

Government/Industry Aeronautical Charting Forum (ACF)

**Meeting 08-01
April 23-24, 2008**

MINUTES

I. Opening Remarks

The Aeronautical Charting Forum (ACF) was held at Advanced Management Technology Inc. (AMTI) offices in Rosslyn, Virginia. Mr. John Moore, FAA/NACO, ACF Co-Chair and Chair of the Aeronautical Charting Forum, Charting Group, opened the Forum on April 23, 2008. Mr. Moore acknowledged ACF Co-Chair Mr. Tom Schneider, AFS-420, and introduced Mr. Tom Reiss, AMTI, who welcomed the ACF participants to the AMTI offices. Mr. Schneider chaired the ACF Instrument Procedures Group meeting held on April 22, 2008. Minutes of that meeting will be distributed separately.

II. Review of Minutes from Last Meeting

The minutes from the 07-02 ACF meeting were distributed electronically via the NACO website: <http://naco.faa.gov/index.asp?xml=naco/acf> last winter. They were accepted as submitted with no changes or corrections.

III. Agenda Approval

The agenda for the 08-01 meeting was modified to include New Charting Topic 08-01-209 Missed Approach Icon Altitudes.

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 and that there has been no activity.

ACTION: 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 currently working to complete the text portion of an Aerospace Recommended Practice (ARP) document, to be accompanied by a matrix of representative symbols in graphical form. The John Volpe National

Transportation System Center is providing human factors support and several avionics companies are now involved. The next meeting is scheduled for May 2008, to be held at ICAO offices in Montreal, Canada.

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

ICAO/IFPP Committee Report

Report on latest activities of the Instrument Flight Procedures Panel (IFPP, formerly Obstacle Clearance Panel or OCP). Mr. John Moore, NACO, provided a summary of some of the changes from a working paper provided by Mr. Eric Secretan, FAA/NACO. Some of the highlights included the development of charting and navigation data requirements to promote harmonization of charts, databases and avionics systems. ICAO has approved the hierarchy concept via a letter from ICAO to States, with implementation expected in 2009. These include symbolic depictions for compulsory/on-request reporting points and fly-over/fly-by status designation.

Additional topics in discussion: Standardized terminology for GLS; and, correction and update to miscellaneous references in ICAO Annex 4. Mr. Mike Webb, FAA/AFS-420, and U.S. member to the IFPP, reported some activity related to determining which ICAO committees are now responsible for certain topics. Expect that increased exposure and frequency of meetings will result in an increase of chart-related subjects.

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

Temporary NAVAID Outages

Ms. Valerie Watson, FAA/NACO, reported that a notice providing policy and procedural guidance and interim operating procedures revising FAA Order 7930.2, has been signed and was effective Jan. 28, 2008. 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. The status of privately owned NAVAIDs being out-of-service is still in question and may still be listed as OTS in D-NOTAMs.

ACTION: Brad Rush, FAA/NFPO and Greg Pray, FAA/NFDC to report at the next ACF.

Airport Source Data Committee

Mr. Dave Goehler, Jeppesen, [provided an update of the problems and solutions facing the ASD Committee](#). Mr. Mike Brown, FAA/Airports Division, and Mr. George Sempeles, FAA/NFDC, have been working together to provide guidelines on how to submit and what to report regarding airport data changes. These guidelines will be contained in an Airports Advisory Circular (AC) with an anticipated release date of July 2008. The comment period would be a minimum of 30 days. The AC will affect all airport operators listed in the A/FDs and Supplements. Operators of private use airports will be encouraged to follow the same guidelines. Website urls were provided on how to report data changes now and after the AC is released.

Contacts with several airport operators (public and private) revealed a lack of awareness and/or general confusion about what types of information should be reported to the FAA's airports division, the preferred (standardized) processes used to collect the various forms of data by the NFDC, and processes for public access

or dissemination. Emphasis will be placed on reporting changes in a timely manner, to include coordination with FAA Procedure Development with respect to instrument procedures (i.e. runway end changes).

A comment was made that if airports do not comply, perhaps enforcement could be elevated from the initial form of non-regulatory guidance (Advisory Circular) to a different form that would require regulatory compliance.

Mr. Brad Rush, FAA/NFPO replied that airports that receive federal funds would be expected to comply with the guidance in the new AC starting in 2009.

Another comment was made regarding the use of satellite imagery to update airport information. Mr. Ted Thompson, Jeppesen, responded that satellite imagery is not always up-to-date and they will continue to act on customer requests to update airport data.

ACTION: Dave Goehler will report on subcommittee activities at the next forum.

