

**Government/Industry Aeronautical Charting Forum (ACF)**

**Meeting 04-01**

**April 28 to April 29, 2004**

**MINUTES**

**I. Opening Remarks**

The Aeronautical Chart Forum (ACF) was held at the Air Line Pilots Association (ALPA) office in Herndon, Virginia. Mr. Dick Powell, FAA/ATA-100, the ACF Co-Chair, opened the Forum on April 28, 2004 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. Powell acknowledged the ACF Co-Chair Mr. Tom Schneider, FAA AFS-420. Mr. Schneider chaired the ACF Instrument Procedures Group meeting held on April 26-27, 2004. Separate minutes of that meeting will be distributed.

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

The minutes from the 03-01 ACF meeting were accepted with the following corrections:

**Section 3 Presentations, ACF Working Group Reports, ACF Project Reports:**

*Procedure Title Briefing* - delete the entry in its entirety.

**Section 4 Outstanding Issues:**

**98-02-111 Tabular Data for Military Operations Areas (MOAs) Times of Use NOTAMs** - strike the fourth action item, Mr. Hal Becker and Mr. Bill Hammett will coordinate with the military to add other times by NOTAM in their new legal descriptions of MOAs.

**01-01-140 Tabular Information for Descent (non-precision approaches)** change Mr. Val Watson to read Ms. Valerie Watson.

**III. Agenda Approval**

The agenda for the 04-01 ACF meeting was approved with the following additions:

**Section V. New Charting Topics**

Add item **04-01-167 Charting of Altitude Constraints on SIDs and STARs** and item **04-01-168 Identifiers for Heliports and Helipads**.

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

##### **RNAV Transition Working Group Update**

Mr. Eric Secretan, AVN-503, Co-Chair of the RNAV Transition Working Group, gave a brief status report of the two papers submitted by the RNAV Transition Working Group. The Working Group presented recommendations for consistent charting of ground-based fixes vs. RNAV waypoints, and a method for indicating additional fix functions such as compulsory/on-request position reporting, and/or RNAV fly-by/fly-over requirements. Mr. Secretan stated that the hierarchy of symbology issue was approved, as presented, by the Interagency Air Cartographic Committee (IACC), with the exception of the depiction of compulsory vs. non-compulsory waypoints. The depiction of compulsory vs. non-compulsory waypoints remains an issue for several members of the ACF.

Mr. Mike Riley, NGA, stated that the Member Point of Contact (MPOC) is unable to agree on this issue. Mr. Secretan stated that a waypoint, fix, or NAVAID is an on request reporting point, filling in that waypoint, fix, or NAVAID means compulsory reporting. Mr. Secretan reported that the two papers developed by the RNAV Transition Working Group, Concept For RNAV/Ground-Based Charting Symbol Consistency And Hierarchy, and Charting Of Holding Pattern Waypoints has been submitted to the ICAO, Obstacle Clearance Panel (OCP) and Operations Panels for consideration.

##### **ACF AIS/MAP Initiative Update**

Due to budget limitations Mr. Davis Lewtas, ICAO, was unable to attend the ACF. Mr. Dick Powell, ATA-100, provided a brief update of the ICAO AIS/MAP activities. Mr. Powell reported that the last AIS/MAP Study Group meeting was held on June 3, 2003 at the ICAO Headquarters in Montreal, Canada and was attended by himself and Mr. Terry Laydon, FAA/AVN-500.

Mr. Powell stated that at the meeting the U.S. presented three Working Papers, National Airspace Redesign, Concept For RNAV/Ground-Based Charting Symbol Consistency and Hierarchy, and Charting of Holding Pattern Waypoints. Copies of the three working papers were available for interested ACF Members. It was stated that since the last ACF, two major amendments have occurred to IACO Annex material: Amendment 53 of Annex 4, Aeronautical Charts and Amendment 33 to Annex 15, Aeronautical Information Services.

##### **ACF ICAO Identifier Working Group**

Mr. Dick Powell, ATA-100, provided the ACF with the following update. The ICAO Identifier requirement came to the ACF in 01-02 from Jeppesen out of the ATA Charting/Database Harmonization Group, to add ICAO identifier code K in front of three-letter airport identifier. NATCA and ATP non-concur to the Cartographic Change Proposal (CCP). Mr. Powell reported that on April 24, 2003 ATP dropped its non-concur, supporting a phased-in approach to changing all airport identifiers to four characters to be in compliance with ICAO. Mr. Powell stated that work would continue with NATCA to resolve the non-concur.

