November 14, 2012

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) held on October 23, 2012. The meeting was hosted by the Air Line Pilots Association, 535 Herndon Parkway, Herndon, VA 20192. An office of primary responsibility (OPR) action listing (Atch 1) and an attendance listing (Atch 2) are appended to the minutes.

Please note there are briefing slides inserted in the minutes as PDF files shown as stickpins. All are asked to review the minutes and attachments for accuracy and forward any comments to the following:

Mr. Tom Schneider
FAA/AFS-420
P.O. Box 25082
Oklahoma City, OK 73125

Phone: 405-954-5852
FAX: 405-954-5270
E-mail: thomas.e.schneider@faa.gov

Copy to:

Mr. Bill Hammett
FAA/AFS-420 (ISI)
6 Pope Circle
Nashua. NH 03063

Phone: 603-521-7706
FAX: 603-521-7706 (Call first)
E-mail: bill.ctr.hammett@faa.gov

The AFS-420 web site contains information relating to ongoing activities including the ACF-IPG. The home page is located at:
http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs420/acfipg/
This site contains copies of minutes of the past several meeting as well as a chronological history of open and closed issues to include the original submission, a brief synopsis of the discussion at each meeting, the current status of open issues, required follow-up action(s), and the OPR for those actions. There is also a link to the ACF Charting Group web site. We encourage participants to use these sites for reference in preparation for future meetings.

ACF Meeting **13-01** is scheduled for **April 23-25, 2013** with Innovative Solutions International as host. ACF meeting **13-02** is scheduled for **October 29-31, 2013** with the Air Line Pilots Association (ALPA) as host.

Please note that **meetings begin promptly at 8:30 AM**. Dress is business casual. Forward new agenda items for the 13-01 IPG meeting to the above addressees not later than April 5, 2013. A reminder notice will be sent.

We look forward to your continued participation.

Thomas E. Schneider, FAA/AFS-420
Co-Chairman, Aeronautical Charting Forum,
Chairman, Instrument Procedures Group

Attachment: ACF-IPG minutes

GOVERNMENT / INDUSTRY AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
Meeting 12-02
Air Line Pilots Association
October 23, 2012

1. Opening Remarks:

Tom Schneider, AFS-420, Flight Standards co-chair of the Aeronautical Charting Forum (ACF) and chair of the Instrument Procedures Group (IPG) opened the meeting at 8:30 AM on October 23rd. The Air Line Pilots Association (ALPA) hosted the meeting at their Herndon, VA facility. Mr. Steve Serur made welcoming and administrative comments on behalf of ALPA. A listing of attendees is included as attachment 2.

2. Review of Minutes of Last Meeting:

Bill Hammett, AFS-420 (ISI), briefed that the minutes of ACF-IPG 12-01, which was held on April 24, 2012 were electronically distributed to all attendees as well as the ACF Master Mailing List on May 30th. No comments were received; therefore, the minutes were accepted as distributed.

3. Briefings: Tom Schneider, AFS-420, briefed that the ACF Charter, FAA Order 7910.5, was signed by the FAA Administrator on September 17, 2012. A copy is provided here  or may be seen at: http://www.faa.gov/documentLibrary/media/Order/7910.5C.pdf

4. Old Business (Open Issues):

a. 92-02-110: Cold Station Altimeter Settings (*Includes Issue 04-01-251*).

Kel Christianson, AFS-470, briefed that the MITRE study has been vetted through FAA. It was determined in the study that the required obstacle clearance (ROC) could be exceeded on 289 procedures at 131 airports when operating into these airports using the lowest temperature recorded for the last five years. AFS-470 is working on several fronts to get the information to the public. A Graphic Notice is under development for inclusion in the Notices to Airmen Publication (NTAP) that will include background information and requested pilot actions as well as a listing of affected airports. The AIM is being updated to provide expanded information and guidance for pilots. Consideration is also being given to expanding the program to include airports with runways of 3,000' or greater (the standard is 4,000'). AFS-470 is also addressing the issue of whether to allow pilots to manually compensate current RNAV and RNP approaches with temperature restrictions. The immediate goal is to make pilots aware of the issue and develop corrective actions and an implementation plan.