Declared Distances

Mr. Richard Boll, NBAA, reported that the subcommittee has been active trying to eliminate the misunderstanding of how much runway length is available for landing at any given airport. He emphasized the need to use one scheme to determine these lengths. The subcommittee is furthering efforts to provide policy guidance to airport operators to provide declared (operational) distance information to NFDC by completing all appropriate sections of the FAA Form 5010. Mr. John Moore, FAA/NACO, recommended that someone from Flight Standards would need to be involved in the committee.

The goal is to report on all Part 139 Airports first and eventually expand to include all airports. Mr. Mike Brown, FAA/Airport Safety and Operations, is developing such policy guidance in the form of a "Cert Alert" that will be issued very soon to FAA airport safety inspectors. Eventually, the Cert Alert would be incorporated into the official airport safety policy manual. A draft version of the Cert Alert will be circulated next month (May), and could very well be finalized shortly afterward. Mr. Brown will provide a copy of the Draft Cert Alert to Mr. Boll, who will in-turn share it with members of the Declared Distance Subcommittee.

This committee is coordinating with the Airport Source Data committee (under Mr. Dave Goehler, Jeppesen) to ensure that the upcoming airport source Advisory Circular will address the need to provide declared distance information, and will include reference to the above-mentioned Cert Alert guidance to airport safety inspectors. The goal is to take advantage of the opportunity presented by issuance of the AC to address the need to report and disseminate declared distances, which are then published in various forms for use by pilots.

The three main objectives of the subcommittee are:

- Address the need & provide guidance for airports to provide declared distances
- Documentation to support pilot education (AIM and/or IPH)
- Publication and Operational Use of Declared Distances (Charts and NavData)

The subcommittee is hopeful that the upcoming Cert Alert and reference in the upcoming airport source data AC will satisfy the first objective. They will then proceed to address the two remaining objectives.

Another question that was raised was the issue of electronic navigation databases and performance data requirements for the FMS.

The placement of a Negative D in the A/FD and on IAPs was discussed to denote a Declared Distance calculation. In the end, operational training will be needed after Declared Distance data is published. AFS 200 and AFS 250 and Part 142 Training Centers should get involved. Mr. Brown agreed to provide Mr. Boll with a list of contacts.

ACTION: Richard Boll will report on subcommittee activities at the next forum.

Runway Status Lights

Mr. Peter Hwoschinsky, FAA/AJP-671, briefed that 20 airports in the U.S. and 20 additional airports worldwide have been identified as candidates for the [Runway Status Lights \(RWSL\) program](#). This program is being developed to reduce the risk of runway incursions and in response to NTSB Recommendation A-00-66. The RWSL is an active automated system that makes use of colored lights to visually alert pilots to potential traffic conflicts during ground movement. The system utilizes in-pavement sensors and ASDE-X/AMSS Radar to activate red "Runway Entrance Lights" (REL). Red lights on mean STOP. Red lights off IS NOT a clearance to proceed.

RWSL is an active automated system that consists of:

- Runway Entrance Lights
- Takeoff Hold Lights
- Runway Intersection Lights
- Final Approach Runway Occupancy Signal

Currently there are two test sites where RWSL are being used - Dallas/Ft. Worth and San Diego. The first operational implementation is scheduled for late 2009 at Orlando International Airport (MCO).

Informing pilots of RWSL is currently underway. Jeppesen has supported the FAA's operational evaluation program by publishing RWSL information pages in the Airway Manual for affected airports. NACO will need to add a "general information page", in the Airport/Facility Directory and TPPs, similar to the "Attention All Users" pages for PRM and RNAV.

Concerns from ALPA were that there will be a learning curve by aircrews, and that the best solution would be to include information along with the applicable terminal and airport charts for each location.

(See New Charting Topics [08-01-206](#))

Procedures for Category I Approach Operations at 1800 RVR & Approval of Special Authorization for Cat II Approach Ops on Type I ILS

Mr. Bryant Welch, FAA/AFS-410, [briefed the issue](#). FAA Order 8400.13C provides criteria to take current CAT I 2400 RVR ILSs to either:

- CAT I 1800 RVR with no Touchdown Zone (TDZ) or Centerline Lights (CL)
- CAT II 1600 or 1200 RVR Approach with no TDZ or CL

This action serves to convert 272 ILS installations without CL from RVR 2400 to RVR 1200 or 1800 for aircraft equipped with the proper technology. This will also allow a decreased lighting requirement from ALSF to MALSR.

Additional capacity increases could be realized if RVR were installed at many more affected locations (almost double the number of affected airports). This is a budget issue to be resolved within the FAA for airport improvements.

As airports are checked and approved, FAA is issuing P-NOTAMs with new chart notes. Approach charts are to be updated and reissued accordingly using the P-NOTAM as source until the 8260 procedure source is updated. (Example: "RVR 1800 authorized with the use of FD or HUD to DA".)