Mr. Powell [disseminated the revised CCP](#), "Proposal to Phase-in International Identifiers" for review and encouraged all groups to review and comment. Mr. Powell informed the ACF Members that feedback is critical to each phase and may alter the final recommendations. The revised CCP is attached to these minutes. Mr. Powell stated that after reviewing the responses of the initial CCP no response was received from IATA, ATA, EAA, HAI, and NBAA. Mr. Powell encouraged these groups to respond, as this may be a major impact on them. He also stated that ALPA, AOPA, Jeppesen and GTE DUATS concurred. However several groups did voice concerns about how to handle Alaska and Hawaii. There was also some concern on how the NOTAM system would be impacted by the revised identifiers.

**ACTION:** ACF Members to [review and comment](#) on the CCP by June 29, 2004 (see attachment 2). Comments maybe sent via email to [9-awa-ata100-feedback@faa.gov](mailto:9-awa-ata100-feedback@faa.gov).

**ACTION:** Mr. Powell will report on the CCP comments at the next ACF.

**ACTION:** ATA-100 will continue working with NATCA to resolve non-concurs.

### **High Altitude Redesign Briefing**

Mr. Larry Bicknell, MITRE-CAASD updated the ACF on the High Altitude Redesign (HAR). Implementation of Phase 1 roll out is designed to provide balanced flexibility and structure to obtain maximum system efficiency in the Northwest seven ARTCCs (Chicago, Denver, Kansas City, Minneapolis, Oakland, Salt Lake City and Seattle). This roll out has provided web access to SUA/ATCAA ([sua.faa.gov](http://sua.faa.gov)) schedules and locations, publication of 11 Q routes, and initiation of nonrestrictive routing (NRR) and point-to-point (PTP) navigation. Other parts of Phase 1, the charting of Navigation Reference System (NRS) waypoints and the lifting of GNSS restrictions enabling DME/DME use will take place later in the summer 2004.

Phase 1 expansion is scheduled for May 12, 2005. This expansion project will expand the airspace to an additional seven ARTCCs in the south and west and add approximately 250 new NRS waypoints. The expansion may include 6-10 new 'Q' Routes and lower the airspace floor to FL350 and above.

Waypoints have been established around the perimeter of SUA/ATCAA to minimize the impact of flights within the HAR environment. Pilots should flight plan around these areas using the waypoints when the SUA and ATCAAs are active. These waypoints are being used by ATC to reroute aircraft should an unanticipated activation occur.

The first eleven Q routes were effective July 10, 2003. Mr. Bicknell stated that the routes are not being flight planned by customers.

Mr. Bicknell's presentation led to an extensive discussion by the AFC members. ATA informed the ACF members that the FAA formally submitted an exemption to ICAO Annex Material explaining the U.S. intent to express NRS grid points as a series of alphanumeric points on U.S. charts and databases. Four hundred-fifty, NRS waypoints were published in the NFDD 069 dated April 9, 2004. These NRS waypoints will be effective/published on the June10, 2004 high altitude charts. In

addition, the IACC chart specifications have been amended to permit charting of the NRS waypoints on the U.S. High Altitude charts.

AOPA stated that their members requested SUA/ATCAA waypoints be charted on the low enroute charts and the sectional charts to help them avoid SUA. Mr. Steve Bergner, NBAA, expressed interest in how many “fat finger” errors, controller errors, and what the error detection rate would be for the NRS points. Mr. Bergner requested a copy of the human factor study. Southwest Airlines requested to see a FMS graphic display of NRS points at different radius. Mr. Ted Thompson, Jeppesen, inquired as to when will the U.S. expand or except RNAV routes coming into the U.S. from South America. ACF members expressed concerns about pilot education/notification reference the charting NRS waypoints. Mr. Eric Secretan, AVN-503, stated that NACO would send out a Charting Notice to users. Mr. Thompson stated that Jeppesen would not send out a Bulletin to its users.