Status: AFS-470 will continue developing an implementation plan. Item Open (AFS-470).

b. 98-01-197: Air Carrier Compliance with FAA-specified Climb Gradients.

Bruce McGray, AFS-410, provided a briefing on the joint AFS-410-NBAA Transport Airplane Performance Planning (TAPP) Working Group's progress in addressing this issue and related issue 09-02-287 (A copy of Bruce's slide presentation is included here ). Bruce reported

that excellent progress has been made on this issue over the past seven months. Through the cooperation of FAA, NBAA, Boeing, Delta Airlines, Bombardier, and others, a 40 minute video presentation demonstrating the aircraft performance limitations and proposing solutions was made and presented at the Bombardier Safety Stand Down Forum. The video is the first in a planned series of modules to promote understanding of aircraft performance, both with all engines operating and in the event of one engine inoperative (OEI). The subject area involved guidance and educational materials related to take-off obstacle analysis, OEI planning, and guidance for pilots of transport aircraft. The scope of recent activity was expanded to include business transport aircraft operating under 14 CFR Part 91. The goal is improved knowledge and understanding of aircraft performance. Specific subject areas include:

Understanding of declared distances	Wet runway take-off performance
Landing distance assessments	Departure planning
SID climb gradients & OEI planning	OEI departure procedures

The hope is that the video is useful for both airline and corporate/business operators. The video was well received by the Bombardier participants and will also be presented at the NBAA 2012 Convention later this month. The TAPP is also coordinating with the FAA on how to share and distribute relevant material. Bruce also added that the key to a permanent solution is improving the training provided by Part 142 facilities. To this end FAA Flight Standards is standing up the first Certificate Management Office (CMO) for Part 142 Training Facilities. Bruce closed by expressing that he has never seen such good FAA-industry cooperation as witnessed during the preparation of the video. He publically acknowledged both specific individuals and corporations by name. Tom Schneider questioned whether the completion of the video satisfies the original issue objectives when submitted by ALPA back in 1998. Bob Lamond, NBAA, responded that with the ongoing activities of the TAPP, he felt this issue and related issue 09-02-287 could be closed. The representatives from ALPA did not object and Bruce McGray, AFS-420, also supported closure through the ACF emphasizing that the issue would continue to be of FAA interest through the TAPP. The group agreed.

Status: ITEM CLOSED

c. 02-01-241: Non Radar Level and Climb-in-hold (CIH) Patterns.

Paul Eure, AJE-31, briefed that a change to Order JO 7210.3, similar to what Terminal had published, has been completed and scheduled for publication on March 7. The change will add a note below paragraph 6-2-2, En Route Sector Information, subparagraph d10 as follows:

10. Normally used sector holding fixes to include published/unpublished hold, allowable altitudes, maximum speed, maximum length, direction of turn, direction from fix, and if applicable, published procedures involved.

    NOTE: At facilities having areas with limited or no radar coverage, include those holding patterns within these areas that contain Climb in Holding assessments as noted on FAA Form 8260-2.

Status: AJE-31 to track change. Open Pending Publication (AJE-31).

d. 04-02-258: Vertical Navigation (VNAV) Approach Procedures Using DA(H); OpSpec C073.

Kel Christianson, AFS-470, briefed that updated OpSpec C073 was published on April 27, 2012, and that a revision is in progress targeted for February 2013. He added that Part 91 is not included. Bob Lamond, NBAA, questioned why Part 91 was excluded. Kel responded that FAA has no resources to oversee inclusion of Part 91 operators. Bob stated that this is not a good reason for the denial. Tom Schneider asked participants if the agenda item can be closed since it appears there is a FAA-NBAA stalemate on the issue. Bob reiterated NBAA's objection to the exclusion of Part 91 operators and stated that the issue could be closed provided it was annotated that is was closed under NBAA objection. Tom and the group agreed.

Status: Item CLOSED.

e. 07-01-270: Course Change Limitation Notes on SIAPs.