Mr. Welsh provided several case studies to illustrate the proposed savings.

The immediate operational advantages, soon after implementation, will be the availability of these lower visibilities for approximately 90+ aircraft to land at San Diego and another 90+ at Columbus that otherwise would have diverted because of local weather conditions.

Jeppesen was asked how they are responding to the change in their Airway Manual. Mr. Ted Thompson responded that they have modified the format of their landing minimums band to accommodate the new RVR 1200/1800 condition, that they are updating their charts when/where the P-NOTAM is issued, and that they're in the process of creating a "Briefing Bulletin" that will explain the basis for the change and the technical requirements for operators.

This improvement will affect 591 Approaches at 480 Airports and is expected to lead to fewer flight cancellations, fewer diversions and fewer high cost delays.

AC90-RNP Status Update

Mr. John Swigart, FAA/AFS-470, [briefed the issue](#) to the AFC. The purpose of this new AC90-RNP covers the application of public-use RNAV RNP procedures. It is intended to address and clarify numerous emerging variations of RNP procedure design, development and implementation. Any SID, STAR or IAP with an RF leg will be impacted (not Enroute charts).

Guidance in this new AC90-RNP is **NOT** to be confused with previous guidance published for [RNP SAAAR](#) procedures.

The Draft Version is 85% complete and it is expected to be published in the Federal Register for public comment on or about August 15. However, it may not become official until spring 2009. Much of the language in the AC comes directly out of ICAO's Performance Based Navigation (PBN) manual.

Highlights include:

- Defines basic and advanced RNP
- RNP with advanced RNP, i.e. RF legs
- Incorporation of several FAA PARC recommendations

Several spin-off issues will affect charting and may require consideration by the ACF Charting Group.

Highlights of issues to be considered/resolved:

- ICAO PBN Harmonization
- Requirements for Type 2 LOAs
- RNP to Angular FAC

- Temperature Compensation
- DME/DME/IRU RNP Capability
- RF Leg on Initial, Intermediate and Missed Approach Segments
- RF Legs used in SID and STAR procedure design
- Equipment Requirements, Moving Map, Flight Director, Roll Steering Autopilot, RF Legs Bank Angles, etc.
- Disposition of AC90-94 & 90-97

ACTION: John Swigart will report at next ACF.

ACTION: Presentation will be given by MITRE at the next ACF.

V. Outstanding Issues

04-01-168 Identifiers for Heliports and Helipads

Mr. John Moore, FAA/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 Issue 05-02-177, Identifiers for Copter Point-in-Space procedures.)

Mr. Mike Webb, FAA/AFS-420, briefed that the interim system is working well. Problems include naming of private heliports and not getting into NOTAM System. Work is still ongoing. The biggest problem is getting the private locations into an already overburdened NOTAM System.

STATUS: OPEN

ACTION: Mike Webb will report on issue at the next ACF.

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

John Moore, NACO, recapped the issue and turned it over to Mr. George Sempeles, FAA/NFDC. Mr. Sempeles first introduced Mr. Randy Ottinger of the U.S. Parachute Association and then reported that NFDC had previously reviewed PJAs in the FAA's NASR database (700+) against a list provided by the USPA (200+). The NASR database had many more records than the USPAs, including non-USPA PJAs (civil and military).

Jump sites have been assigned a unique identifier and converted to geographic positions vice bearing and distance from a given point. The USPA had CONUS data only but no military records. Mr. Sempeles reported 45 possible additions to NASR and added that these additions must come through the facility having jurisdiction over the airspace. Mr. Ottinger offered to help clear up any confusing or conflicting information. Mr. Sempeles offered the USPA the 45 differences they found.

USPA has committed to providing a revised listing annually to the FAA.

NACO previously made recommendations to ARINC to accommodate parachute jump areas in aeronautical databases (unique identifiers, boundaries, vertical limits, etc). ARINC 424 - 19 will address coding of PJAs. PJAs might eventually have application for interested avionics companies or for future data-driven VFR charting applications / US Sectional electronic chart display themes.

STATUS: OPEN

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

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

Mr. Ted Thompson Jeppesen reported on this issue. Jeppesen currently uses the words **Above** and **Below** to denote altitudes while NACO uses overlines and underlines. Jeppesen is currently studying overlines and underlines in an attempt to make the top altitudes more prominent. When Jeppesen introduced a new concept to make these look like block altitudes, a lot of mixed feedback was received. Mr. Mark Steinbicker, FAA/AFS-470, may set-up a review of top altitudes. Mr. Mark Ingram, ALPA, asked about the London Airspace step climbs.

