I. Opening Remarks

The Aeronautical Chart Forum (ACF) was held at the Air Line Pilots Association (ALPA) office in Herndon, Virginia. Mr. John Moore, NACO, the ACF Co-Chair and Chair of the Aeronautical Chart Forum, Charting Group, opened the Forum on October 26, 2005 with thanks to ALPA and ALPA representatives Mr. Mark Ingram and Mr. Kevin Comstock for hosting the meeting. Mr. Comstock welcomed the ACF participants to ALPA. Mr. Moore acknowledged the ACF Co-Chair Mr. Tom Schneider, AFS-420. Mr. Schneider chaired the ACF Instrument Procedures Group meeting held on October 25, 2005. Separate minutes of that meeting will be distributed.

II. Review of Minutes from Last Meeting

The minutes from the 05-01 ACF meeting were accepted as distributed.

III. Agenda Approval

The agenda for the 05-02 meeting was approved as presented.

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

High Altitude Redesign Briefing

Mr. John Timmerman, System Operations, updated the ACF on the High Altitude Redesign (HAR). Mr. Timmerman stated HAR Phase 1 ‘Expansion’, expand the airspace design to an additional seven ARTCCs. Currently there are fourteen ARTCCs using non-restrictive routing (NRR) at FL350 and above. That includes: Albuquerque, Chicago, Denver, Fort Worth, Houston, Jacksonville, Kansas City, Los Angeles, Memphis, Miami, Minneapolis, Oakland, Salt Lake, and Seattle.

Waypoints have been established around the perimeter of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) to minimize the impact of flights within the HAR environment. Pilots should flight plan around these areas using the waypoints when SUA and ATCAAs are active. These waypoints are being used by ATC to reroute aircraft within the 48 contiguous states should an unanticipated activation occur. Mr. Timmerman reported that most waypoints have been charted; however AVN is still processing additional waypoints to be charted. The special use airspace website (sua.faa.gov) provides a complete listing of ATCAA, Restricted, Prohibited, and Warning Area schedules and locations. There has been a noticeable improvement in the website scheduling data through increased emphasis on facilities for timely and complete data. The System Operations Office is currently working with the RNAV Office, RNP Group to determine a standard of equal separation from a waypoint to the special use airspace.

Navigation Reference System (NRS) waypoints have been established throughout the contiguous 48 states. These waypoints make more efficient use of the National Airspace System (NAS) by providing pilots point-to-point navigation capability using a latitude/longitude grid.

Mr. Timmerman stated that the first sets of Q Routes were published September 1, 2005. These routes were established within the Jacksonville ARTCC area. Additional Routes are scheduled for publication as
AVN workload permits. Q Routes within Los Angeles and Albuquerque ARTCC are targeted for publication December 22, 2005; Q Routes within Houston ARTCC are targeted for publication February 16, 2006; and Q Routes within Memphis ARTCC are targeted for publication April 13, 2006. In the HAR ‘Expansion’ phase Q Routes will be expanded to include a 14 ARTCC area. Provisions are in place for the six ARTCCs in the northeast to begin building Q routes. Mr. Timmerman reported that Q Routes are now a ‘fielded’ capability within the airspace design ‘toolbox’. Track-track procedural separation efforts are ongoing. Flight Standards is currently working on separation standards of 8 mile centerline to centerline. These separation requirements will expedite the creation of Q Routes. Mr. Timmerman stated every change to the NAS will require a Safety Management Risk Determination Activities Plan.

Funding has been made available for the implementation of HAR Phase 1 in Alaska, expanding the HAR concepts into Alaska airspace.

Waypoints density will be dependent on regional needs with more waypoints in areas with higher need.

The HAR status for Phase 2/3 will include: NRP/NRR will roll into one program; a standardized HAR floor; and a completely RNAV/RNP high altitude structure, independent of ground-based NAVAIDs.