Tom Schneider, AFS-420, briefed that the US-IFPP stated it no longer needed to track the progress on this topic since a resolution has been established and revised criteria have been incorporated into draft Change 26 to Order 8260.3B (TERPS). Therefore, it will be dropped from future US-IFPP tracking. Rick Dunham, AFS-420, briefed that Change 26 is in internal FAA coordination and should be released for formal external coordination next week. The ACF will continue to monitor the issue until Change 26 has been published.

Status: AFS-420 to track TERPS Change 26. Open Pending Publication (AFS-420).

f. 07-02-278: Advanced RNAV (FMS/GPS) Performance of Holding Patterns Defined by Leg Length

Tom Schneider, AFS-420, briefed the following report as received from Steve Jackson, the AFS-420 point person for holding issues:

> Work is progressing on the revision of 7130.3 into 8260.HOLD. PBN holding criteria can be included based on the DO-236 formulae; however, there is no NavSpec or operational guidance which covers this type of holding, so implementation is dependent on publication of the supporting documentation.
>
> One issue that has been identified through TARGETs modeling, with manual construction of DO-236 based tracks, is that conventional holding is based on 25 degrees of bank at all altitudes, but DO-236 is based on 15 degrees above FL195 for turns, and possibly FL245 for holding, based on an obscure paragraph that is not in the holding appendix. We have asked that MITRE do additional bench-top runs with the manufacturers to determine which altitude is actually used by the current equipment, since it seems unlikely that manufactures have implemented two changeover altitudes for bank angle. Use of the lower bank angle substantially increases the size of the pattern flown, so resolution of the altitude is critical to determine issues such as whether the fly by entry and the holding pattern fit inside the conventional holding pattern templates at higher altitudes.
>
> We have also asked for holding pattern runs with wind (the previous runs were all no wind) to specifically address the issue of whether systems are flying past the specified turn point, and by how much. The difference between the slant range across the pattern and flying the specified outbound distance as an inbound distance is larger than originally thought, again based on

limited modeling with TARGETs. At higher altitudes, this would account for much of the distance noted as being flown past the turn point.

It has also been identified that the source of some of the assumptions about using fly by entries on conventional holding patterns is due to an assumption that the holding fix is being coded as a fly by. The holding occurs prior to passage of the IAF, except for a hold-in-lieu-of-procedure-turn, even though the point is co-located. If the holding waypoint coding is not specified on government documents, it is assumed to be fly over based on the operational guidance.

These coding and guidance differences point to several implementation issues; e.g., aircraft that are flown manually, or are not fully DO-236 compliant, yet flying published PBN holding. Also, are there any additional issues with PBN aircraft flying conventional holding patterns, especially at higher altitudes above the bank angle transition point? Conventional holding criteria already has a provision for operations with slant range (VOR/DME) and without slant range (GPS and DME/DME) that could be applied to help accommodate PBN operations on conventionally defined holding patterns. This dual application of the template would of course increase the effective size of the area.

Status: AFS-420 to continue development of revised holding criteria. Item Open (AFS-420).

g. 09-01-282: Glide Slope Intercept Altitudes on ILS Parallel Approaches

Brad Rush, AJV-3, briefed that AeroNav Products is continuing to remove notes as they are discovered. Approximately 500-550 IAPs have been updated thus far. Upcoming changes (development of a new Order addressing simultaneous approach operations - draft FAA Order 8260.Simuls) will cause the notes on PRM approaches to be removed. Rick Dunham, AFS-420, briefed that the draft 'Simuls' Order is targeted for early 2013. Rick also briefed that AFS-420 has begun work to fully revise FAA Order 8260.3B, TERPS, in FY 2013. This Order was last totally re-written in 1976.