**ACTION:** Mr. Bicknell will provide a copy of the human factor study to Mr. Bergner.

**ACTION:** Mr. Bicknell will respond to Mr. Thompson’s inquiry reference South America RNAV routes.

**ACTION:** Mr. Bicknell will provide Southwest Airlines a graphic display of NRS waypoints.

**ACTION:** NACO will distribute a charting notice to user.

### **Airport Surface Detection Equipment Model X (ASDE-X)**

Ms. Erin Carrier and Mr. Don Gunderson, TRISO Inc. [provided a briefing on the ASDE-X project](#). Mr. Gary Norek, ATP-120 assisted in the briefing. ASDE-X is an airport surface surveillance system for the airport surface designed to provide seamless coverage and aircraft identification (tags) to air traffic controllers. The system uses a combination of surface movement radar and transponder multilateration sensors to display aircraft position labeled with flight call-signs on an ATC tower display.

They explained that ASDE-X architecture consists of five subsystems: Multilateration, Surface Movement Radar, Automatic Dependent Surveillance-Broadcast (ADS-B), Multi-Sensor Data Processing and Tower Displays.

Multilateration is secondary surveillance sensor, which directly interacts with Mode S or ADS-B equipped aircraft and vehicles for positive identification and location information. By installing a collection of receiver antennas around the airport surface and noting the time each antenna hears a transponder squawk, ASDE-X calculates location with the difference between these times through the use of triangulation. ASDE-X provides highly accurate data that provides controllers with positive identification of aircraft on the surface in all weather conditions.

Ms. Carrier stated that a total of 34 ASDE sites would be commissioned by FY 2007, 59 airports are targeted for ASDE-X if funding is available. The first ASDE-X was commissioned at General Mitchell International Airport, Milwaukee, WI. She stated that the impact to users at ASDE-X airports would

be that users would be requested to operate transponders while on runways and taxiways. Ms. Currier informed the ACF of the importance of user notification and pilot education. She stated that pilot notification could consist of putting a message on the ATIS, issuing an L-NOTAM, updating the AIM and AIP, and adding the information to the A/FD and airport diagrams. Airport diagram notations suggested by Ms. Currier included adding an asterisk by the ground control frequency, including ASDE-X in the frequency data block or adding a note stating ASDE-X Airport: Pilots should operate transponder while on airport surface.

Mr. Eric Secretan, AVN-503, stated that the asterisk is currently used and that it means part-time. He stated that NACO is not interested in creating new symbology for the chart and adding a note would be the easiest way to add this data to the airport diagram. Mr. Ted Thompson, Jeppesen, concurred. He suggested modifying the note to read ASDE-X Radar: Pilots should operate transponder while on airport surface. Ms. Currier stated that at this time, ASDE-X would not affect SMGS. She stated that AOS-230 provides the display/airport map overlay for the controller display. Mr. Dick Powell, ATA-100 stated that the controller display must agree with the published airport diagram and that update procedures for controller display needs to be worked out. The ASDE-X PowerPoint briefing and a copy of the ACF 04-01 minutes can be found on the FAA Air Traffic Airspace Management Office website [http://www.faa.gov/ats/ata/ata100/acf/meeting\\_min.htm](http://www.faa.gov/ats/ata/ata100/acf/meeting_min.htm).

**ACTION:** ATA, ATP, and ATP-430 will create the ASDE-X note for the airport diagram.

## V. Outstanding Issues

### **98-02-111 Tabular Data for Military Operations Areas (MOAs) times of use NOTAMs issue.**

Ms. Pat Fair, ATA-130, updated the ACF on this issue. She stated that SUA/PAJA frequencies have been received from the FAA Regions and consolidated for publication in the NFDD by ATA/ATP. Frequency data for SUA-MOA, Alert, and Warning Areas were published in the NFDD as add on pages on April 27, 2004. PAJA frequencies were parsed out of the list and will be evaluated by ATA staff to resolve any discrepancies that may exist. Ms. Fair stated that NFDD publication of PAJA frequency information would occur as soon as any inconsistencies are addressed. She reported that a Document Change Proposal has been issued to amend FAA Order 7210.3, Facility Operation and Administration to provide direction to facilities about maintenance of SUA frequency information. NACO will begin updating the SUA tabulations on the VFR charts beginning with the August 5, 2004 chart publication date.