The briefing led to the following group discussion. Mr. Bill Hammett, AFS-420, questioned if NRS waypoints will replace SWAP points. With response, Mr. Timmerman offered that no specific plan has been implemented, however; facilities have been tasked with exploring the pulling of these waypoints to reduce chart and database clutter. Mr. Timmerman suggested the possibility of a separate RNAV chart that was discounted by Mr. Ted Thompson, Jeppesen, given that RNAV-only structure/operations cannot be charted separately given the real-life, mixed use environment. The use of small scale charts was an alternative. This congestion will also impact the content and legibility of electronic, data-driven chart displays. Mr. John Moore, NACO, asked about expansion of NRS into the low altitude structure. Mr. Timmerman indicated that there was no requirement for it at this time. The High Altitude Redesign presentation is attached to these minutes.

**ACTION:** Mr. Timmerman will provide an update at the next forum.

**ATA Charting Committees**

Mr. Ted Thompson, Jeppesen, updated the ACF on the Air Transport Association (ATA) Charting Committees. A meeting was held in August 2005 in Minneapolis MN, at Northwest Airlines. This meeting was held in conjunction with the ATA FMS/RNAV Task Force. The main focus of the meeting was chart, database, source, and avionics compatibility issues. Mr. Thompson stated that RNAV overlays of conventional terminal procedures pose the greatest challenge in terms of compatibility.

Topics for discussion at the next meeting will include flyover depiction on conventional procedures, unnamed procedures, flyover/flyby, and path terminators. No date has been set for the next meeting. Mr. Eric Secretan, NACO, updated the group on the ICAO Obstacle Clearance Panel (OCP) meeting held in Japan. The OCP has been handling charting issues on an ad-hoc basis. At the meeting it was determined that a charting working group would be formed. The charting working group will meet in January 2006.

**ACTION:** Mr. Thompson 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, updated the ACF on the Society of Automotive Engineers (SAE) G-10 Committee. The meeting was held in October 2005 in Boston, MA at the Volpe National Transportation System Center. The committee continued work on developing a basic, simplified set of symbols for use in electronic displays. Mr. Thompson stated that the goal is to establish symbols that are intuitive and universally recognizable by all users. The committee is working with Volpe to refine and validate its work through human factors testing involving pilots. Mr. John Moore, NACO, added if any pilot would like to participate in the Volpe testing process to please see Ted or himself. Mr. Moore emphasized the importance of the testing process stating that it is critical that Volpe get a wide variety of pilot participation that includes general aviation, NBAA, and airline.

Mr. Thompson reported that the outcome of the group’s efforts will become a document that FAA can use in certification of avionics systems that include electronic moving map or electronic chart displays. Mr. Eric Secretan, NACO, stated that the NDB symbol currently used by the US is causing problems in electronic displays. At some point the symbol will need to be changed. The next SAE G-10 meeting is scheduled for February 2006.

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

**ACF ICAO Identifier Working Group**

Mr. Dick Powell, Aeronautical Information Services, was unable to attend the ACF. This issue has been tabled until the 06-01 ACF.

**ACTION:** Mr. Powell will report at the next forum.

**RNAV Route Naming Convention**

Mr. Paul Ewing, RNP, reported the ACF Working Group was formed to make a recommendation to the ACF and the Performance Based Operations Aviation Rulemaking Committee (PARC) concerning the naming convention for RNAV routes in the NAS. The group met three times since the last ACF to discuss several proposals. The group recommends that RNAV routes at or above FL180 will be designated as ‘Q’ Routes. Restrictions to RNAV equipage, DME/DME/IRU, will be indicated by chart notes or Notice to Airmen. RNAV routes below FL180 will be designated as ‘T’ Routes and will be for Global Navigation Satellite System (GNSS) equipped aircraft only. Minimum Enroute Altitudes (MEAs) will contain the ‘G’ suffix. Mr. Ewing stated that T Routes should not overlap existing victor airways and chart clutter should be considered when developing the routes. Developers should coordinate with NACO’s Requirements and Technology Team prior to submitting the new routes for the Notice of Proposed Rule Making. He thanked the Requirements and Technology Team for their work in coordinating the Charlotte T Routes.

Mr. Ewing reported that RNAV routes below FL180 for DME/DME equipped aircraft will not be addressed at this time. However, this issue may be addressed in the future. FAA Orders 7400.2, Procedures for Handling Airspace Matters, and the Aeronautical Information Manual (AIM) should be amended to reflect the recommendations of the Working Group. The proposed changes to the AIM are attached to these minutes. Mr. Ewing’s briefing led to extensive discussion from the forum participants.