Status: AJV-3 to continue to remove the profile notes on all ILS IAPs. Item Open (AJV-3B).

h. 09-01-284: Question of TERPs Containment with Late Intercepts

Paul Eure, AJE-31, briefed on behalf of AJE-31 and AJT-2A3, that a Document Change Proposal (DCP) amending FAA Order JO 7110.65 has been finalized and is scheduled for publication in March 2013. The ATO is also making an effort to expedite publication of the change via a NOTICE in December with implementation in mid-January 2013. He added that what started out as a relatively simple fix has gotten increasingly complex over the past 5-years; however, the final verbiage has been finalized. Bruce McGray, AFS-410, stated that AIM language has been drafted for publication in August 2013. He added that interim publication of the AIM language as a Graphic Notice in the Notices to Airmen Publication (NTAP) is under consideration. John Collins, GA Pilot, stated that if the JO 7110.65 change and the AIM are not published concurrently, there will be pilot/controller confusion. He added that the NTAP has low visibility among pilots. Bill Hammett, AFS-420 (ISI), suggested that AFS-410 might consider a SAFO or InFO as an interim method to broadcast the change. Bruce agreed to consider these options.

Status: 1) AJT-2A3 and AJE-31 to track the change to Order JO 7110.65; 2) AFS-410 to make necessary changes to AIM 5-4-7i; and, 3) AFS-410 to consider all options for interim publication of the AIM guidance (Graphic Notice, SAFO, InFO).
Item Open (AJT-2A3, AJE-31, and AFS-410).

i. 09-02-286: Initial “Climb & Maintain” Altitude on Standard Instrument Departure Procedures

Bruce McGray, AFS-410, briefed that recent problems related to the FAA’s decision to delay implementation of “Climb Via” procedures further complicates this issue. The previous ACF decision was that the subject should be addressed by the FAA PARC; however, Kel Christiansen, AFS-470, reported that, according to Mark Steinbicker, Manager, AFS-470, the PARC will not accept responsibility for the subject. Therefore, it remains within the purview of the ACF IPG. A discussion ensued regarding SID published altitudes and controller clearances. Lev Prichard, APA, stated that the CHILY SID at Phoenix Sky Harbor (KPHX) is a classic example. The SID specifies "maintain 7000", yet controllers continually issue "maintain 5000". This creates confusion, especially since all the applicable runways require a climb gradient of 300 or 350 Ft/NM to 7000. Art Blank, AJT-2A3, stated that there are also problems regarding altitude assignments at Houston (KIAH) and the facility managers at both KPHX and KIAH are actively working to have the SIDs corrected. Rick Dunham, AFS-420, stated that pilots must request clarification when there is confusion. He added that the solution must not remove flexibility for controllers to make altitude changes as necessary for traffic flow/separation. Paul Eure, AJE-31, stated that this type issue was the main reason why "climb via" was cancelled. It is also related to the meaning of "maintain" and the fact that "climb via" cannot be issued at Pre Departure Clearance (PDC). Gary McMullin, SWA, agreed that there is a lot of altitude confusion regarding departure clearances and SIDS; however, whatever is issued via PDC is the master to avoid confusion. Bill Hammett, AFS-420 (ISI), stated that it has long been the consensus of this group that when ATC assigns an altitude, it overrides any published altitudes on a procedure. ATC is assuming responsibility for the aircraft. Gary agreed.

Status: AFS-410, AFS-470 and AJT-2A3 will jointly work the issue and report progress. Item Open (AFS-410, AFS-470 and AJT-2A3).

j. 09-02-287 Operator Training Concerning One Engine Inoperative (OEI) Contingency Planning For IFR Departure Procedures

Bruce McGray, AFS-410, provided a briefing on the joint AFS-410-NBAA Transport Airplane Performance Planning (TAPP) Working Group's progress in addressing this issue and related issue 98-01-197 (A copy of Bruce's slide presentation is included here ). Bruce reported that excellent progress has been made on this issue over the past seven months. Through the cooperation of FAA, NBAA, Boeing, Delta Airlines, Bombardier, and others, a 40 minute video presentation demonstrating the aircraft performance limitations and proposing solutions was made and presented at the Bombardier Safety Stand Down Forum. The video is the first in a planned series of modules to promote understanding of aircraft performance, both with all engines operating and in the event of one engine inoperative (OEI). The subject area involved guidance and educational materials related to take-off obstacle analysis, OEI planning, and guidance for pilots of transport aircraft. The scope of recent activity was expanded to include business transport aircraft operating under 14 CFR Part 91. The goal is improved knowledge and understanding of aircraft performance. Specific subject areas include:

