# Government/Industry Aeronautical Charting Forum (ACF) Meeting 07-02 October 24-25 2007

## MINUTES

## I. Opening Remarks

The Aeronautical Charting Forum (ACF) was held at the Air Line Pilots Association office in Herndon, Virginia. Mr. John Moore, NACO, ACF Co-Chair and Chair of the Aeronautical Charting Forum, Charting Group, opened the Forum on October 24, 2007. Mr. Moore welcomed the ACF participants to the ALPA office and acknowledged ACF Co-Chair Mr. Tom Schneider, AFS-420. Mr. Schneider chaired the ACF Instrument Procedures Group meeting held on October 23, 2007. Minutes of that meeting will be distributed separately.

#### II. Review of Minutes from Last Meeting

The minutes from the 07-01 ACF meeting were accepted as submitted with no changes or corrections.

#### III. Agenda Approval

The agenda for the 07-02 meeting was modified to include New Charting Topics 07-02-203 and 07-02-204.

## IV. Presentations, ACF Working Group Reports, ACF Project Reports

#### ATA Charting Committees

Mr. Mitch Scott, Continental Airlines and Chair of the ATA Chart and Data Display Working Group was not present. Mr. Ted Thompson, Jeppesen, reported that the committee had not met since the last ACF meeting.

**<u>ACTION</u>**: Mr. Mitch Scott will report on the ATA Chart and Data Display Working Group at the next forum.

# SAE G-10 Electronic Symbology Committee Report

Mr. Ted Thompson, Jeppesen, provided an overview of the committee's ongoing effort to develop a basic, simplified set of symbols for use in electronic aeronautical displays. The goal is to establish symbols that are intuitive and universally recognizable. FAA intends to use the results as a reference for use in future certification of electronic aeronautical displays. The committee is continuing its work on the depiction of airspace and special use airspace boundaries. The next SAE G-10 committee meeting will be held in December in Phoenix. The committee should have a published document by late 2008.

**ACTION:** Ted Thompson will report on the SAE G-10 Committee at the next forum.

#### **RNAV Airway Program Sub-group**

Mr. Tom Schneider, AFS-420, reported that the latest changes have been incorporated into the 8260.19D with an effective date of 26 NOV 2007. Mr. Schneider recommended that the group be disbanded. The ACF approved.

## ICAO/OCP Committee Report

Report on latest activities of the Instrument Flight Procedures Panel (IFPP, formerly Obstacle Clearance Panel or OCP). Eric Secretan, NACO, provided a summary of some of the changes which will be included in an upcoming ICAO "State Letter". The letter is a solicitation to member States for comments.

<u>RNAV Holding Patterns</u>: For systems not capable of auto-hold, there is a proposal to change the charted depiction of holding patterns to illustrate the fact that the holding distance limit applies to the end of the outbound leg.

<u>GPS/GNSS MEA:</u> The panel is moving toward adoption of the GPS MEA depiction using the "G" suffix (e.g. 7300G). An exception is that the ICAO application does not specify the use of the G suffix when the MEA applies to a GPS-only route. The G suffix would be used only in combination with a conventional MEA on a conventional route.

<u>Procedure Titles:</u> Procedure titles will indicate the primary NAVAID only. Also, ICAO will change the use of capital letters for Aircraft Categories (A, B, C, D) and also Duplicate Procedure Suffix Codes (X, Y, Z) to use lower case letters verses upper case letters.

<u>RF Legs on RNAV RNAP SID, STAR and Approach Procedures:</u> ICAO will allow the use of RF legs on all types of RNAV Flight Procedures, including Departures and Arrivals. An appropriate note would be included to indicate the "RF capability required." Also, ICAO uses the term "AR" (Authorization Required) verses FAA's SAAAR terminology.

<u>Waypoint Naming</u>: A matrix has been developed to aid in the establishment of waypoint names. The worldwide repository of pronounceable waypoint names is running low. Consideration has been given to waypoints used in ATC communications where pronounceable names are necessary. In some cases it will allow the use of non-pronounceable alpha-numeric waypoint identifiers, generally in local terminal environments. (Comment by Eric: The US HAR grid reference waypoints do not conform to the guidelines because they are not 5-letter pronounceable but are used in ATC clearances.)

<u>Definitions of Airspace Fixes and Symbology:</u> Guidance on terminology and symbols for Intersections, Waypoints, Reporting Points and Significant Points. Incorporates the 'hierarchy' concept, on-request, and compulsory reporting status (solid fill).

A request was made to include Eric's summary notes as part of the ACF meeting minutes so attendees would have an opportunity to review details. Eric will coordinate with Jim Grant and John Moore.

**<u>ACTION</u>**: Eric Secretan will report on ICAO/IFPP activities at the next forum.

# Temporary NAVAID Outages

Ms. Valerie Watson, NACO, reported that a notice providing policy and procedural guidance and interim operating procedures revising FAA Order 7930.2, to be effective January 28, 2008, has been signed. This guidance establishes the policy that temporary NAVAID outages will be covered via NOTAM until such time as the NAVAID is either decommissioned or returned to service. NOTAMs will be reissued for all NAVAIDs that are currently in an "Out of Service (OTS)" status and temporary NAVAID outages will be removed from the A/FD by established NFDD procedures.