Mr. Eric Secretan, NACO, stated that overlying RNAV routes on victor airways should not be an issue as long as both routes use the same fixes. Problems arise when new fixes are established for the RNAV route instead of using the underlying or existing fixes established for the victor airway. As long as the routes use
the same fixes, the hierarchy concept will handle the charting of overlying routes. Mr. John Ingram, NGA, stated that database coding is an issue for the overlying routes. The group debated the naming convention ‘Q’ represent high altitude structure and ‘T’ representing the low altitude structure and if additional designators ‘Y’ and ‘Z’ should be used for equipment requirements.

Mr. Brad Rush, NFPO, recommended that some effort be made to “clean up” existing Q Routes in the gulf and the VOR/DME/RNAV routes is Alaska. Mr. John Moore, NACO, recommended a follow-on group to discuss these issues. ACF consensus was that a sub-group will be formed and chaired by Mr. Rush. A sign-up sheet was distributed and the following individuals/organizations expressed an interest in participating on the working group.

<table>
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**ACTION:** Mr. Rush will report at the next forum.

**RNP Chart Briefing**

Mr. John Moore, NACO, provided a brief status report on RNP. The first RNAV RNP Special Aircraft & Aircrew Authorization Required (SAAAR) procedure was published on 1 September 2005, at Ronald Reagan Washington National Airport. IACC 4 and 17 specifications were modified (IACC Requirement Document (RD) 596) to include radius-to-fix (RF) legs, charting of missed approach holding patterns as an inset and outlined the depiction of the procedure track course line. In addition, the requirement document added several abbreviations to the Terminal Procedures Publication (TPP) Legend page, F2. Mr. Moore opened the floor to questions.

Mr. Vincent Chirasello, AFS-410, inquired if it is necessary to chart the RNP value on a missed approach that requires an RNP capability. The forum participants discussed the issue and were unable to resolve the matter. Mr. Mark Steinbicker, AFS-410, stated that the SAAAR working group will need to be reformed to discuss the issue.

**ACTION:** Mr. Schneider, AFS-420, will reform the group and report at the next forum.
Charting Symbology Hierarchy

Mr. Eric Secretan, NACO, updated the ACF on the hierarchy status. The hierarchy concept is on the work plan for the IACO OCP. The hierarchy concept is one of the many charting issues the OCP is working. Mr. Secretan reported that in effect, the IACO Operations Panel approved the hierarchy concept.

One of the major points in the implementation process is the triangle symbol. Currently the triangle indicates a reporting point; the hierarchy concept redefines the triangle to indicate a ground-based fix or intersection. Any charted point can be a reporting point to ATC; a specific symbol is unnecessary. The triangle would be used to indicate a navigation function and would no longer be used as an air traffic function. If a waypoint, NAVAID, or intersection is a compulsory reporting point for ATC it will be filled-in.

Mr. Secretan reported that IACC RD 520, Charting of Compulsory Reporting Waypoints, was signed by the IACC. The RD established the requirement to chart compulsory reporting waypoints with the center of the waypoint completely filled-in. Within the IACC implementation the hierarchy concept has begun. A detailed overview of the IACO Working Paper and the hierarchy of symbology concept presented to the IACO Operations Panel are available in the ACF 05-01 Minutes. Mr. Secretan stated that one other issue is the use of the circle around the intersection, NAVAID, or waypoint to indicate flyover points on a RNAV procedure. There has been discussion by IACO to use the circle on conventional procedures for conventional navigation to indicate a flyover point.

**ACTION:** Mr. Secretan will provide an update at the next forum.
V. Outstanding Issues

00-01-119 Raising Nationwide Charting Standards (PCNs)

Mr. Dave Goehler, Jeppesen, reported runway PCN data is being collected by Federal Airport Inspectors and that State Inspectors will be trained in the near future to collect PCN data at the smaller airports.

Mr. George Sempeles, Cartographic Standards, stated that an agreement has been made with Mr. Ben Castellano, Airport Safety Data Program AAS-330, to have airport inspectors send PCN data to the National Flight Data Center (NFDC). NFDC will enter the PCN data into the National Airspace System Resource (NASR) database and publish the PCN data through the National Flight Data Digest (NFDD) or as an add-on page to the NFDD. Once published in the NFDD, NACO will publish the data on airport diagrams and in the Airport/Facility Directory (A/FD).