**STATUS: CLOSED**

### **[00-01-119 Adding PCNs \(Ground/Airports\)](#)**

Mr. Dick Powell, ATA-100, reported that funding has been identified for this project. He stated that the Airport Master Record Form 5010 would be amended to include PCN data for runways and taxiways. State and Federal airport inspectors would collect the information as part of the airport inspection. The PCN data will be stored in NASR and published in the NFDD. Mr. Steve Bergner, NBAA, reported that there is a tremendous interest by his constituents to have this data published. Mr. Powell stated the problem is how to portray the information on the airport diagram.

Mr. Frank Flood, Air Canada, informed the ACF that Canada depicts [PCN data for runways, taxiways and aprons on the airport diagram](#) as a remark. He also reported to the ACF that Canada publishes PCN data in a document titled [Canadian Airport Pavement Bearing Strengths \(TP 2126E\)](#). This document reports pavement bearing strengths for 150 runways at regional/local airports in Canada. Pavement bearing strengths are reported using both the Transport Canada Aircraft Load Rating/Pavement Load Rating (ALR/PLR) system and the ICAO ACN/PCN system. Mr. Ted Thompson, Jeppesen, stated that he is concerned about chart clutter and adding additional notes to the airport diagram.

The ACF members determined that a new working group should be created to identify the pavement classification requirements for airport surfaces (runways, taxiways, and ramps), and develop a proposal for ACF consideration. The following individuals/organizations have expressed an interest in participating on the new working group.

**STATUS: OPEN**

## ACF Pavement Classification Working Group

Scott Jerdan	AVN-511	(301) 713-2817	richard.s.jerdan@faa.gov
Debbie Copeland	AVN-503	(301) 713-2631	deborah.l.copeland@faa.gov
Kevin Comstock	ALPA	(703) 689-4176	kevin.comstock@alpa.org
Allan Ball	Net Jets	(614) 239-4873	ball@netjets.com
TBD	NBAA	(202) 783-9000	
Betty Bradley	AVN-512	(301) 713-2961	betty.j.bradley@faa.gov
Ron Canter	AVN-512	(301) 713-2958	ronald.l.canter@faa.gov
Ted Thompson	Jeppesen	(303) 328-4456	ted.thompson@jeppesen.com
Harry Pavulaan	AVN-511	(301) 713-2829	harry.pavulaan@faa.gov
Ann Behrns	HQ AFFSA	(240) 857-6721	ann.behrns@andrews.af.mil
Rick Funkhouser	HQ AFFSA/XOIA	(240) 857-6713	rick.funkhouser@andrews.af.mil
Charles K Chung	HAI	(703) 683-4646	charles.chung@rotor.com

**ACTION:** Mr. Dick Powell will notify interested participants when he is ready to begin work on the new ACF pavement classification working group.

**ACTION:** ACF pavement classification working group will present proposal for ACF consideration at the next forum.

### [01-01-140 Tabular Information for Descent \(non-precision approaches\)](#)

Ms. Val Watson, ATA-130 reported that RD538 was submitted to the MPOC on September 4, 2002. Non-concurs were received from AVN-100, AVN-500, and NGA. Mr. Ted Thompson stated that Jeppesen wouldn't create these "ribbons" and that they must be State supplied. Recommendation was made to close this issue. ACF consensus.

**STATUS: CLOSED**

### [02-01-145 LPV Minima Charting](#)

Ms. Val Watson, ATA-130 reported that RD541 was signed by the IACC on May 29, 2003 and that AIM guidance has been developed.

**STATUS: CLOSED**

### [02-01-146 Codes for Non-ICAO Airfields](#)

ACF discussion led to the consensus of the ACF to close this issue and open a new issue 04-01-168, Identifiers for Heliports and Helipads.

**STATUS: CLOSED**

### [02-02-147 FAA Electronic Regulations/Documents \(Central location of FAA electronic Regulations\)](#)

Ms. Pat Fair reported that President Bush signed an order on this issue that will create a regulatory type database for all FAA documents. This database will take approximately two years to complete. Ms. Fair provided interested ACF members [a listing of websites for aviation data](#).

**STATUS: CLOSED**

### [02-02-148 Obstacles not in Public Data](#)

Mr. Mark Ingram, ALPA, stated ALPA's concern that some OE obstacle data is not available in the DOF. Mr. Ingram made reference to two obstructions on the final at Lihue Hawaii, one of which is the controlling obstruction. Mr. Eric Secretan, AVN-503, stated that obstructions under 200 feet are not in the DOF. Obstructions under 200 feet will be added to the DOF if the obstruction is a manmade controlling obstruction, or if requested by Flight Procedures. Mr. Secretan stated that the Obstruction Repository System (ORS) would contain man-made and natural obstructions under 200 feet. ORS should be available after October 2004.