Mr. Thompson answered that some operators in that region were Jeppesen customers. Jeppesen agreed to adopt the overline/underline method in the UK. While Level-busts incidents went down he believes that a combination of corrections caused the drop in Level-busts. Speed and Altitude restrictions are being examined.

The issue is that charts reflect the procedure source, but 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.

Mr. John Moore, FAA/NACO, commented at the last ACF that this item has run its course. Also, the original sponsors, Brian Townsend and Don Porter, no longer participate in the ACF. Kevin Comstock expressed concerns about closing the issue without concurrence from Brian and Don. Mr. Thompson recommended closure until further study.

Mr. Thompson explained, from Jeppesen’s perspective, the operational problems related to the recent implementation of the RNAV SIDs at Salt Lake City, which included feedback, related to Jeppesen’s depiction of Speed and Altitude restrictions (including Top Altitudes).

Also, per a comment made by Divya Chandra the previous day in the IPG, Mark Steinbicker has approached Volpe Labs about the possibility of Volpe conducting a human factors review of the presentation of altitude and speed restrictions.

The Top Altitude Note Issue has been transferred to the new ATC/MCA Crossing Altitude subcommittee under the IPG. The issue will be returned the Charting Group at a later date.

STATUS: CLOSED

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

Mr. Mike Webb, FAA/AFS-420 briefed the issue. In order to get Helicopter “Point-in-Space” (PinS) instrument procedures into the FAA NOTAM system, there needs to be unique location identifiers. Point-in-space procedures support several locations (Heliports). There is also a related International issue of running out of names for heliports. Five characters will not work because there is a four-character limit in the naming convention. Therefore the question remains, how to identify the procedures with a four character naming convention? The FAA has been working with the international community to resolve this issue but have made little progress. One idea was to have a standard identifier for a region of heliports. Procedures would be located for a regional area, similar to how a SID serves multiple airports. The committee will continue to develop other possibilities.

Mr. John Moore, FAA/NACO asked if additional members would help the cause. Mr. Webb asked Jeppesen and Canada for members. The following people have agreed to participate:

- David Bradshaw, DoD
- Ron J. Graham, Transport Canada
- John Kasten, Jeppesen
- Greg Pray, NFDC
- Gary Prock, NOTAM Office
- Valerie Watson, NACO
- Mike Webb, AFS

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, FAA/AFS-470, was not available to report. Mr. John Swigart, AFS-470, asked to keep this issue open for the next ACF.

STATUS: OPEN

ACTION: John Swigart will provide an update at the next ACF.

06-02-187 Obstructions on World Aeronautical Charts

Ms. Valerie Watson, FAA/NACO, reported that RD650 has been signed. Coordination with Visual Charting will commence. A Chart Notice will be posted on the NACO website. Federal Register input through General Counsel.

STATUS: CLOSED

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

Mr. John Moore, FAA/NACO, recapped the issue. NACO noted it would affect 1400 charts. RD 861 was non-concurred by DoD. The IACC did not endorse the recommendation. AOPA had no information from its members. NACO recommended closing. The consensus of the ACF was to close 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 agenda item 06-01-181 Declared Distance Information on Airport Charts (since closed in ACF 07-01).

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). Reference: FAA Order 5200.8 titled Runway Safety Area Program dated October 1999.

Mr. Richard Boll, NBAA, is chairman of the ACF Declared Distances Subcommittee. The agenda item is under the scope of this group. Refer to the subcommittee report provided earlier in these minutes.

Open until resolution, then it will be reported back to the Charting Group.

STATUS: OPEN

ACTION: Mr. Richard Boll will report at the next ACF.

07-01-193 Charting Helicopter RNAV Routes

Mr. John Moore recapped the issue originally submitted by Mr. Paul Ewing, AMTI. ICAO Annexes say Helicopter RNAV routes are allowed to use the prefix letter K. Combined prefixes are also allowed (e.g. TK000). Prefixes are also allowed in ARINC coding. According to Mr. John Kasten at Jeppesen, an ARINC record allows for a route type field that can be defined as helicopter only. It would actually look like a T-Route on the charts but would be for helicopters only. There is no TERPs allowance for helicopters.

The question was asked how would routes be created? Routes will be regulatory and the requirement will be received from Mr. Ewing's office. Mr. Paul Gallant, FAA/AJR33, will have to validate that in Rule Making. Mr. Frank Flood, Air Canada, agreed to check with an automation expert to see if these routes can be filed.

STATUS: OPEN.

ACTION: Greg Pray, NFDC will have to ensure that NASR can accommodate these designators.

ACTION: Ms. Valerie Watson, FAA/NACO will write an RD for charting after receiving route ident format confirmation from Airspace & Rules. She will also confirm ARINC route coding.

ACTION: Mr. Paul Ewing AMTI, will report back on the status at the next ACF

ACTION: Mr. Paul Gallant, FAA/AJR-33 to validate how routes would be created.