The National Geospatial-Intelligence Agency (NGA) currently publishes PCN data, when available, on airport diagrams. Mr. Goehler briefed the forum on the current status of the FAA Safe Flight 21 airport mapping program. There are no plans to do additional airport mapping in FY06. The airport mapping program has been “put on the shelf” due to budget limitations and may not be funded again until 2010-2013 time frame. Mr. Goehler reported that there is still no funding for the Airport 5010 sketch program through GCR & Associates. GCR is the current FAA 5010 contractor.

**STATUS: OPEN**

**ACTION:** Mr. Goehler will report on the Airport Source Data Committee recommendations at the next forum.

02-02-148 Obstacles not in Public Data

Mr. Kevin Haggerty, ATO-R, was unable to attend the ACF. Ms. Valerie Watson, Cartographic Standards, will attempt to obtain a response from Mr. Haggerty to add to the minutes.

*Editor’s note: No response was available at the time of print for these minutes.*

**STATUS: OPEN**

**ACTION:** Mr. Haggerty will provide an OE/AAA update at the next ACF.

03-01-151 Charting of IFR Transition Routes

Mr. Paul Ewing, RNP, provided a brief update on the status of the IFR Transition Routes (RITTR). Mr. Ewing stated that the Charlotte, NC routes were published on the enroute low charts for the 1 September 2005 effective date. The target date for publishing Jacksonville, FL and Cincinnati, OH is 22 December 2005. Additional routes are planned for Florida and Memphis.

Mr. Ewing reported that the term ‘RITTR’ would no longer be used. The routes will be low latitude RNAV routes and carry a ‘T’ airway designator. Airway numbers will be assigned from T200-T500. Mr. Mark Steinbicker, AFS-410, stated that additional numbers would be required in the future.

**STATUS: CLOSED**
**03-01-153 Depicting LAHSO Hold Short Lights and Hold Short Points**

Ms. Valerie Watson, Cartographic Standards, reported that IACC Requirement Document (RD) 595, Charting of Land and Hold-Short Operations (LAHSO) points on airport diagrams was submitted to the IACC MPOC. The IACC RD will establish the requirement to identify hold-short points on airport diagrams by a hold line (similar to that currently used for ILS hold lines) at the actual point on the runway where the hold-short point is positioned. The points will be identified by the letters ‘LAHSO’ leader-lined to the hold short point on the runway or taxiway. NACO was provided an excel spreadsheet that contains the LAHSO distances in feet. Ms. Watson reported that the LAHSO information currently published in the A/FD would not be deleted. NGA requested that coordinates for LAHSO points be provided for database purposes. Providing the points in feet will require manual calculations each time the runway end coordinates change.

Ms. Watson questioned Mr. Mark Washam, ATO-T, if the LAHSO order could be rewritten to include coordinates and if the order were not rewritten would we ever get coordinates. Mr. Washam responded that Airport Safety Data Program AAS-330 is responsible for collecting this information. Mr. Washam stated that the LAHSO Office is not interested in reopening the LAHSO Order to include the coordinate requirement. Mr. Washam stated that he would ask Airport Safety to collect the information. Mr. Ted Thompson, Jeppesen, concurred stating that coordinates are required for the data driven world. Mr. Tom Schneider, AFS-420, stated Airport Safety should participate in the ACF. Mr. John Moore, NACO recommended that the coordinate issue be handled outside of the ACF.

**STATUS:** OPEN

**ACTION:** The MPOCs will report on the IACC response at the next ACF.

**03-01-154 Charting of RNAV legs adjacent to Fly-Over and Fly-By Waypoints**

Ms. Valerie Watson, Cartographic Standards, reported that the IACC MPOC is staffing the recommendation document depicting the fly-over waypoint as a stylized line on all procedures.