**STATUS: OPEN**

**ACTION:** AVN (AVN-100, AVN-200 and AVN-500) will look at DOF specifications, requirements and what will be distributed to the public. AVN will submit a proposal for comment at the next ACF.

### [03-01-150 Airway Intersections on VFR Charts](#)

Mr. John Moore, AVN-503, recommended the removal of the airway intersection information from the visual charts to reduce chart clutter. Ms. Heidi Williams, AOPA, stated that AOPA does not want the intersections removed. Air Traffic concurred with AOPAs position, sighting National Security issues. Consensus of the ACF is to close this issue.

**STATUS: CLOSED**

### [03-01-151 Charting of IFR Transition Routes](#)

In response to customer demand, the FAA has begun a program to develop IFR Transition Routes through TRACON airspace for RNAV (E/F/G) equipped aircraft. These transition routes were described as a series of waypoint/fixes and published in the A/FD Special Notice section in graphic format. The transition route graphic for Charlotte, NC is currently published in the SE A/FD and Cincinnati, OH will be published in the 5 Aug 04 A/FD.



Ms. Heidi Williams, AOPA, stated that placing the graphic in the A/FD is not working; pilots do not fly with the A/FD. She stated that the AOPA members want the transition routes charted. The purpose of the route is to get the general aviation pilot through the area and to keep him away from the air carriers. Currently, the general aviation pilots are not using the routes because they are not charted. Ms. Williams stated that there are approximately 33 Class B areas that need charted transition routes.

Mr. Dick Powell, ATA-100 proposed adding them to the area charts and where area charts don't exist create one. Mr. Eric Secretan, AVN-503, stated that the area charts do not exist in many areas, and creating new ones would result in additional paper charts. He also stated that until there is a larger number of transition routes NACO would not consider creating a new chart or product; but NACO will continue to publish transition routes in the A/FD. Mr. Secretan suggested placing the transition route graphics on the AOPA and NACO websites to increase pilot awareness. It was stated that the routes could be designated as Q routes for the low enroute structure.

Ms. Pat Fair, ATA-130, proposed making them ATS routes with ATS designators. Additional proposals discussed by the ACF were charting these routes on SIDs and STARs or on the enroute low charts. Charting these routes on the enroute low charts caused several concerns for ACF members. Chart clutter continues to be an issue and if they were charted, the lengths of the routes are such that they may not be seen due to the scale of the enroute low chart. Mr. Paul Ewing, ATP stated that the distance covered by the routes could exceed the Class B airspace area. Mr. Ted Thompson, Jeppesen, stated that these routes need to be identified for database purposes. Mr. Brad Rush, AVN-101, stated that all the routes originate at intersections or fixes. He proposed identifying these routes by city name, e.g., Charlotte1, Charlotte2, etc., and coding them in the database by airport identifier KCLT1, KCLT2, similar to the way the preferred routes are coded. AFS-410 informed the forum that the Administrator wants these routes to be available by the year's end.

#### **STATUS: OPEN**

**ACTION:** Ms. Heidi Williams, AOPA, will submit a formal written request for charting of the routes.

**ACTION:** Mr. Paul Ewing, ATP, will research the transition route requirements, length of the route segments, the size of the route area and report at the next ACF.

#### **03-01-152 Marine Navigation Lights on VFR products**

Mr. John Moore, AVN-503, recommended the removal of marine navigation lights on the visual charts to reduce chart clutter and maintenance costs. He stated that currently there are several hundred marine navigation lights charted on the visual charts, and that the source for this data is the Coast Guard Light List. Ms. Heidi Williams, AOPA reported the results of their membership survey. AOPA concurs with the removal of the navigation lights from the sectional charts. Mr. Mike Riley, NGA non-concurred stating that DoD does not chart marine beacons on their products. But, as a user of FAA visual charts they are requesting that they remain on the chart for situational awareness. HAI concurred stating that from a user perspective they should remain on the charts.