Understanding of declared distances	Wet runway take-off performance
Landing distance assessments	Departure planning
SID climb gradients & OEI planning	OEI departure procedures

It is hoped the video is useful for both airline and corporate/business operators. The video was well received by the Bombardier participants and will also be presented at the NBAA 2012 Convention later this month. The TAPP is also coordinating with the FAA on how to share and distribute relevant material. Bruce also added that the key to a permanent solution is improving the training provided by Part 142 facilities. To this end FAA Flight Standards is standing up the first Certificate Management Office (CMO) for Part 142 Training Facilities. Bruce closed by expressing that he has never seen such FAA-industry cooperation as he witnessed during the preparation of the video. He publically acknowledged both specific individuals and corporations by name. Tom Schneider questioned whether the completion of the video satisfies the original issue objectives when submitted by ALPA back in 1998. Bob Lamond, NBAA, responded that with the ongoing activities of the TAPP, he felt this issue and related issue 98-01-197 could be closed. The representatives from ALPA did not object and Bruce McGray, AFS-420, also supported closure through the ACF emphasizing that the issue would continue to be of FAA interest through the TAPP. The group agreed.

Status: ITEM CLOSED

k. 09-02-288 VNAV Minimums vs. Circle to Land

Bruce McGray, AFS-410, reported there has been no action to develop AIM language to help resolve the issue. The current FAA policy is to continue to publish both LNAV and LNAV/VNAV lines of minima regardless of difference in MDA/DA. The circling MDA will be based on (no lower than) the lowest non-vertically guided MDA. Tom Schneider noted that at meeting 11-02, it was the consensus to continue to publish both LNAV and LNAV/VNAV minimums whenever possible regardless of the difference. It was also agreed that improved AIM and IPH guidance would be developed to help explain why circling can sometimes be lower than the vertically guided MDA/DA. John Collins, GA Pilot agreed that a better explanation would help pilots understand a situation that is not common. Gary McMullin, SWA, added that pilots flying an LNAV approach will still use vertical guidance (VNAV) to the MDA. Rick Dunham, AFS-420, advised that the guidance in the IPH has been expanded and the document is in the formal coordination process.

Status: 1) AFS-410, in concert with NBAA, APA, John Collins, and Horizon Air, develop AIM language; and, 2) AFS-420 track IPH publication. Item Open (AFS-410 and AFS-420).

l. 09-02-289 Use of Leg Combinations and Altitude Constraints on RNAV Departure Procedures

Tom Schneider, AFS-420, briefed that the change forwarded by NBAA for Order 8260.46D, Appendix A (as briefed at the last meeting), has been included in Change 3, which entered formal coordination on October 11, 2012. AFS-420 will track the change until published.

Status: AFS-420 will track the change until published. Open Pending Publication (AFS-420).

m. 09-02-291 Straight-in Minimums NA at Night

Rick Dunham, AFS-420, briefed that no analysis of straight-in and circling surfaces has been accomplished due to other higher order analysis projects. This project is on hold pending funding and manpower. Rick added that the US-IFPP considers the cost-benefit of this study to be marginal in overall impact to NAS operations and could adversely impact the current minimums if the two surfaces are harmonized. John Collins, GA Pilot, asked about the impact

on minima. Rick responded that the study is looking at harmonizing the surfaces without impacting minimums.

Status: AFS-420 and 450 will continue to work the issue through the US-IFPP. Item Open [AFS-420 and AFS-450 (US-IFPP)].

n. 10-01-292 Removal of the Visual Climb Over Airport Option on Mountain Airport Obstacle Departure Procedures

Tom Schneider, AFS-420, briefed there were 4 open IOUs for this issue. Each is addressed separately below:

1) Track IPH Guidance. Tom Schneider, AFS-420, briefed that IPH guidance has been developed and the publication is out for formal coordination. The requirement that pilots must obtain ATC approval for the VCOA maneuver has been included.