**STATUS:** OPEN

**ACTION:** The MPOCs will report on the IACC response at the next ACF.

**04-01-158 Depiction of Takeoff Minimum on Standard Instrument Departures and those Associated with Obstacle Departure Procedures**

Mr. Ted Thompson, Jeppesen, reported that there is no update on this issue from a Jeppesen perspective. Mr. Mark Steinbicker, AFS-410, briefed that AFS-410 and AFS-420 met with Chuck Schramek, Delta Air Lines, in a Technical Review Board (TRB). The TRB determined that although the recommendation had merit, the FAA would stay with the current method of Standard and Above-Standard minimums. The TRB recommended that Mr. Schramek take the issue to the Ops Specification Working Group to resolve. Mr. Steinbicker recommended that the issue be closed.

**STATUS:** CLOSED

**04-01-160 Charting Low Altitude Q Routes**
Mr. Paul Ewing, RNP, discussed this issue during his earlier briefing. Mr. John Moore, NACO, recommended that this issue be closed and a briefing from Mr. Brad Rush, Chair of the RNAV Airway Program sub-group, be added to the agenda of the ACF 06-01.

**STATUS: CLOSED**

**04-01-166 Charting of RNAV SIDs, STARs and Q Routes**

Mr. John Moore, NACO, reported that the Type A and Type B equipment note was published effective 1 September 2005. Jeppesen and NACO sent out Charting Notices to its users. Mr. Mark Steinbicker, AFS-410, reported that after a tremendous amount of work by Mr. Brad Rush and NACO the equipment notes were published on time. Work has begun on the follow-on charting recommendations to remove some of the notes or move them to other places on the procedures. Mr. Steinbicker stated additional items would be discussed in the future. These items will include the procedure title. Mr. Steinbicker recommended that this issue be closed stating that Type A and Type B will be in place for the next few years.

**STATUS: CLOSED**

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

Ms. Valerie Watson, Cartographic Standards, reported that the IACC MPOC is currently staffing the issue of using over and underline bars to depict minimum/maximum altitudes and airspeeds on SIDs, STARs and Instrument Approach Procedure (IAP) Charts. Mr. Eric Secretan, NACO, stated that ICAO endorses the use of over and underline bars.

**STATUS: OPEN**

**ACTION:** The MPOCs will report on the IACC response at the next ACF.

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

Ms. Valerie Watson, Cartographic Standards, reported that NFDC received a list of private heliports that require identifiers. These facilities have been assigned reserved location identifiers. The identifiers were placed into NASR as reserved and published as a reserved identifier in FAA Order 7350.7. Reserved identifiers will not be published in the NFDD. NFDC notifies the NOTAM Office when the proposed location identifiers are used. With a unique identifier the heliport could be added into the NOTAM system. Final approval of the procedure could be done with a reserved identifier. The reserve status would be deleted once the approach was operational.

Mr. Tom Schneider, AFS-420, expressed concerns about the reserved identifier changing once the paperwork catches up to the identifier. Mr. Brad Rush, NFPO, and Mr. Schneider requested to be notified when a reserved location identifier is assigned to a facility.

**STATUS: OPEN**

**ACTION:** Mr. Washam will provide a listing of all heliports that require location identifier to Aeronautical Information Services.
**ACTION:** Mr. Powell will provide an update at the next forum.

### 04-02-169 Location of PRM Monitor Frequency on NACO Charts for ILS PRM and LDA PRM Approaches

Ms. Valerie Watson, Cartographic Standards, briefed that IACC RD 602, PRM Frequency, has been submitted and signed by the IACC MPOC and should be signed by the IACC within the next few weeks. Mr. Bill Hammett, AFS-420, stated that once the frequency is moved to the tower frequency box the note and the frequency box could have different frequencies. He inquired how the frequency note would be deleted from the procedure and the 8260 forms. Mr. Brad Rush, NFPO, stated that the notes would be deleted via a P-NOTAM. Ms. Watson will notify Mr. Rush when the IAC RD is implemented.

**STATUS:** OPEN

**ACTION:** Ms. Watson will notify Mr. Rush when the RD is implemented.

**ACTION:** Upon implementation of the RD Mr. Rush will issue the P-NOTAMs.

**ACTION:** The MPOCs will report on the IACC response at the next ACF.

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

Mr. George Sempeles, Cartographic Standards, briefed that National Airspace System Resource (NASR) would be modified sometime in FY06 to include data fields for unique identifiers, geographic position, civil or military use and jump volume. Once the data fields are added to NASR the database will be populated. Mr. Eric Secretan, NACO, questioned if the additional fields would be available in the NASR subscriber file. Mr. Sempeles responded that the data would automatically be added to the subscriber files.