**ACTION:** Val Watson to report at the next ACF.

## **Cold Temperature Risk Analysis**

Mike Cramer, MITRE, <u>gave a presentation</u> on the process and formulas that MITRE intends to use to run a Cold Temp Risk Analysis for AFS-410 in response to ACF-IPG issue 92-02-110. Specifics regarding the briefing as well as a copy of the briefing slides are included in the ACF-IPG minutes.

# Airport Source Data Committee

Mr. Dave Goehler, Jeppesen, <u>provided an update</u> of the two meetings of this committee since May 2007 and lauded the participation of Mr. Dave Bennett, FAA Airports Branch, and their willingness to move forward on the issues. Mr. Bennett attended ACF 07-01 in May. He is aware of the depth of concern about airport source problems. His presence at the last ACF meeting was very helpful and has generated increased awareness, cooperation and progress on several issues being addressed by the subcommittee.

The FAA has indicated it plans to create an Advisory Circular intended to provide guidance to airport authorities and operators about the collection and handling of airport related source information. The committee has developed a list of ways airports could provide better information, textual and graphical. The committee has also developed a list of important airport related data elements.

The next ASD committee meeting will be in February 2008. In the meantime, Dave will be working with Michael Brown (FAA Airports) on an initial draft version of the Advisory Circular. Target date for completion of the draft AC is year's end, with final signature and issuance in Spring 2008.

Brad Rush raised the issue about the importance of coordinating the timing of publication effective dates of certain types of critical changes, such as runway end coordinates, that affect IFR terminal procedures. Mr. Rush volunteered to participate in future committee meetings.

Ted Thompson, Jeppesen, commented that for inclusion in the AC, the committee's list of airport data elements ought to identify those data elements that are linked to IFR terminal procedures and that need advance notification of change and close coordination with FAA flight procedures (OKC).

(See ACF-CG RD <u>07-01-197</u> Graphic Airport NOTAMs for additional information on this issue)

**<u>ACTION</u>**: Dave Goehler will report on subcommittee activities at the next forum.

#### **Helicopter RNAV Routes**

Paul Ewing, Air Traffic RNAV RNP Office, reported that the basic philosophy used in the RNAV T-Route program is going to be used in the creation of Helicopter RNAV routes. He noted that a prototype chart was coordinated with the Northeast Region and they were satisfied with it. He stated that most of these routes would be helicopter-only routes and discussion took place as to how best to indicate that on charts. For instance, should a different prefix be used, should an H suffix be used on a T-route designator, should a series of T-route numbers be set aside for helicopter only use, should the color Green be used, etc.

Mr. Ewing stated that HAI did not have any unique requirements for RNAV routes on charts. He also reported that the routes would be regulatory and there was little interest by either HAI or FAA (other than LAX and NE Region) to create Helicopter Routes.

(See ACF-CG RD 07-01-193 Charting Helicopter RNAV Routes for additional information.)

**ACTION:** Paul Ewing will report on these activities at the next forum.

## **Declared Distances**

Richard Boll, NBAA, reported that the subcommittee has been active via telecons and email exchanges. There is consensus within the group that declared distance information should be provided by airport authorities through official FAA source distribution processes. FAA form 5010 is the preferred source. During an ad-hoc meeting of members in attendance at the ACF, Ben Castellano, FAA, confirmed that the desired process could work and should be put in place. Mr. Castellano committed to being responsible for working with airport authorities and inspectors to collect declared distance data for inclusion in the 5010 and NASR database.

It was agreed that the committee would develop and document a recommended process and flow diagram (end-to-end) of how the declared distance data would be collected, processed, and disseminated. The process must include NOTAM support.

Mr. Castellano will identify appropriate individuals in the FAA to represent affected branches. These individuals would be contacted to ensure the recommended process is workable.

Rich asked Roy Maxwell and Ted Thompson to collaborate on the recommendation document, and then work with him to determine the next steps.

It was also noted that the Declared Distances Subcommittee should coordinate its work with Mr. Dave Goehler's Airport Source Data Subcommittee.

The goal will be to submit the subcommittee's recommendation document to the ACF at the next meeting.

(See ACF-CG RD 07-01-192 Usable Runway Lengths for Takeoff and Landing for additional information.)

**<u>ACTION</u>**: Richard Boll will report on subcommittee activities at the next forum.

## V. Outstanding Issues

# 04-01-167 Charting of Altitude Constraints on SIDs and STARs

Mr. John Moore, NACO, provided a brief history of the issue. IACC Requirement Document (RD) 616, signed by the IACC in May 2006, established the requirement for using over line and underline bars to depict maximum/minimum altitudes and airspeeds on SIDs, STARs and Instrument Approach Procedure (IAP) Charts.

In response to the IACC RD, ATC commented on the need to accommodate "expect" altitudes (a.k.a. "recommended" altitudes). Expect altitudes would still utilize the lines, but be prefaced with the term "expect". (*NOTE: FAA uses "expect" altitudes. Recommended altitudes are not mentioned in the FAA SID/STAR order.*)

There was previous discussion about the important relationship between altitude and speed information, and related chart depictions, with regard to the increasing number of performance based terminal procedures.

The IACC made an additional review of the IACC RD based on the discussions and decided that no changes were needed. IACC RD-616 has been approved and NACO is applying overlines and/or underlines on SID/STARs on an as-revised basis.