**STATUS: OPEN**

**ACTION:** HAI will research the issue with offshore operators and report at the next ACF.

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

Ms. Valerie Watson, ATA-130 stated that the LASHO distance data is published in the back of A/FD under the Land and Hold Short Operation Section, and Jeppesen list distances in the additional runway information section of the -9 pages. It was stated that neither publication lists whether the land and hold short lights are installed. Recommendation was made to depict LASHO HSP and hold short lights on the airport diagram. The ACF consensus was for ATA to prepare a CCP for circulation/comment at the next ACF. Pending resolution of any issues associated with the CCP an IACC RD will be submitted to the MPOC. FAAO 7210.3, Facility Operation and Administration will need to be amended to provide for LASHO land and hold short lighting updates.

**STATUS: OPEN**

**ACTION:** Mr. Dick Powell, ATA-100 will discuss this issue with the LAHSO Office and prepare a CCP for the next AFC.

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

The ACF consensus is that on RNAV procedures where fly-over is designated by the source and the waypoint is followed by a direct-to-fix leg that the leg be depicted as flown. The ACF consensus only applies to SIDs and STARs. Mr. John Moore, AVN-503, reported that he would discuss the ACF consensus and submit a RD at the next MPOC meeting.

**STATUS: OPEN**

**ACTION:** Mr. Moore will submit a RD at the next MPOC meeting and report the IACC response at the next ACF.

**03-01-155 Broadcast Stations on VFR Charts**

Mr. Dick Powell, ATA-100 reported that he contacted HAI to determine if they have any objections to removing broadcast stations from the VFR charts. Mr. Powell stated that he received no response from HAI and that he was unable to contact EAA. Mr. Powell asked the ACF members for a point of contact at EAA.

**ACTION:** Mr. Powell will contact Mr. Randy Hansen, EAA and request EAAs position.

**ACTION:** HAI will research this issue and report at the next ACF.

**03-01-156 Inclusion of Parachute Jump Areas in GPS/FMS Databases, Approach Plates, and Arrival/Departure procedures**

Issue 03-01-156 (contains 03-01-156 and 03-01-157 original submissions of Mr. Scott.) Mr. Dick Powell, ATA-100 reported that there are 211 IAP airports with associated Parachute Jump Areas (PAJA). Ms. Valerie Watson, ATA-130 reported that the PAJA are in NASR and published/maintained in the NFDD and in the A/FD. ACF discussion led to the consensus not to chart PAJA on IAPs, SIDs or STARs since SIDs and STARs are not to scale, and PAJA are not active during IFR conditions.

Mr. Greg Yamamoto, AVN-503, stated that GPS/FMS database specifications, ARINC 424 don't support the inclusion of PAJA data. He stated that ARINC may develop a record or directory standard for PAJA but manufactures may filter this data out. Mr. Yamamoto stated that in order to add PAJA data to the GPS/FMS, geographical positions of the PAJA would need to be obtained. Currently, position data for PAJA is not available in NASR. ACF consensus was to close both issues.

**STATUS: CLOSED**

## VI. New Charting Topics

### [04-01-158 Depiction of takeoff minimum on Standard Instrument Departures and those associated with Obstacle Departure Procedures](#)

Mr. Chuck Schramek, Delta Airlines, submitted this issue. Mr. Schramek, was unable to attend the ACF. ACF members recommended holding this issue until the next ACF.

**STATUS: OPEN**

### [04-01-159 RNAV Idents](#)

Mr. John Ingram, NGA, submitted this issue. Recommendation was made to follow ICAO rules for identifying RNAV Routes and waypoints designated as RNAVs. DoD requested the removal of the R suffix on the Alaska VOR/DME routes. Mr. Ingram stated that waypoints are being identified as RNAV, but are only used on non-RNAV routes on enroute airways. Mr. Ingram questioned as to why these non-RNAV waypoints are on enroute airways, when the airway record doesn't contain the waypoint. It was stated that the waypoint is a tie-in to a terminal procedure, SID, STAR or IAP. It was stated that the airway does not have a segment distance because the waypoint is not part of the airway. Jeppesen and NACO code these waypoints as part of the airway segments. ACF discussion led to the determination that there are no easy or obvious solutions; ACF recognizes this as an issue.