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

Mr. Richard Boll, NBAA, recapped the issue asking what happens to the underlying airspace when the core airspace goes away. 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.

Ray Nussear, FAA/NACO Airspace, concluded that this was primarily a charting issue. Airspace core and underlying areas should be the same. The airspace may not be described correctly but is depicted correctly. Mr. Nussear identified discrepancies at more than 50 locations where Class D core hours did not correlate to part time hours for Class E extensions. Airspace around military fields was looked at also. Mr. Nussear will work with the FAA's Airspace & Rules group to address and clarify questionable situations with focus on the data and affected documentation. Any changes would eventually be reflected in the charts. There would be no change in chart notes. Legal descriptions would need to be revised by Airspace and Rules.

STATUS: OPEN

ACTION: Ray Nussear to report back at the next forum.

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. There was continued talk about adding a “D” suffix to a DME/DME/IRU MEA (i.e. 24000D) similar to what is used for GPS MEAs (i.e. 2500G) and cover the explanation in the legend. The current legend is clear but DoD thinks the route depiction could be made more intuitive. DoD pilots are trained to read and understand the chart legend. Mr. Ted Thompson, Jeppesen, stated the Jepp uses the “D” suffix although their route lines are not blue in color. They try to avoid using color and use text instead. Hal Becker, AOPA, stated that most GA pilots want to make the maximum use of the airspace. Most GA pilots want the lowest MEA available due to aircraft performance limitations. NGA/DoD has not worked the issue since the last meeting. Mark Steinbicker, AFS-470, was not present to offer his perspective.

One comment was made that in Alaska the use of WAAS may allow an MEA to be even lower than a GPS MEA. This further compounds the situation: conventional MEA, a GPS MEA, a DME/DME/IRU MEA, and now the possibility of a WAAS MEA in Alaska.

STATUS: OPEN

ACTION: Hal Becker, AOPA, Paul Gallant, FAA and JoAnn Ford, FAA/AJW-41, will all send input to John Swigart, FAA/AFS-470, to help define prospective policy.

ACTION: John Swigart, FAA, will have someone with the FAA’s perspective at the next ACF in October.

07-01-197 Graphic Airport NOTAMs

The original seven aspects of this issue were transferred at ACF 07-01 to the Airport Source Data Committee led by Mr. Dave Goehler, Jeppesen. See Mr. Goehler’s ASD Report at the beginning of these minutes.

STATUS: OPEN

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

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

Active project is in work. This issue will require some time to address. The first telecom took place on April 14th and the next one is scheduled for May 5th.

STATUS: OPEN

ACTION: Mr. Pedro Rivas, ALPA will report status at the next ACF.

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

Mr. John Moore recapped the issue then summarized the final NTSB report. The NTSB determined the probable cause of the accident was “The failure of the glider pilot to utilize his transponder and the high closure rate of the two aircraft, which limited each pilot’s opportunity to see-and-avoid the other aircraft.” For complete information see NTSB Identification LAX06FA277B at www.nts.gov. Although not required, caution notes have been placed on SIDs and STARs in the past. Mr. Brad Rush, FAA/NFPO admitted that some notes got through and were incorrectly placed on some of the charts. He further commented that when the procedures are amended the notes would come off the charts. The following NTSB recommendations to the FAA were provided by Ms. Francie Hope FAA, Western Service Center.

- Remove the glider exemptions from the Federal Aviation Regulations that pertain to transponder requirements and use. (A-08-10)
- Develop guidance material for glider owners/operators that describes feasible installation options to aid in the prompt installation and approval of transponders in gliders. (A-08-11)
- Establish a national transponder code for glider operations, as low in the transponder code range as feasible, that would notify air traffic controllers of glider operation/position. (A-08-12)
- Upon establishment of a national transponder code for glider operations, as per Safety Recommendation A-08-12, ensure that air traffic control personnel are informed of the code, what it represents, and under what limitations the users are operating. (A-08-13) -1013

It was not an NTSB recommendation to put notes on IFR Enroute Charts. Lance Christian, DoD/NGA said it doesn’t belong on the charts and the NTSB solution/recommendation was to have and use a transponder. The ACF decided previously that, in general, notes about VFR operations do not belong on IFR procedure charts. Mr. Frank Flood, Air Canada, suggested that appropriate authorities consider possible establishment of special use airspace.

Though there was considerable conversation and opinion about this issue, the general consensus was to close it with no further action required.

STATUS: CLOSED

07-02-200 Charting of Alert Areas

Mr. John Moore, FAA/NACO, recapped the issue. Basically, the question was should Alert Areas be changed to magenta on Visual charts and to brown on Enroute charts?