2) Develop AIM Educational Material. Paul Eure, AJE-31, briefed that the ODP/VCOA Working Group has met 7 times since the last ACF and that AIM and ATC guidance has been finalized. A copy of Paul's briefing slides, which includes the agreed-upon definition of VCOA, associated changes to the AIM/AIP, recommended changes to FAA Orders 8260.46 and JO 7110.65, is included here . There was some discussion as to where the IFR portion of a VCOA maneuver commences. The general consensus is that the IFR portion commences once the visual instructions are complete; e.g., if the VCOA instructions read "Climb in visual conditions to cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200", the IFR portion commences once proceeding on CPN R-309 at or above 7700. Paul then briefed that the VCOA WG is also addressing ODP procedures in general, particularly the rule [Editors Note: 91.175f(3)] that requires certain operators to use the ODP or "*an alternative procedure or route assigned by ATC.*" There is also on-going discussion regarding whether an ATC assigned heading is the same as a radar vector. Bill Hammett, AFS-420 (ISI) interjected that these general ODP comments were off the VCOA issue. It is fine for the WG to continue to address them, but if ACF discussion is desired, it should be under a separate issue. Tom Schneider, ACF-IPG Chair concurred.

3) Mandatory Briefing Item (MBI) for Terminal Facilities. Terry Pearsall, AJT-2B2, (at the time AJT-28) recommended at meeting 11-02 that a MBI be issued for terminal facilities; however, Terry has not been in attendance since. Art Blank, representing AJT-2A3, was asked for an update. Art stated that he was unaware of this tasking for the Terminal Service Unit. He was asked to take the IOU to determine whether a MBI is warranted, and if so, who would be the responsible office.

4) Re-establish VCOAs at Selected Mountainous Airports. Bob Lamond, NBAA, stated that his organization is working closely with AJE-31 and making progress, albeit slowly. There is ongoing discussion regarding development of a separate stand-alone VCOA procedure to be published and controlled as a SID. Brad Rush, AJV-3B, responded that AFS criteria will not allow a VCOA on a SID. Bob responded that this issue should be raised through the Service Area Flight Procedures Team.

All 4 IOUs remain open with taskings as indicated below.

Status: 1) AFS-420 to track the IPH and Order 8260.46 revisions until published; 2) AJE-31 (Paul Eure) to track AIM and JO 7110.65 changes until published; 3) AJT-2A3 (Art Blank) to

determine whether a MBI for terminal facilities is needed; and 4) NBAA and AJE-31 to continue to work jointly to re-establish VCOAs at selected mountainous airports.
Item Open (AFS-420; AJE-31; AJT-2A3; and, NBAA).

o. 10-01-294 RNP SAAAR Intermediate Segment Length and ATC Intervention

Gary Fiske, representing AJT 2A3, had been tracking this issue, but was unable to attend this meeting. Paul Eure, AJE-31, stated that the DCP for FAA Order JO 7110.65U, paragraph 4-8-1, has been completed and is awaiting March publication. He added that they are attempting to publish the change sooner via a NOTICE, hopefully in the January timeframe. Gary McMullin, SWA, stated that he would like a copy of the final to comment on. He added that the 6-NM requirement prior to joining an RF leg is unacceptable and will cause problems with use of RNP. Gary added that he had communicated these concerns to Gary Fiske, then representing AJT-2A3, about a year ago. Paul agreed to provide Gary McMullin a copy of the final DCP and forward his concerns to Gary Fisk's replacement.

Status: AJT-2A3 to track the DCP change. Item Open Pending Publication (AJT-2A3).

Editor's Note: ***The secretary was advised that publication of the change to Order JO 7110.65 has been slipped to August 2013; however, implementation via NOTICE is still planned for early 2013.***