## STATUS: CLOSED

## 04-01-168 Identifiers for Heliports and Helipads

Mr. John Moore, NACO, provided a brief recap of the issue. The FAA is working to create location identifiers for heliports and helipads in order to support helicopter operations. The initiative is intended to provide the required NOTAM support to private use heliports and helipads. (Note: This item also relates to ACF-CG RD <u>05-02-177</u>, Identifiers for Copter Point-in-Space procedures.)

Progress has been made, but work is still underway to determine how the new identifiers will flow between Flight Standards, Flight Procedures and Flight Service Stations and disseminated via the FAA's new "FS-21" NOTAM system.

Mr. Mike Webb and Mr. Gary Prock were not present and had no reports.

#### STATUS: OPEN

**<u>ACTION</u>**: Mike Webb and Gary Prock to report on issue at the next ACF.

# 04-02-170 Idents and Coordinates for Parachute Jump Areas

Mr. John Moore, NACO, recapped the issue and read an excerpt from Mr. George Sempeles, Cartographic Standards. "Of the 204 records provided by Mr. Ed Scott of USPA, I have reviewed 108 records verses the 703 records found in NASR. Of the 108 records reviewed, I have found 12 possible adds to NASR. I cannot use the USPA list to assume deletes because it is possible some activity areas are not members of the USPA. I'm sorry the review is slow but USPA's list is not compatible with the NASR data structure, so I have to perform a manual check between the two databases. My plan is to complete the review, identify all the

adds, find & notify the facilities having jurisdiction over the airspace where the jump activity is occurring, and request those facilities notify NFDC via formal communication." Resolving the differences is a significant work effort.

Jim Spencer, NGA/OMS, requested that before any jump areas are deleted from NASR, the FAA should get input from the military.

## STATUS: OPEN

**<u>ACTION</u>**: Mr. George Sempeles will provide an update at the next ACF.

# 05-01-174 Top Altitude Note on Standard Instrument Departures (SIDs)

Proposed Definition: "Top Altitude" is the maximum altitude a pilot is cleared to climb to in the initial SID clearance, or when receiving a "climb via" clearance from ATC.

This subject concerns a need, expressed by ATC, to standardize the depiction of Top Altitude information on relevant SID charts where "climb via" procedures are used.

One solution when designing a SID would be to NOT include any crossing altitudes that are higher than the so-called "Top Altitude". This would avoid complications and confusion. Another solution would be to depict the Top Altitude conspicuously in a prominent, consistent location on the chart (i.e. beneath the procedure title), or as part of the Briefing Strip general notes section. (Note: Regardless of depiction, Jeppesen insists that Top Altitude information be included on SID procedure source.)

The FAA, for pilot education purposes, created an informational video covering "Climb Via" procedures. Mr. Brian Townsend, ALPA, <u>gave a presentation</u> as a refresher and a topic update.

According to Brian, new RNAV SIDs will be implemented at Salt Lake City effective January 8, 2008. New RNAV SIDs will be implemented at Las Vegas soon after, on or about February 2008. (Check FAA AVN website for advance procedures.) Brian requests that Jeppesen apply ALPA's recommended depiction of the "Top Altitude" climb limit. (Note: On the FAA procedure source, this is also the "maintain" altitude.)

The discussion led to whether or not the 8260 procedure source should be changed from providing a "maintain altitude" to providing a "window or block altitude" for each waypoint or route segment. According to Brad Rush and Tom Schneider, existing policy allows the use of 'block altitudes". The requirement is actually driven by Air Traffic.

Brad Rush pointed out that no matter which way you go, a sizeable number of FMS boxes will be impacted – both positively and negatively.

Brian Townsend, ALPA, stated that box manufactures need to modify their FMSs. Rich Boll of NBAA expressed concern about business/corporate operators who do not have FMS VNAV capability. This would be an education issue.

In summary, charts reflect the procedure source. Coding is another aspect. Ideally, the charts should be compatible with the coding. If the source was clear as to the application of "block altitudes", that would be the ideal outcome. There was additional discussion that this subject may have run its course as a charting forum subject and the issue should be transferred to AFS for certification.

#### STATUS: OPEN.

- **ACTION:** Brian Townsend, ALPA, will provide ASF-420 Tom Schneider with recommended text for 8260.46D, Appendix 2. AFS-420 will incorporate and report back.
- **ACTION:** Mr. Brian Townsend will provide an update at the next ACF.

## 05-02-177 Identifiers for Copter Point-in-Space Procedures

In order to get Helicopter "Point-in-Space" (PinS) instrument procedures into the FAA NOTAM system, there is a need to establish unique location identifiers.

Some of the questions being asked were: What are the issues? What should the criteria be? How would FAA's internal systems be affected?

Today, some helicopter procedures are to a common MAP, then 'split' into separate VFR paths to individual landing sites.

Options include:

- a. Use ID of the common Missed Approach Point (MAP) ATO says "not feasible".
- b. Use closest Landing Surface already in the NASR database New York example.

c. Use location where pilot gets the current altimeter setting – ties ID to the facility used by the pilot to fly the procedure.

d. Treat similarly as done for SIDs that serve multiple airports.

This issue is still being worked.