Pete Lehman, AOPA, said his members see magenta as meaning less restrictive airspace. Alert Areas have fewer restrictions. For the sake of being consistent the areas should be portrayed as magenta. Canada tries to be ICAO compliant. Ron Graham, Transport Canada, said he had no problem with the suggestion. Ms. Valerie Watson, FAA/NACO, will formally staff the issue through the IACC. It was agreed that Warning Areas would not be included in the issue.

STATUS: OPEN

ACTION: Val Watson will report back at the next ACF.

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

Mr. John Moore, FAA/NACO recapped the issue. Mr. Paul Gallant, FAA Airspace & Rules, asked why don't they want to utilize Alert Areas. Pete Lehman, AOPA, responded that the numbers fell just short for Alert Area criteria in FAA Order 7400.2F. Another question was asked, why don't they create MOAs? Dan Rund, USAF Academy Airspace Manager, had worked to try to get MOAs but they were turned down. Mr. Gallant responded that the Military established the MOA program for intensive flight training areas. MOAs can be used for non-hazardous activity such as flight training. However, Alert Areas and MOAs were not wanted by the USAFA. They wanted non-regulatory training areas on the Flyway chart and corridors primarily because they would prefer to avoid the lengthy development process plus the fact that their areas change so frequently. Their operations don't meet special use activity criteria.

The FAA and NACO understand and appreciate the situation, but are uncomfortable with going outside established processes to make an exception to normal charting practices and policies. The ACF consensus was that these USAF flight training areas should become official Alert Areas. Doing so would also result in their being coded and available in electronic database and map displays.

George Sempeles, FAA/NFDC, commented that there is currently a note on the chart and special graphic in A/FD. Paul Gallant reported that his office had not been contacted to provide numbers, etc. Valerie Watson, FAA/NACO commented that Chart Specs do not allow for what the USAFA wants to do on the Flyway Chart. AOPA still supports the concept. AOPA's primary goal is to provide its members with information.

STATUS: OPEN

ACTION: Mr. Dan Rund to contact the Air Force Representative at the Western Service Center to discuss the requirements.

ACTION: Mr. Pete Lehmann will take action to coordinate with Dan Rund and Air Traffic.

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

The NBAA recommendation is to chart Holding Pattern Leg Lengths and DME Min/Max Limits on conventional SID/STAR charts. After Tom Schneider, FAA/AFS-420, recapped the issue he remarked that SID/STAR charts are already too cluttered and this was unnecessary. If the leg length is not charted, timing is to be used as a substitute. Brad Rush, FAA/NFPO, stated that the information was available but not provided on the same source material. Ms. Valerie Watson, FAA/NACO, responded that under current procedure, if it's not on the **procedure** form then NACO will not chart it. Air Traffic agreed that the leg length should be on the form.

Jeppesen charts the Holding Pattern Leg Length from the NFDD source. Jeppesen also provides 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 Enroute Charts.

Jeppesen and NGA asked why they couldn't have the holding pattern information on the 8260 procedure form as a matter of convenience. Mr. Brad Rush was opposed to this idea due to rulemaking implications. From a technical standpoint, Jeppesen should not transfer a holding pattern limit from the NFDD. Charts should strictly reflect and depict holding pattern limits or the omission of limits. Mr. Rush added if there's a change to the holding pattern then the 8260-2 will be used for holding information, but not on SIDs/STARs.

The Aeronautical Information Services Working Group (AISWG) consensus is that in the absence of published leg length a pilot should use timing for holding. Ms. Watson added that the charts are cluttered enough and NACO does not have a spec to add this information. Jeppesen provides the leg length because it has a customer request to do so. The problem is that the data is not found on just one source. The 8260-2 (Dash 2) gives the holding pattern for a given STAR. Richard Boll, NBAA, would like the FAA to reconsider their position and put the leg distance. The FAA policy is, if the Dash 2 says to chart, then they will. Jeppesen will have to remove leg lengths if timing is published instead of distance. Official source is either the 7100-9 forms or the Dash 2 for holding pattern source. Policy issue put back on AISWG since it involves possible changes to FAA source content.

STATUS: OPEN

ACTION: Mr. Bill Hammett and Mr. Tom Schneider will take action at the AISWG.

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

Mr. Ted Thompson, Jeppesen, requested that the issue be closed and noted that they would apply what ever comes out of the new working group (ATC/MCA Crossing Altitude subcommittee under the IPG) to Jeppesen Charts. This is mainly a Jeppesen issue. They are seriously considering adopting the overline/underline method and at and at or below altitudes. The issue is currently under evaluation at Jeppesen.