p. 11-01-296 Magnetic Variation Differences and FMSs

Bill Hammett briefed that the AFS InFO discussed at the last meeting was signed on June 26, 2012. The number is InFO 12009 and it is a bit different than what was shown at the last meeting. A copy is provided here . Bill questioned whether anyone knew of any further involvement or input by the CNS Task Force. Ted Thompson, Jeppesen, responded that he knew that the CNS Task Force had received a copy of the InFO and that Brian Will, Industry Co-Chair of the Task Force, seemed pleased with it. Ted recommended the issue could be closed based on the InFO and lack of CNS Task Force response. Tom Schneider, AFS-420, stated there was still an open portion of the issue relating to including information from the InFO in the AIM as an update to paragraph 1-1-19l and to add a cross reference to this paragraph in paragraphs 5-2-8f, *RNAV Departure Procedures* and 5-4-1e, *RNAV STAR*. He requested that Kel Christianson, AFS-470, take on this IOU. Rich Dunham, AFS-420, also recommended the agenda item be kept active pending the outcome of technical reviews by RTCA SC-227 and the FAA PARC. Therefore, the agenda will remain open. However, based on the lack of response by the CNS Task Force at this and the previous meetings, Bill recommended they be dropped as a point of contact for this issue. The group agreed.

Status: 1) AFS-470 to develop and coordinate requested AIM changes, and 2) AFS-420 to monitor actions by RTCA SC-227 and the PARC. Item Open (AFS-470 and AFS-420).

q. 11-02-297 Airway "NoPT" Notes on Instrument Approach Procedures

Bruce McGray, AFS-410, briefed that his office is pursuing a "pop-up" research project for a human factors assessment on the issue. He mentioned the possibility of involving Volpe NTSC in writing the testing standards to determine whether the NoPT note applies to airway radials only or to an entire sector.

Status: AFS-410 to continue to track the issue and report. Item Open (AFS-410).

r. 11-02-298 Converging ILS Coding and Chart Naming Convention.

Brad Rush, AJV-3B, briefed that he has discussed the issue with Ron Singletary, AJT-2A3, and he is looking at the FAA Order on the naming convention for converging approaches. The Order affects the ATO and the converging portion may need to be transferred to AFS for inclusion in the planned "8260.Simuls" Order, which is currently under development. AT is supportive of changing the titling to eliminate "converging" in favor of using a suffix. The discussion includes whether to use the standard "Z, Y, X" methodology or use something different for converging approaches. Tom Schneider, AFS-420, asked whether the use of "converging" would be continued in the approach clearance. Brad responded that this issue is still under discussion. Charting the requirement may be a consideration so the verbiage can be eliminated from ATC phraseology. Kevin Allen, US Airways, asked about corrective actions for Philadelphia (KPHL) as it is a safety issue. Brad responded that the KPHL procedures should be amended in April/May of 2013. Similar problems also exist at KIAD, KDFW. Not all can be fixed until ATC decides how they want the rules to work.

Status: AJV-3B will monitor US-IFPP activities and keep the ACF apprised of the issue status. Item Open (AJV-3B and US-IFPP).

s. 12-01-299 Loss of CAT D Line of Minima in Support of Circle-to-Land Operations.

Tom Schneider, AFS-420, stated that the issue was briefed to the US-IFPP on 5 September 2012. AFS-420 accepted an action to analyze the issue and to consider the recommendation to expand guidance related to the publication of circling minimums within order 8260.3B. John Bordy, AFS-420, is forming a study group to address the issue and develop a recommendation that will be presented to the US-IFPP at their next meeting (January 24, 2013). Tom briefed that John will accept outside input. The following personnel signed up as participants:

John Bordy	AFS-420 (Chair)	405-954-0980	john.bordy@faa.gov
Rich Boll	NBAA	316-655-8856	richard.boll@sbcglobal.net
Dan Lehman	NAVFIG	843-218-5282	dan.lehman@navy.mil
Steve Serur	ALPA	703-689-4333	steve.serur@alpa.org
Mark Cato	ALPA	703-689-4189	mark.cato@alpa.org

Status: AFS-420 will lead a study group to develop a recommended position for the US-IFPP. Item Open (AFS-420).

t. 12-01-300 Public Access to RNAV Visual Flight Procedures.