**STATUS: OPEN**

**ACTION:** ATA-100 will provide NGA access to FTP site to obtain - 2.

**ACTION:** Mr. Dick Powell, ATA-100, will discuss the issue of identifying RNAV routes with Mr. Frank Price.

### [04-01-160 Charting Low Altitude Q Routes](#)

Mr. Paul Ewing, ATP-500, submitted this issue. Mr. Ewing stated that ATC is looking to develop RNAV/RPN Q routes for general aviation use in the low altitude structure. It was stated that these routes will be regulatory and must go through the regulatory process. The low altitude Q routes would have a published MEA and they will be charted the same as the existing Q routes in the high structure with the only difference being equipment required to use the route. Mr. Brad Rush AVN-101 stated that restrictions will be added to the -16 and that the Q routes will be flight checked. This issue would require a change to the low altitude specifications. Mr. Ewing stated that ATP-500 is working with AFS-410 to determine the requirements for low Q routes. These requirements will be submitted to AOPA for comment. Pending resolution of any issues, ATA-130 will submit an IACC RD to the MPOC.

**STATUS: OPEN**

**ACTION:** ATP-500 and AFS-410 will research the issue and report at the Next ACF.

**04-01-161 Depicting Intermediate Fixes (IF) As Initial Approach Fix (IAF)/IF on RNAV T Approaches**

Mr. Dick Powell, ATA-100 received ACF consensus to transfer this item to the ACF Instrument Procedures Group.

**STATUS: CLOSED**

**04-01-162 Use of Lead-In Light Systems (LDIN)**

This issue was deferred to the next ACF.

**STATUS: OPEN**

**04-01-163 Depicting Required DME Facilities on Q Route Segments**

Mr. Hooper Harris, AFS-410, submitted this issue. RNAV Routes Q Routes that are approved for DME/DME navigation will identify required DME facilities for each route segment when the DME evaluation tool identifies that such essential facility exist. AVN-410 stated that Q Routes are currently GPS only. In August 2004, these routes will be approved for DME/DME use. Mr. Brad Rush, AVN-101, stated that the –16 will identify the critical DMEs. There may be critical DMEs if there are 5 or less available DME within a route segment. These critical DMEs will be added to the A/FD. He also stated that when there is a change to the DME the –16 will be modified/updated. It was stated that when a required DME is out of service, users must be able to identify route segments that are supported by these facilities. The DME must be NOTAM'd out of service and these route segments will not be available to DME/DME users for the duration of the NOTAM.

Ms. Valerie Watson, ATA-130, stated that the current NOTAM system would not support enroute DME out of service information. DME NOTAMs are currently only available for IAP support. Ms. Watson stated that the current NOTAM system would need to be modified to support the NOTAM of these critical DMEs. ACF discussions led to the consensus to modify the note on the IFR Enroute Chart Legend. Recommendation was made to change the current RNAV route note from “GNSS and Radar monitoring required. DME/DME RNAV N/A” to read “Radar monitoring required. Non-GNSS (DME/DME RNAV only) see A/FD.” AFS-410 will provide revised phraseology for the A/FD lead in paragraph.

**STATUS: OPEN**

**ACTION:** AFS-410 will provide ATA-130 with revised phraseology for the A/FD lead in paragraph.

### [04-01-164 Chart Note for Instrument Approach Procedures Terminating in Uncontrolled Airspace \(Class G\)](#)

Mr. Brad Rush, AVN-101, submitted this issue in response to a user request. Recommendation was made to add a chart note to instrument approach procedures at airports with instrument approaches terminating in uncontrolled airspace, i.e., CLASS G Airspace Below 700 ft AGL. AOPA stated that this is not a critical issue. ACF discussion led to the determination that this is a safety issue that may be specific to Eveleth airport and Ely Lake airport. The ACF non-concurs with this recommendation.

**STATUS: CLOSED**

### [04-01-165 Enroute Chart Depiction of Controlled Airspace for Instrument Approach Procedures](#)

Mr. Brad Rush, AVN-101, submitted this issue in response to a user request. Recommendation was made to depict or annotate controlled or uncontrolled airspace on enroute charts for airports having instrument approaches. Mr. Rush stated that Class C and Class D airspace are currently shown on the enroute low charts following the airport name. The recommendation was made to depict all controlled or uncontrolled airspace on enroute charts using that format. The ACF discussion led to the determination that this is not a safety of flight issue and would increase chart clutter. The ACF non-concurs with this recommendation.