STATUS: CLOSED

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

Mark Ingram, ALPA, recapped the issue for the forum. Mr. George Sempeles, FAA/NFDC mentioned the landmark value aspect of abandoned or closed airports on visual charts. Mr. Ingram responded by saying that the A/FD may indicate Closed UFN, when it's obvious that the airport will never reopen. Jay Jackson, FAA/NACO/Visual Team, commented that they are now using ortho-imagery as source data. Cartographers can more easily evaluate if a closed airport has landmark value. Visual will be more proactive in using this new source. Visual has new server and more data will be available soon. Mr. Sempeles agreed to provide the airport list to Mr. Jackson and Brad Rush FAA/NFPO. The controlling agency or owner uses FAA Form 7480-1 to close an airport. If there are procedures associated with the airport, these procedures will be N/A'd. Additional issues need to be addressed before closing this issue.

STATUS: OPEN

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

VI. New Charting Topics

08-01-205 Detailed Change Data Published on the LA TAC & Flyway Chart

Ms. Candy Robinson of the Southern California Airspace Users Group (SCAUG) submitted this issue. Ms. Francie Hope, FAA/Western Service Center briefed the issue to the ACF. The SCAUG has recommended that a Notice of Changes be added on a currently blank panel on the Los Angeles TAC for users to be aware of regulatory and safety changes made to the chart since the previous edition. The recommendation further stated that nearly every FAA navigation publication and all major non-FAA publications, such as Jeppesen, have detailed change data published on the face of the chart. In fact, FAA charts and publications are *not* appended with change lists and those published by Jeppesen provide only skeletal and by no means detailed information.

Ms. Donna Gallant, NACO/Visual Chart Team Manager, stated that if implemented on one chart, all charts would have to be done and that not all charts have a blank panel available. Furthermore her team simply doesn't have the resources to handle such an effort. Ms. Valerie Watson, FAA/NACO, commented that major changes to the charts are already published in the Chart Bulletin section of the Airport/Facility Directory. Mr. John Moore, FAA/NACO, added that the NACO philosophy has always been for pilots/navigators to treat a chart as if it were the first time viewing it. Lance Christian, DoD/NGA commented that the military also subscribes to that philosophy. Military pilots are required to review all available information before a flight. Ted Thompson, Jeppesen, remarked that his company expects pilots to review the entire chart even though they highlight changes in general terms. Their charts are published on an as-revised basis only.

The current CAD system NACO uses to update most of the visual charts would not provide the needed change information. Mr. George Semples, FAA/NFDC recommended that the SCAUG revisit the issue in 5 to 10 years when a new chart compilation system is expected to be in place. Currently there's no practical way to list the changes. Mr. Jacques Beaudry, NAV Canada, commented that they are considering going to a publish-when-revised method as Jeppesen does. Mr. Beaudry agreed to report back to the ACF at a later date. As far as the statement in the recommendation about nearly every FAA navigation publication having detailed change data – that was considered inaccurate. Ms. Hope recommended closing the issue due to NACO's inability to comply at this point in time, and revisit it in the future per Mr. Semples recommendation,

Editorial Note: The following was received from Jacques Beaudry, NAVCANADA, after the ACF:

Changes to the aeronautical data are published in the Canada Flight Supplement until all related VFR charts are updated and distributed to the users. This information is found in the section "PLANNING" under "VFR CHART UPDATING DATA". As required, a sketch is included to complete the change notice. Furthermore, all VFR chart covers have a note advising pilots to consult NOTAMs and the CFS for the latest information.

Listed by province, this section of the CFS reports amendments to the:

- *NAVAIDS*
- *AIRSPACE DESIGNATIONS*
- *DANGER, RESTRICTED & ADVISORY AREAS*
- *CONSERVATION*
- *HAZARDS TO AIRCRAFT OPERATIONS (Parachuting, Hang gliding, Soaring areas, Mil ops)*
- *SIGNIFICANT OBSTRUCTIONS*
- *BLASTING OPERATIONS*
- *COMMUNICATION*
- *NOISE ABATEMENT PROCEDURES*

- *NOTAM PROCEDURE*
- *CABLE CROSSINGS*
- *TRAINING AREAS & ROUTES*

STATUS: CLOSED

08-01-206 Runway Status Lights Information Charts for Pilots

See Runway Status Lights Briefing at beginning of these minutes.

STATUS: OPEN

ACTION: Mr. Peter Hwoschinsky, FAA/AJP-671 will provide content to Ms. Valerie Watson to take to the IACC and will update the status at the next ACF.