Mr. Secretan reported on the NACO action item to determine the criteria for indicating if a jump area is on or near a procedure. Mr. Secretan stated that determining if a jump area is near a procedure is very subjective and creating the criteria for adding this information to a database would be extremely difficult. Mr. Secretan stated that the FAA is not interested in pursuing this issue. However, the parachute jump area layout record for ARINC-424 will be included in version 19. Mr. John Moore, NACO, recommended closing the NACO portion of the issue and leaving the NASR portion of the issue open.

**STATUS:** OPEN

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

### 05-01-173 ASR Symbol on Visual Charts

Mr. Eric Secretan, NACO, provided the following update. NACO has been researching the issue to determine origin and intent of the negative type R symbol when charted. NACO is currently working with Airway Facilities to identify towers that have ASR capability. However, towers that have ASR capability may not have operators authorized to use the ASR system. Mr. Secretan reported that NACO is still investigating the issue.

Mr. Hal Becker, AOPA, stated that AOPA did not poll their members. However, AOPA recommends continuing to chart the negative type R in the airport data block at airports with FAA operated ASRs that do
not lie within the charted lateral limits of Class B, Class C or TRSAs. In addition, AOPA recommends charting the approach control and departure control frequencies in the radar approach control frequencies legend of the Sectional and the TAC. A copy of the AOPA request is attached to these minutes. Mr. Secretan stated that the AOPA request seems reasonable but we need to get a handle on what the symbol means prior to adding the frequency data. Mr. Mark Washam, ATO-T, stated that he could provide NACO with a source for towers that are certified to use ASR. Mr. Washam stated that this information is available on the NATCA web site.

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

**ACTION:** Mr. Washam will work with Mr. Jim Grant, NACO and report at the next ACF.

**ACTION:** NACO will determine the criteria for charting the ASR symbol.

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

Mr. Don Porter, ATO-R/RNP, reported the Pilot/Controller Procedures and Phraseology (P/CPP) Working Group has been developing procedures and phraseology for ‘Climb via’ for SIDs that is very consistent with ‘Descend via’ for STARs. Climb via is an instruction the controller will give that authorizes the pilot off the lateral path to climb at their discretion to comply with all restrictions on the SID. ‘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.

The forum participants discussed the need to standardize the depiction of the Top Altitude information on the SID. Two options were discussed, one is to show a note in the upper corner, near the title of the procedure and the other option is to have the information included with the MSA information in the upper corner. In addition to the placement of this information, guidance for procedure designers must be established to include the top altitude information in the procedure source documentation. The Top Altitude Note presentation is attached to these minutes.

**STATUS:** OPEN

**ACTION:** NACO and Jeppesen will produce prototype charts for discussion at the next forum.

**ACTION:** Mr. Porter will provide requirements for prototype and provide an update at the next forum.

**05-01-175 Adding VFR Flyway Planning Charts to the SRAC**

Mr. Eric Secretan, NACO, reported that NACO would add the VFR Flyway Planning Charts to the Sectional and Terminal Raster Aeronautical Charts (SRAC) DVD effective 22 December 2005. The planning charts will not be geo-referenced because they are not for navigational use. The helicopter charts and the Grand Canyon VFR Aeronautical Chart will be added to the SRAC in approximately six months. These charts will be geo-referenced.

**STATUS:** CLOSED

*Editor’s note: The VFR Flyway Planning Charts will be added to the SRAC effective 16 February 2006.*
05-01-176 Charting of Radius to Fix (RF) Leg/Path Terminators

Mr. Mark Steinbicker, AFS-410, reported that we currently have a standard for charting RF legs. RF legs are charted on RNP charts and this will be the procedure for the near future. The group discussion led to the determination that departure and arrival procedures will be charted in the same way. Mr. Vinnie Chirasello, AFS-410, inquired if RF turns would be used outside of RNP procedures. Mr. Tom Schneider, AFS-420, responded possibly. Mr. Chirasello inquired if we wanted to open the door to discuss the RF leg on other procedure types.