#### STATUS: OPEN.

**ACTION:** Mr. Mike Webb will provide an update at the next ACF.

#### 05-02-179 Attention All-Users Page for Simultaneous, Parallel RNAV Departures and PRM Approaches

Mr. Mark Steinbicker, AFS-410 briefed pilot recognition of simultaneous operations as important to safe operations by increasing pilot awareness. Currently, All-Users Pages are only in use at Atlanta-Hartsfield and Dallas-Fort Worth airports by a non-government developer of charts. The pages would be limited in use to multiple complex airports with simultaneous parallel RNAV departures and therefore the total number would be somewhat limited. It is estimated that there may be 10-12 airports in the USA with parallel runway complexes where RNAV SIDs will be implemented.

How would the information be disseminated for use by commercial charting entities?

One option previously discussed was how the FAA would publish the information – in the Airport/Facility Directory (A/FD) or as a text page in the relevant TPP?

ALPA and NBAA prefer to have the advisory notices published with the procedures.

The underlying issue is who is responsible for the content, and how would the information be disseminated?

In a previous ACF meeting Mark Steinbicker agreed AFS-410 would be responsible for these notices. It remains to be seen how they'll be sourced and/or published by the FAA. Mr. Steinbicker will coordinate. The same concept applies to both Simultaneous Parallel RNAV SIDs as well as PRM approaches.

As far as the PRM approaches are concerned, it was reported that AAUPs have been created for all IAPs. They will be published via NFDD concurrent with the part 97 procedure amendments that will delete the currently published regulatory pages. When asked when the procedures were to be revised, Brad Rush reported that the updates for the deletion of the regulatory AAUPs are "on the schedule".

Discussion between Mark Steinbicker and Tom Schneider indicated that the informal "all user" pages would be reviewed and integrated into some new form of FAA-all users text page covering both PRM approach and PRM departure (SID) operations. These would be re-evaluated and produced when affected locations come up for FAA / AVN evaluation. Additional coordination will follow.

## STATUS: OPEN.

**<u>ACTION:</u>** Mr. Mark Steinbicker will provide an update at the next ACF.

## 06-01-182 Alternate Missed Approach Holding Pattern

Ms. Valerie Watson, NACO, recapped the issue and reported that FAA 8260 procedure source already designates alternate missed approach holding patterns.

The problem has to do with a pilot's ability to easily understand, identify and locate the missed approach holding fix and pattern on charts.

At issue is how NACO shall chart the fix and holding pattern. NACO originally depicted Alternate Missed Approach Fix information the same as the primary Missed Approach Fix. To differentiate the two, examples were made by NACO showing the information screened. NACO's application did not include the "Alternate" label.

Jeppesen charts alternate missed approach holding patterns (inset labeled "Alternate Missed Approach Fix") DoD wanted to see additional NACO chart examples that makes the distinction between primary and alternate missed approach holding fixes more apparent. New NACO chart examples were presented for discussion.

The ACF's position is to include the "Alternate" label. The subject of outlining the alternate fix information can be determined by the IACC.

NACO depiction will include a boxed outline and a label. Val Watson reported the RD had been signed and implemented.

# **STATUS: CLOSED**

# 06-02-187 Obstructions on World Aeronautical Charts

Mr. John Moore, NACO, provided the following recap of the issue. Currently, obstructions greater than 200 feet AGL (300 feet AGL or more in built up areas) are charted on the WAC if the location is critical and space permits. Charting of these low level obstructions provides limited value to the pilot and adds chart clutter.

WAC charts were intended for aircraft operating at higher altitudes at moderate speeds. They were not intended for low level use.

The recommendation is to modify the requirement for charting low level obstructions on WAC charts to 500 feet AGL. U.S. Sectional and Terminal Area Charts (TAC) would continue to chart obstacles greater than 200 feet AGL.

The ACF supports the position that obstructions below 500 feet AGL be omitted from WAC charts. The recommendation was forwarded to the IACC. Requirement Document 650 was drafted as per ACF recommendation and received concurrence from all members except ATO-R. ATO-R sought and received agreement to the proposed change from both FAA domestic and international General Council (GC). GC requires notice of this change in advance, including a "not for comment" entry in the Federal Register. GC will help with the Federal Register entry. IACC RD 650 might be signed and possibly implemented by the next ACF.

# STATUS: OPEN.

**<u>ACTION</u>**: Ms. Valerie Watson will provide an update at the next forum.

# 06-02-188 Non-Standard Traffic Patterns on TPP Airport Sketch

Mr. John Moore, NACO, recapped the issue and provided the following briefing. A pilot using U.S. Government charts can and should derive airport traffic pattern information from the Airport/Facility Directory. However, when IFR en route (especially single-pilot and operating in IFR weather conditions) it may be difficult to get the A/FD out to check the airport details. A pilot made a recommendation to add some type of symbol or note shown in the airport sketch on the instrument approach chart to alert the pilot of right traffic pattern situations. The pilot believed this inclusion might be helpful to pilots and improve safety.

Mr. Eric Secretan, NACO, noted that this effort would affect about 1,400 charts/sketches, 2,100 personnel hours and \$80,000 in cost. Mr. Secretan added that this project would not be able to be completed in a rapid manner. It would need to be implemented over time.

AOPA endorses the recommendation to modify NACO airport sketches. NACO has concerns about resource impact and implementation given the number of charts affected.

