromised readability of the FAA Enroute charts that could result from this project. Ray agreed to include the NGA in his discussions with AJV-5.

Ted asked Ray about the value of the current Navigation Reference System (NRS) waypoint grid – asking if the waypoints are being used and if they are planned to be retained. Ray stated that the NRS grid still has value and that his office is looking at ways to optimize use of the system. Gary Fiske, AJV-82, commented that he hopes they plan to retain the current NRS grid system and waypoint nomenclature.

## Meeting 16-02

As no one from the ACRP Program was available to brief, Dan Bryder, FAA/AJV-5211, reviewed the topic and provided background information on the original scope of this project. He then presented a revised implementation plan that was developed based upon comments received at the last ACF and from concerns raised by New York Air Traffic Control Center (ZNY). The revised plan consists of two phases. Phase I will be implemented in June 2017 with the addition of 12 new Q and Y routes within the New York Center area of coverage. The new routes will co-exist with the existing Jet Routes. Phase II will be implemented in October 2017 and will add the Q and Y routes to the remaining Centers and all J-routes will be removed. Dan shared that the original plan to NOTAM the new routes out of use on the effective date has been abandoned and the routes will be fully operational on the effective date published.

Dan added that most of the new routes overlay existing J-routes, so chart clutter will not increase significantly. He stated that the FAA Enroute charting offices feel confident with their ability to handle the work load and to depict the changes clearly.

Rich Boll, NBAA, asked whether the FAA was planning to update the Preferred Route database. Also of concern are possible effects to Tower Enroute Control (TEC) routes, Coded Departure Routes (CDRs), Departure, Arrival and Approach procedures. Dan responded that he has heard these items mentioned by the ACRP group and assumes that those routes/procedures will be updated concurrently, but has only been involved with the IFR Enroute airway changes.

Concerns were raised by the audience regarding this two phase process and a lack of understanding for why this was the chosen path. What is the value of the Phase 1 plan for ZNY? Gary Fisk, FAA/AJV-82, expressed concern over the exception in place for ZNY where Q route segments will appear in the sector in June but will not be connected to a similar type route within surrounding ATC areas until October. He questioned the wisdom of this avenue and the logic behind it.

Dan responded that he would communicate the ACF concerns to Ray Spickler, FAA/AJV-142, but voiced that, in his understanding, the plan has already been agreed upon and set into motion.

Gary also asked whether the rulemaking actions required for removing Jet Routes is being done. Paul Gallant, FAA/AJV-113, reported that his office is responsible for processing and publishing the rulemaking changes, but that no change packages had yet been received.

Ted Thompson, Jeppesen, commented that the revised plan is a vast improvement on the original plan presented at the prior ACF, but voiced concern regarding dependent procedures, especially implications on Terminal Departure and Arrival procedures along the East Coast.

Lt. Col Neindorf, USAF, asked about alternate navigation for military aircraft without GPS equipment. Dan emphasized that not every Jet Route will be eliminated as part of this project and there will still be sufficient conventional routes available for non-GPS equipped aircraft.