Mr. John Moore, NACO, recommended that the group discuss their concerns outside of this meeting. Mr. Schneider and Mr. Ted Thompson, Jeppesen stated that no negative comments have been received and if Mr. Chirasello wanted to revisit the issue it could be added to the agenda of Mr. Schneider’s PARC RNP Charting meeting. Mr. Chirasello will ensure that all the ‘right players’ are in attendance.

STATUS: CLOSED
VI. New Charting Topics

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

Mr. Mike Webb, AFS-420, submitted this issue. Mr. Webb briefed that currently there are two kinds of helicopter Point in Space (PNS) instrument procedures. One procedure goes to a specific landing area identified as ‘Proceed Visually’ in the instructions to the pilot to proceed to the landing area if it is in sight from the missed approach point. In this case the pilot will be cleared for the Copter RNAV approach to a single heliport. The other PNS procedure is to a point at which the pilot makes visual contact with the ground and proceeds under visual flight rules to any of a number of landing surfaces.

In 2004, a General Notice was issued requiring all instrument approaches, both public and special, to be provided NOTAM protection. For the PNS instrument approaches to a single heliport the NOTAM was tied to the heliport location identifier. For approaches that do not terminate at a specific landing location, industry representatives have requested using the missed approach point waypoint identifier as the location for NOTAM purposes and stored in NASR. Option two is to use the closest landing surface that is already in NASR. A third option is to use the location where pilots get the altimeter setting. Request is made for the ACF to make a determination on a standardized process for assigning location identifiers for helicopter PNS instrument approaches.

ATO-R reported that the industry suggestion of using the missed approach point waypoint identifier is not feasible. A waypoint has a five-character identifier and the last four letters may or may not be unique which would make this recommendation unacceptable. Mr. Eric Secretan, NACO, inquired about the placement of the instrument approach procedure in the Terminal Procedures Publication. The procedure would be listed under the primary airport/identifier. If it were to a missed approach point with an assigned identifier, how would the pilot find it? Mr. Tom Schneider, AFS-420, recommended a separate section in the A/FD to identify these points. Mr. Bill Hammett, AFS-420, recommended that they be treated the same as SIDs that service multiple airports. Each point would be assigned an identifier and published in the TPPs multiple times.

Mr. Webb reported that there are only two published procedures and approximately 70 specials. Mr. Hammett questioned if the NOTAM System could be programmed to handle five charter identifiers or is it limited to four characters. Mr. Gary Bobick, ATO-R, will investigate and report at the next ACF. Mr. Hammett stated that the NOTAM System is key to resolving this issue. Mr. Brad Rush, NFPO, informed the group that the state of Pennsylvania was considering adding GPS Helicopter approaches every five miles along their interstates for evacuation purposes. Other states could adopt this plan causing hundreds of thousands of these points in the future.

The group discussed database and liability issues associated with these points. Ms. Debbie Martin, Transport Canada stated that PNS is an issue in Canada and requested that Transport Canada participate in the working group. The following individuals/organizations have expressed an interest in participating on the working group. The PNS presentation is attached to these minutes.

STATUS: OPEN

<table>
<thead>
<tr>
<th>NAME</th>
<th>ORGANIZATION</th>
<th>EMAIL</th>
<th>PHONE</th>
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<tbody>
<tr>
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<td>303-328-4447</td>
</tr>
</tbody>
</table>
Valerie Watson  Carto Standards  valerie.watson@faa.gov  202-267-9302
Mike Webb, Chair  AFS-420  mike.webb@faa.gov  202-385-4603

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

**ACTION:** Mr. Bobick will investigate the NOTAM issue and report at the next ACF.

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**05-02-178 Listing of Glider Field Frequency on Sectional Charts**

Mr. Steve Freeman, Soaring Club of Houston, submitted this issue. Mr. John Moore, NACO, briefed the ACF. The Soaring Club of Houston operates west of the Houston Class B airspace with approximately 12,000 operations a year. They are requesting that the glider frequency and symbol be listed on the sectional charts similar to the parachute jump area symbol and frequency.

Mr. George Sempeles, Cartographic Standards, reported that NASR couldn’t support the frequency data and modifications to NASR would be quite complex. This issue is one request from one operator and could be handled with a chart note. Mr. Moore stated NACO currently publishes one-time, local notes on the Visual Charts that are unique for a specific area.