There was discussion that conversion of charts over time might result in confusion. The question posed is "would the response possibly make the situation better or worse?"

At ACF 07-01 AOPA took an action item to review the recommendation, given the response from NACO, and reconsider the recommendation based on pros and cons.

AOPA reported in this meeting that they want to pursue the recommendation. At issue is how the right traffic indication or note should be portrayed. Based on AOPA's recommendation, IACC Requirement

Document 651, Non-Standard Traffic Pattern Notation on IAP Sketches, was proposed. Both NGA members (representing OMS & PV) have non-concurred with the proposed change.

Jim Spencer, NGA/DoD supported non-concurrence with the recommendation because military flight crews are required to check the A/FD.

Pamela Coopwood, FAA Air Traffic, does not concur with the recommendation either.

Eric Secretan, NACO, stated that any change should consider compatibility with US Sectional charts that already include a right traffic pattern notation. He further indicated that there appears to be some confusion among pilots on what RP\* means.

## STATUS: OPEN.

ACTION: AOPA will report back at the next meeting as to how well the US Sectional depiction for right traffic pattern, specifically RP\*, is understood by its constituents.

## 07-01-191 Excessive Verbiage on NACO Airport Diagrams

AOPA recommendation proposed the removal of the note covering "Read back of all runway holding instructions". The rationale is that the warning is adequately covered in the AIM as well as ATIS broadcasts. Pilots should be aware of the need to comply with ATC read back instructions. Removal would simplify charted notes and allow focus on more important notes. Ms. Pamela Coopwood, FAA Air Traffic, reported that Air Traffic does not want it removed, as it is a safety issue. AOPA agreed and withdrew the issue.

## STATUS: CLOSED

# 07-01-192 Recording, Reporting and Dissemination of Usable Lengths for Takeoff and Landing

*This agenda item also relates to ACF-CG agenda item <u>06-01-181</u> Declared Distance Information on Airport Charts (closed in ACF 07-01).* 

Mr. Richard Boll reported that the NBAA wants the FAA to provide in NFDD source "declared distance" or available runway length information (landing beyond displaced threshold) anytime the full length of runway is not available, typically when a displaced landing threshold exists.

The correlation between landing beyond threshold distances and declared distances must be carefully evaluated, as they represent different values and must be labeled appropriately.

Airport authorities are responsible for establishing their own declared distances.

The FAA is attempting to meet safety area standards by providing declared distances for airports in increasing numbers (via the NFDD and A/FD publication).

#### STATUS: OPEN

See Rich Boll's report "Declared Distances" at the beginning of these minutes.

## 07-01-193 Charting Helicopter RNAV Routes

Mr. Paul Ewing, ATO-R, submitted this issue to the forum and Mr. John Moore, NACO, recapped the issue. In June 1979, an Advisory Circular was issued titled IFR Helicopter Operations in the Northeast corridor. This AC was used to provide routes for helicopters flying between Washington DC and Boston, MA. The AC was recently cancelled and the helicopter community is looking for a way to have area navigation (RNAV) routes published that would provide them safe operations from fixed wing traffic and provide efficient flight operations for helicopters, fixed wing aircraft and air traffic control. It would be desirable to have these routes published as public routes.

Options include:

a. Publish as RNAV T Tango Routes with appropriate equipment/usage requirements.

b. Publish as RNAV T Tango Routes with annotations in Legend materials restricting to helicopter use only.

c. Develop separate ICAO approved route designators (X-Ray or Yankee) to differentiate helicopter RNAV routes from conventional fixed wing routes.

Issues were raised such as the need to address the subject from a greater perspective including the need for official heliport/helipad identifiers, integration with conventional fixed wing Victor routes, route designation, rulemaking, integration into conventional IFR Enroute charts or create new special helicopter-only charts.

Jeppesen's position is that helicopter routes must have unique identifiers (Y or Z) to differentiate them from conventional fixed wing routes (databases, electronic data-driven charts, flight planning, etc.).

Air Traffic and the Helicopter Association International (HAI) wants "ATS" (direct) routes in the NAS, mainly in the Northeast Corridor (Washington DC to New York). There might be some requirement in Southern California as well. These routes would require regulatory action.

Users want to have the routes charted on existing Low Altitude Enroute/Area charts. Concerns were expressed about chart congestion. According to Paul Ewing, the number of additional routes is not extensive (15-20).

These routes will be restricted to helicopter use only. The routes might begin or end at waypoints not suitable for fixed wing aircraft. At issue is how to distinguish these helicopter-only routes from conventional, fixed-wing routes.

NACO's Enroute branch created a prototype chart showing how these routes might appear on a chart. They used color to distinguish helicopter routes (e.g. green).

Additional research into options for unique airway designators (route prefix or suffixes) is recommended. Coordination within the FAA, with ICAO, and ARINC coding is necessary before a final decision.

# **STATUS: OPEN**

See Paul Ewing's report on Helicopter RNAV Routes at the beginning of these minutes.

**<u>ACTION</u>**: John Moore took an IOU to Paul Ewing regarding ICAO route prefixes available.

**ACTION**: Adrienne Funk will investigate the ARINC coding aspects of Helicopter RNAV routes.

**<u>ACTION</u>**: Ted Thompson will report on Jeppesen's experience with helicopter routes.

# 07-01-194 Charting Tango "T" Routes in Congested Terminal Areas

NACO provided the 36 re-schemed low charts to the ACF. ACF noted little discussion. John Moore asked that Air Traffic be made aware of the chart congestion problems with using a terminal fix for enroute RNAV routes. Mr. Paul Ewing acknowledged this.