08-01-207 Depiction of Minimum Crossing Altitudes on Graphic Departure Procedures

Mr. Richard Boll, NBAA, submitted the issue stating that the Graphic Departure Procedures depict Minimum Crossing Altitudes using two different symbols. One symbol is traditional “X” flag over the fix (see GABRE SIX SID, at LAX), and the other symbol is the (MCA) designation (see ZEPHR THREE RNAV SID, at RNO). The (MCA) symbol was recently introduced on Graphic DP’s where there is a need to chart a minimum crossing altitude for obstacle clearance and a minimum crossing altitude for ATC purposes. The ATC crossing altitude is depicted using the symbol (ATC).

Mr. Boll also recommended that the TPP should consider using one symbol for a Minimum Crossing Altitude charted for obstruction clearance purposes as specified in FAA Order 8260.46C and consistently apply this symbol on all Graphic DP’s. The TPP legend should make a clear distinction between charting symbols used to depict minimum crossing altitudes for obstruction clearance purposes which are mandatory and minimum crossing altitudes charted for air traffic control purposes which are subject to change/amendment by ATC.

The forum discussed settling on a single meaning for an MCA or two different meanings. If two meanings were determined, then both would need to be addressed in the TPP legend and Chart User’s Guide. NACO requested time to evaluate the issue before making any changes to the legend or the Chart User’s Guide. Ted Thompson, Jeppesen, stated that they just call it what it is and do not use any symbol. The issue should be resolved in the IPG’s ATC/MCA Crossing Altitude subcommittee discussions.

STATUS: OPEN

ACTION: Tom Schneider, FAA/AFS-420, to report at next ACF.

08-01-208 TPP Rate of Climb Table Improvements

Mr. Richard Boll, NBAA, submitted the issue that the Rate of Climb Table contained in the “Front Matter Section” of the TPP booklet is used to convert a feet per nautical mile climb gradient. This may be published on an Instrument Approach Procedure, Obstacle Departure Procedure, or Standard Instrument Departure as a required climb rate based on feet per minute. This required rate-of-climb can then be used during pre-flight

planning to determine whether or not the required climb gradient can be achieved after takeoff during the climb-out.

It has been noted that the published Rate of Climb Table does not cover all possible published climb gradients contained in the TPP. For example, the GYPSM THREE Graphic Obstacle Departure Procedure at Eagle, CO (EGE) requires a 750 ft/nm climb gradient to 10,500 ft. Yet, the highest Required Gradient Rate value shown on the TPP's table is 700 ft/NM. With the absence of this column on the table, a pilot is unable to determine the required rate of climb necessary to achieve the GYPSM THREE's published climb gradient.

The recommendation is to revise the Rate of Climb Table in the TPP Books to include all possible climb gradient values published in the TPP.

There was much discussion on how the values in the current tables were derived. The figures in the tables are rounded for ease of use. The consensus of the group was to ask Flight Standards what the highest climb gradient on a public procedure was before committing to produce a revised table.

STATUS: OPEN

ACTION: Mr. Boll agreed to contact AFS-460 through Mr. Tom Schneider.

08-01-209 Missed Approach Icons Altitudes

Mr. John Moore, FAA/NACO briefed the issue to the forum stating that an altitude in the first Missed Approach Icon box could have two meanings – climb straight ahead to a final procedure altitude or climb straight ahead to an initial altitude. In an effort to resolve confusion that may exist, NACO is offering the following: Where two or more altitudes are listed, NACO proposes using a heavy line to distinguish between altitude sections. When the words “then climb” or “then climbing” are used in the missed approach text, a heavy line weight is used in the graphical representation. See examples shown in the submitted RD. Mr. Moore opened the floor for discussion.

Major James Taylor, USAF, stated that military pilots are trained to read the entire text of the missed approach and that the icons are simply there as a memory jogger. Richard Boll, NBAA agreed, adding that icons are to provide a quick reference only at a time during the flight when the workload is heavy. Referencing an example at Teterboro where a mandatory altitude is listed he preferred to see an overline/underline with the altitude if it was a minimum, maximum or mandatory altitude.

Mr. Ted Thompson, Jeppesen, stated that he was involved with the committee when Missed Approach Icons were being developed and added that missed approach icons were designed to provide up-and-out instructions only. Mr. Thompson suggested that NACO is trying to fix something that is not broken.

Ms. Francie Hope, FAA/Western Service Center liked the heavy line examples NACO provided, stating that it was an improvement. However, the general consensus of the forum was to leave the icons as they are and close the issue.

STATUS: CLOSED

VII. Closing Remarks

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

VIII. Next Meeting

The next meeting of the ACF (08-02) is scheduled for October 21-23, 2008 at the NACO facility in Silver Spring, Maryland. Meeting 09-01 is scheduled for April 28-30, 2009. The location has not been determined.

Please note the attached (Attachment 6) 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 October 3, 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.

A special thanks to Mr. Ted Thompson, Jeppesen, for providing his meeting notes for use in these ACF minutes.

IX. Attachments

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

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.