**STATUS:** OPEN

**ACTION:** Mr. Sempeles will contact the originator and coordinate the note with NACO.

**ACTION:** Mr. Sempeles will report at the next ACF.

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**05-02-179 Attention All-users Page for Simultaneous, Parallel RNAV Departures**

Mr. Mark Steinbicker, AFS-410, submitted this issue. Mr. Steinbicker 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. Recommendation is to develop a standard template for such pages that maybe tailored for each location with respect to local operations and procedures.

Mr. Steinbicker’s briefing led to extensive discussion by the ACF participants. There are approximately seven facilities that would be affected by this issue. Jeppesen has published notices as text pages published with the procedure. Mr. John Moore, NACO, stated that adding the notice to the TPPs is not an issue. The issue will be coordinating the notice with each facility to assure consistent data is published for each facility. Mr. Brad Rush, NFPO, expressed his concerns for using the TPP as an education tool. Mr. Eric Secretan, NACO, recommended that the information be published in the AIM. Mr. Steinbicker explained that the requirements are different for each procedure.

Mr. James Spencer, NAVIF, recommended the information be added to the airport remarks section of the A/FD. Mr. Bill Hammett, AFS-420, recommended that only the generic data or boilerplate information be added to the A/FD. Mr. Mark Ingram, ALPA, stated that the A/FD is not an acceptable location for this type of information. Mr. Secretan stated this type of information is an airport remark and should be published in the airport remark section of the A/FD. NACO could publish a caution note on the procedure to ‘See the A/FD for additional information’. Mr. Vinnie Chirasello, AFS-410, stated that all notices (PRM, Simultaneous
Parallel, etc.) should be published in the same publication. Mr. Steve Bergner, NBAA, stated from an industry prospective, the All-user Pages belong in the TPPs. ALPA concurred with the NBAA recommendation. Mr. Secretan commented that NACO is being forced to a Jeppesen solution because that’s what pilots are familiar with. Mr. Tom Schneider, AFS-420, stated that the information could be condensed into one or two notes that could be added to the charts and all common data could be added to the A/FD.

Mr. Secretan questioned the source data for adding the information to the A/FD. Mr. Rush recommended that the information be published in the NFDD. Mr. Bergner reminded the group that this is new ground for pilots, controllers, and procedure designers and that we need to be proactive in providing the data to the users. The ‘Attention All-users Page’ has considerable value. In a year or two we could revisit the issue and possibly delete the pages from the TPPs. Mr. Secretan stated removing the pages from the government produced products once they are published is a liability issue. Mr. Steinbicker stated that the RNAV group would identify the requirements. The Jeppesen All-users Page is attached to these minutes.

**ACTION:** Mr. Steinbicker will obtain the airport specific data to determine if the notes can be added to the face of the procedure, or option 2, add the information to the A/FD and publishing a caution note on the procedure, or option 3, add a separate page to the TPPs. Mr. Steinbicker will coordinate with Mr. Rush, Mr. Schneider, and NACO.

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

**VII. Closing Remarks**

Mr. John Moore, NACO, again thanked ALPA and ALPA representatives Mr. Kevin Comstock and Mr. Mark Ingram for hosting the ACF. Mr. John Moore, NACO, stated that the sub-groups chaired by Mr. Brad Rush and Mr. Tom Schneider would meet back at ALPA at 9:00 am on October 27, 2005 for follow-up meetings.

**VIII. Next Meeting**

The next meeting of the ACF is scheduled for April 18-20, and will be hosted by Advanced Management Technology, Inc (AMTI), at their facility in Arlington, Virginia. Dress will be casual. The following meeting will be held at the National Aeronautical Charting Office in Silver Spring, MD on October 17-19, 2006.

**PLEASE NOTE THE DATE CHANGE FOR THE 06-02 ACF.**

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 Debbie Copeland) a written status update on open issues no later than March 30, 2006.

**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.

**IX. Attachments**

1. Attendees/Mailing List
2. OPR/Action Listing

**ACF Website URL Disclosure:** Website URLs included these minutes were accurate and reflect the URL address at the time these minutes we drafted and approved.