## STATUS: CLOSED

# 07-01-195 Charting and AFD Information Re: Class E Surface Areas

Mr. John Moore, NACO, recapped this issue. At some airports that have part-time control towers, the Class D surface airspace becomes a Class E Surface Area during the hours the tower is closed. At other airports, the Class D airspace becomes Class G (uncontrolled) airspace. These variables also can affect airport-associated Class E extensions that protect terminal instrument procedures. For some time (since the Airspace Redesign) it has been assumed that "Arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area." A number of exceptions to this convention have been identified. Scott Jerdan will supply Pamela Coopwood, Air Traffic, with a listing of the exceptions (approximately 13?). She has agreed to verify them and report back to Mr. Jerdan.

Additionally, Mr. Richard Boll, NBAA, recommended that when part time Class D airspace becomes Class E when the tower is closed, there should be a distinctive indication on VFR Sectional Charts and specifically indicated in the A/FD.

A follow up report will be given at the next forum.

#### STATUS: OPEN

<u>ACTION:</u> Pamela Coopwood, Air Traffic will contact Service Centers to determine if these Airspace descriptions are correct.

#### 07-01-196 Q Route DME/DME IRU MEA

Mr. John Moore, NACO, recapped the issue stating that many of the "Q-Routes" on High IFR Enroute charts have charted MEAs that are above 18,000 feet, but only apply to DME/DME IRU operations; however, some chart users do not realize that GNSS aircraft can normally operate along those routes at FL180 and above. While the chart legend explains MEA charting methodology for Q Routes, it is not intuitively obvious looking at the chart that the charted MEA generally only applies to DME/DME IRU operations. Whether it is because the chart user forgot, misunderstood or didn't read the legend, the effectiveness of the charting to convey GNSS MEA information could be improved.

The recommendation is to consider a change to how these MEA limitations are depicted. NACO's application does not include a unique qualifier or MEA suffix code (e.g., 24000D where D=DME/DME/IRU). Jeppesen charts include the text DME/DME/IRU with these MEAs. This can be problematic because it takes up space and causes congestion. (Note: Jeppesen also includes Q-route GPS and Radar equipment requirement notes.)

One idea is to develop a simple suffix code for DME/DME/IRU MEAs (24000D) similar to what is used for GPS MEAs (2500G) – and cover the explanation in the legend.

NACO was presented with this question, "should they leave as is or should they be proactive and use equipment suffixes on all RNAV MEAs.

#### STATUS: OPEN

**ACTION:** DoD was tasked with looking at this for their user community.

**<u>ACTION</u>**: Mark Steinbicker will review the situation from the FAA perspective.

#### 07-01-197 Graphic Airport NOTAMs

Mr. David Goehler, Jeppesen, provided some background information and summarized the results of numerous committee meetings.

Brad Rush, NFPO, mentioned the database issue and ensuring synchronization. He volunteered to participate on Mr. Goehler's committee.

#### **STATUS: OPEN**

See Dave Goehler's report Airport Source Data Committee at the beginning of these minutes.

**ACTION:** Mr. Dave Goehler to report at the next ACF meeting.

# 07-02-198 Use of Charts to Validate Navigation Database Information

Pedro Rivas, ALPA, briefed that according to regulations (FAR 91.503), charts are to be used to validate navigation database information. However, charting practices do not support the requirement and it's impossible to comply with current regulations.

Factors include: Loading problems (new database not loaded due to problems, lack of availability) and AIRAC rollover cycle (aircraft may be off station, in flight, or in transit during rollover).

Problems include:

- 1. Determining AIRAC rollover time
- 2. Lack of lat-long information on charts to determine NAVAID/fix position.
- 3. Verifying a chart has been amended.

Recommendation: Amend FAA Orders on airspace fix movement (tolerance) so that current charts can support FAA and European guidance material issued to pilots.

ICAO rules state that anytime a fix is moved, a name change is in order. Mr. Tom Schneider, AFS-420, said the FAA's rule is 5 NM. That distance comes from changes in criteria marrying IAP fixes with the 5 NM standard for NAVAID moves. Mr. Schneider also noted that there was no ICAO standard Amendment 44 to Annex 11 regarding renaming significant points which are moved when the FAA adopted the 5 NM standard. Amendment 45 is effective November 2007.

Controllers and pilots have grown accustom to certain fix names and don't want them to change regularly.

ALPA is not recommending that a minor change in geodetic position due to a more accurate survey should mandate a name change e.g. new survey or recalculation of position by only 20 feet.

ALPA believes that fix name changes should be consistent with the underlying navigation performance requirement associated with that fix, e.g. the tolerance associated with the movement of an enroute NAVAID is greater than the tolerance associated with the movement of a waypoint on an RNP approach.

ALPA recommends that other significant fix attributes which change a path and that cannot be readily checked using a chart against an FMS or GPS database should also be examined as a requirement for a name change, e.g. fly-by to fly-over.

ALPA is not recommending that flight with an out-of-date database should be permitted other than temporarily for flights during the AIRAC rollover period, or to allow and an aircraft to be positioned to a location where the current database can be loaded.