**STATUS: CLOSED**

### [04-01-166 Charting of RNAV SIDs, STARs and Q Routes](#)

Mr. Mark Steinbicker, AFS-410, submitted this issue. Advisory Circular (AC) 90, US-RNAV is being developed in an effort to align RNAV aircraft navigation equipment requirements, procedure and route development criteria, and flight crew procedures. It was stated that AC 90 would be available this summer. AFS-410 stated that RNAV SIDs and STARs would belong to either Type A or Type B, and existing procedures would be modified. These types would be charted as such in the title of the procedure e.g., BLUIT FOUR DEPARTURE (RNAV-B). Aircraft suffix requirements will not be charted on the individual procedures. AC 90-US RNAV will delineate requirements. In addition, the NTAP and AIM will discuss requirements. The US Terminal Procedures legend will be modified to indicate the equipment requirements for Type A and Type B. Equipment suffixes will be modified:

/E – DME/DME  
/F – DME/DME/IRU  
plus new suffixes for RVSM+

AFS-410 stated charted MEAs on Q routes would reflect DME/DME coverage requirements. On routes/segments where a lower MEA for GNSS equipped aircraft is operationally

required/requested, an “MEA-G” may be charted in blue, e.g., MEA-22000G. An alternate method would be to use a route numbering system to classify GNSS only routes. AFS-410 stated that the time-line on this issue is critical and that chart changes should occur early next year.

**STATUS: OPEN**

**ACTION:** AFS-410 will work with Mr. John Moore, AVN-503, and ATA-130 on chart reference notes.

**ACTION:** AFS-410 will provide an update at the next ACF.

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

Mr. Mark Steinbicker, AFS-410, submitted this issue. Current charts for SIDs and STARs do not depict altitude constraints in a consistent manner. AFS-410 recommended establishing a standard charting format for mandatory altitude constraints. Consideration should be given to maintaining consistency throughout the different phases of flight: Departure, Enroute, Arrival and Approach. The format should allow for ease of recognition. Mr. Frank Flood, Air Canada stated that [Canada uses a box around altitude and airspeed on Canadian SIDs](#).

**STATUS: OPEN**

**ACTION:** AFS-410 and AVN-503 will provide an update at the next ACF.

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

Mr. Ted Thompson, Jeppesen, submitted this issue. Only a limited number of heliports and helipads in the United States have official FAA identifiers. In other cases identifiers may be informal, or not officially recognized by the FAA. There are also numerous heliports and helipads that have no identifiers whatsoever. Latitude/longitude information for most sites is non-existent. Without unique identifiers, and without latitude/longitude data, these sites cannot be included in NASR or navigation databases.

Mr. Thompson stated that in order to include IFR helicopter approach procedures in navigation databases, the procedure must be coded to the location identifier with valid coordinates. Mr. Thompson requested coordinates to the center of each helipad, including helipads that exist independently from airports. AFS-420 submitted a listing of helipads/heliports with helicopter approach procedures that have no FAA identifier to ATA-100.

**STATUS: OPEN**

**ACTION:** Jeppesen send a requirement document to ATA-100 requesting coordinates of each helipad.

**ACTION:** NGA and HHI submit a listing of U.S. facilities with no official FAA identifiers.

**ACTION:** ATA-100 review the listings submitted by AFS-420, NGA and HHI and report findings at the next ACF.

## **VII. Comments**

Mr. Mike Riley, NGA, requested to work issue 04-01-162 Lead-in Light System, through the MPOC. This issue was deferred to the next ACF. Mr. Riley stated that this is a safety issue for the Air Force.

Mr. Mark Ingram, ALPA, requested consensus of the ACF members to use the attendees/ mailing listing to bring issues to the attention of the ACF members prior to the six-month ACF meeting. ACF members agreed, providing that the subject line is identified as "ACF-..." on the email.

## **VIII. Closing Remarks**

Mr. Dick Powell, ATA-100, thanked ALPA for hosting the ACF, and a special thanks was given to the out-of-town members who attended the forum.

## **IX. Next Meeting**

The next meeting of the ACF is scheduled for October 25-28, 2004, and will be hosted by AMTI, at their facilities in Roslyn, VA. Dress will be casual. The following meeting will be held at the National Aeronautical Charting Office in Silver Spring, MD, April 25-28, 2005.

## **X. Attachments**

1. Attendees/Mailing List
2. CCP Proposal to Phase-In International Identifiers
3. ASDE-X PowerPoint Briefing
4. Victoria Intl Airport Diagram
5. Aviation Website Listing
6. Simcoe Two Arr

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