ALPA is not necessarily endorsing changes to charts. Mark Steinbicker and Pedro Rivas will coordinate and discuss the issue at the PARC. A signup sheet was passed around.

Navigation Database and Aeronautical Chart Synchronization Committee (NDACS)				
NAME	ORGANIZATION	PHONE	EMAIL	
Behrns, Ann	FAA	202-385-4958	ann.m.behrns@faa.gov	
Boll, Richard	NBAA	316-655-8856	richard.boll@sbcglobal.net	
Comstock, Kevin	ALPA	703-689-4176	kevin.comstock@alpa.org	

Funk, Adrienne	FAA	301-713-2631	adrienne.l.funk@faa.gov
Herndon, Al	MITRE	703-983-6465	aherndon@mitre.org
Maxwell, Roy	DELTA	404-715-7231	roy.maxwell@delta.com
Rivas, Pedro	ALPA	770-461-0961	rivas1410@bellsouth.net
Rush, Brad	FAA	405-954-3027	brad.w.rush@faa.gov
Schneider, Thomas	FAA/AFS-420	405-954-5852	thomas.e.schneider@faa.gov
Swigart, John	FAA	202-385-4601	john.swigart@faa.gov
Swope, Tim	FAA/ATP	202-385-8436	tim.ctr.swope@faa.gov
Thompson, Ted	JEPPESEN	303-328-4456	ted.thompson@jeppesen.com
Ward, Edward T.	SOUTHWEST	214-792-1023	edward.ward@wnco.com
Wiseman, Larry	FAA	202-385-4959	larry.wiseman@faa.gov

# 07-02-199 Glider Caution Notes on Terminal Procedures & IFR Charts

John Moore, NACO, briefed this issue for Ms. Francie Hope, FAA/ATO-WSC, who was not in attendance. As a result of an nonfatal midair collision between a glider and a corporate jet aircraft near Reno, Nevada, a memorandum was written by the FAA manager of the Western Service Area recommending a caution note be charted on the IFR LOW Enroute chart and all IFR Terminal charts (SID/STAR/APCH) in the Reno area.

There are at least three chart-related aspects to the issue: 1) whether inclusion of a caution note on instrument charts (and source) is the best way to address the situation, 2) where the note should be located on charts (notes section or planview graphic), if it is determined that they should go there, and 3) how conspicuous the note should be.

Ted Thompson, Jeppesen, stated that a Volpe study recommended all notes of this type be placed in the approach briefing strip. Tom Schneider, AFS-420, noted that policy in the 8260.19D, para 855.b. states SIAPs must NOT contain notes that may be construed as regulating traffic. Brad Rush, NFPO, stated that their policy is no cautionary notes on IAPs. Considerable discussion ensued, with comments from glider pilots in attendance and submitted written comments from glider/fixed wing pilots familiar with the incident and the area where it occurred. There were comments questioning whether such a note on the IFR chart would have prevented the incident and there was overwhelming agreement that it likely would not have prevented it. Broadcasting glider warning on ATIS or by Local NOTAM was mentioned as a possible solution.

The consensus of the forum was that the note does not belong on IFR Enroute charts and would be of questionable value on IFR Terminal charts. The majority of the forum agreed that regulatory guidance mandating gliders be transponder equipped when operating above certain altitudes (i.e. 10,000' MSL) and in the vicinity of terminal arrival operations would be a better safety enhancement than annotating IFR charting products. The forum consensus was to await the final NTSB incident report before acting on this issue.

# **STATUS: OPEN**

<u>ACTION:</u> John Moore, NACO will contact the originator(s) and inform them that the ACF will take no action until an official accident report is made available (NTSB).

# 07-02-200 Charting of Alert Areas

Peter Lehman, AOPA, briefed this issue. The chart symbol color used for Alert Areas on visual and instrument charts is the same as the color for Prohibited Areas, Restricted Areas, and Warning Areas. Alert

Areas, however, do not have the restrictions and types of operations as the others and therefore should not use the same symbol color.

AOPA recommends that the depiction of all non-regulatory airspace such as Alert Areas, Warning Areas, and MOAs charted on NACO-produced charts be changed to the color magenta. This would change the Alert Area color from blue to magenta.

AOPA proposes the change apply to VFR and IFR chart series.

## STATUS: OPEN

<u>ACTION:</u> Peter Lehman will coordinate with Ms. Valerie Watson, NACO. A report will be given at the next meeting.

## 07-02-201 Charting of Flight Training Areas, USAF Academy

Peter Lehman, AOPA, briefed this issue for JJ Greenway, AOPA/ASF. Mr. Daniel Rund, Airspace Manager, USAF Academy also participated in the presentation (<u>Airspace Overview</u> and <u>Near Miss Incident</u> Presentations). Student Flight Training Areas are depicted on aeronautical charts as Alert Areas if they meet certain criteria in FAA Order 7400.2F. If they do not meet the criteria, their existence is indicated with a general caution note.

The nature of these USAFA Flight Training Areas is such that AOPA and the USAFA request their depiction on the Flyway side of the Denver/Colorado Springs VFR Terminal Area Chart (TAC). To do so they recommend the creation of a VFR Flyway Planning Chart for Colorado Springs to be printed next to the Denver Flyway chart on the reverse side of the TAC.

It was pointed out that the most desirable option would be to pursue establishment of these areas as Alert Areas. The reaction from the representative of the USAFA was that they would like to avoid the lengthy development process plus the fact that their areas change so frequently. Additionally, the criteria for the establishment of Alert Areas contains restrictions that would be difficult to meet in the Colorado Springs area.

The FAA and NACO understand and appreciate the situation, but are uncomfortable with going outside established coordination and documentation processes for source information. Eric Secretan, NACO, remarked that it is a matter of maintaining the information and disseminating the data.

The group consensus is that these flight training areas should become Alert Areas. Doing so would also result in their being coded and available in electronic database and map displays.

John Moore will ask Mr. Paul Gallant, Airspace & Rules, for his view of the issue.

#### **STATUS: OPEN**

ACTION: AOPA will contact the Airspace & Rules Branch to pursue establishment of Alert Areas for certain high volume flight training areas.

**ACTION:** Mr. Paul Gallant will provide feedback on the issue at the next ACF.

# 07-02-202 Inconsistent & Incomplete Charting of STAR Holding Patterns

Richard Boll, NBAA, would like to see Holding Pattern Leg lengths and DME Min/Max Limits charted on conventional STAR charts.

Holding Pattern limits are provided to the public via the NFDD source. They are not included on the SID/STAR procedure source documents (FAA forms 8260 or 7100).

There was discussion about how the leg lengths are sourced, including whether or not the information should be included in the procedure source document 8260 or 7100.

Ms. Valerie Watson, NACO, pointed out that publishing these limits is not part of the SID/STAR Specs. Jeff Struyk, NGA, commented that they are not published in DAFIF.

Jeppesen charts the Holding Pattern Leg Length from the NFDD source. Jeppesen charts also provide the Min/Max DME distance in as much as it can be derived from the Fix Formation data (including DME distance) shown on the chart. The same depiction is made on Jeppesen SID/STARs and Enroute Charts.

## STATUS: OPEN

**ACTION:** The issue will be passed to the FAA AIS Working Group via Tom Schneider since it involves possible changes to FAA source content. After the AIS WG completes its review, then the ACF will revisit the charting aspects of the recommendation.

# 07-02-203 Distinguishing 'Cross At' and 'At or Below' from 'At or Above' Crossing Altitudes

Brian Townsend, ALPA, <u>briefed this issue</u>. Crossing altitude situations for 'At' and 'At or Below' are less common than 'At or Above'. This being the case, ALPA recommends that the 'Below' situation be emphasized. Samples were provided in the Recommendation Document included in the ACF 07-02 information packet.

NACO has already changed to the ICAO-style overline/underline depiction without any text.

Jeppesen is still in the process of making a decision whether to adopt the ICAO-style, or stay with text descriptions, or possibly a combination of both text and lines. Jeppesen will consider ALPA's recommendation to further emphasize 'At' or the 'At or Below' conditions.

Also refer to agenda items ACF-CG RD 04-01-167 Altitude Constraints and ACF-CG RD 05-01-174 Top Altitudes).

#### STATUS: OPEN

**<u>ACTION</u>**: Ted Thompson will provide a report on Jeppesen's decision at the ACF at next meeting.

# 07-02-204 Continued Charting of Airports "Closed Indefinitely"

Mark Ingram, ALPA, briefed this issue. Some U.S. airports have been closed or abandoned for several years and will likely never reopen; yet their status is classified as "Closed Indefinitely" or "Closed Until Further

Notice (UFN)". The result is they are still shown on aeronautical charts, publications and databases. This can be potentially misleading for pilots.

When hard-surfaced airfields are classified as "Closed Permanently" they are listed as "NAME (CLOSED)" with the airport data removed. When they are listed as "Abandoned", the airports are either removed from publication or they remain on Visual charts with an X-ed out airport symbol if they have landmark value. The recommendation is to modify current procedures and policies to result in removal of these abandoned airports from charts, publications and databases.

Brad Rush, NFPO, commented that if the airport has an existing procedure still published, then it couldn't be removed.

NFDC agreed to run an airport listing for "Closed Indefinitely" and "Closed UFN" airports and provide that list to Brad Rush. Mr. Ingram would like to know how many airports are on that list.

## **STATUS: OPEN**

**ACTION:** Affected branches of the FAA will review the subject and report back.

### VI. Closing Remarks

Mr. John Moore thanked ALPA for hosting the meeting and everybody for their participation. Official Minutes will be published and provide via email.

#### VII. Next Meeting

The next meeting of the ACF (08-01) is scheduled for April 23-24, 2008 at the AMTI facility in Rosslyn, Virginia. Meeting 08-02 is scheduled for October 22-23, 2008 at the NACO facility in Silver spring, MD.

Please note the attached Office of Primary Responsibility (OPR) listing for action items. It is requested that all OPRs provide the Chair, John Moore, (with an information copy to Jim Grant) a written status update on open issues no later than April 1, 2008.

Note – These status reports will be used to compile the minutes of the meeting and will be the "for the record" statement of your presentation. A reminder notice will be provided.

Special Thanks to Mr. Ted Thompson, Jeppesen, for providing his meeting notes for use in these ACF minutes.

#### VIII. Attachments

- 1. Attendees/Mailing List
- 2. Office of Primary Responsibility (OPR) List