Kel Christianson, AFS-470, briefed that they are looking into alternative methods, other than RNAV Visual Flight Procedures (RVFPs), to improve access into airports. Bob Lamond expressed frustration that the FAA appears unwilling to address the situation. He commented that unless the FAA provides equal access, availability, and efficiencies related to new PBN capabilities to all users of the NAS, including corporate and general aviation users - not only air transport, then the FAA's NexGen program will be "destined to fail". Bob added that despite repeated requests on this and other subjects, NBAA, thus far, has observed no effort by FAA to embrace Part 91 operators in advanced technology. Gary McMullin, Southwest Airlines (SWA), added that SWA supports bringing RVFPs into the public realm stating that it will enhance ATC operations. Kyle McKee, AJV-14, asked if the current initiative of adding RNAV waypoints to Charted Visual Flight Procedures (CVFPs) will achieve the same goal. Gary responded no;

CVFPs will not work and stated that a coded procedure must be used to gain the full benefit. He strongly recommended that Order 8260.55 be revised to allow public-use RVFPs. Kevin Allen, US Airways, suggested the primary concern may be procedure maintenance; there are approximately 30 RVFPs in the system. Bob stated that NBAA would like, as a minimum, to have the capability of providing a list of airports where RVFPs would be of value, including airports not served by Part 121 and 135 operations. Paul Eure, AJE-31, added that one of the top 5 questions his office fields from facilities is whether they can get GA capability to use RVFPs as it would help ATC immeasurably.

Status: AFS-470 will consider the ACF comments regarding public use of RVFPs during the update of FAA Order 8260.55. Item Open (AFS-470).

u. 12-01-301 Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment.

Bill Geiser, AJW-334, who was unable to be present at the last meeting provided a slide presentation on the issue; a copy of which is included here  . The presentation recapped the flight inspection history of the RNAV (GPS) RWY 36 IAP at Birmingham, AL (KBHM) as a result of Southwest Airlines concerns. The flight inspection results confirm that the procedure is designed correctly and that "on path, on course" is safe. The problem is that pilots are not maintaining responsibility for descending below MDA. Pilots are following the published advisory VDA as a glide slope to the threshold. The 34:1 obstacle surface is not clear resulting in GPWS alerts. There are no standard flight inspection guidelines for checking a VDA or the visual segments. Therefore, as a result of this analysis, whenever a procedure form indicates the 34:1 is not clear, flight inspection will fly all approaches one dot below the VDA for a 'reasonable' obstacle clearance check. If the flight inspection pilot has to destabilize the approach or receives a GPWS warning, he/she will annotate the procedure that the VDA and TCH should not be charted or databased. Bill Geiser's recommendations include: 1) Revise FAA Order 8260.19 guidance to accommodate flight inspection results; i.e., raise the angle or do not publish a VDA, 2) Issue a SAFO and beef up other pilot educational material, and 3) revise industry coding policy. Tom Schneider, AFS-420, briefed that the following has been included in Change 3 to 8260.19, under paragraph 8-57u(1). The change is currently in FAA internal coordination - changes are shown in red text:

> *For straight-in aligned nonprecision SIAPs (except for procedures that already have a GS/GP angle established for the vertically guided procedure on the same chart and surveillance (ASR) approach procedures), enter the descent angle for the appropriate fix in the final approach segment, and the appropriate TCH:* ***NIXON to RW15: 3.26/55.*** *Where straight-in minimums are not authorized due to an excessive descent angle, enter the straight-in descent angle (may exceed maximum when compliant with circling descent angle). Where the VDA values are not coincident with published VGSI values, see paragraph 8-55n. Only one angle and TCH will be published on the chart. Do not publish a VDA (or TCH) when Flight Inspection has requested that one not be established due to an obstacle that would require an aircraft to deviate from its vertical flight path prior to reaching the TCH.*

Rick Dunham, AFS-420, added that a policy memorandum has been issued to preclude continuous waiver requests pending publication in Order 8260.19. John Collins, GA Pilot, asked why the 34:1 is used vice a 20:1. Kevin Allen, US Airways, responded that 34:1 is the standard obstacle surface for a 3 degree angle. Gary McMullin, SWA, added that his organization prefers higher angles, but without eliminating CAT D aircraft operations. Tom

stated that if the angle is increased, then it will require increasing the FAF altitude. Marc Gittleman, ALPA, asked why a fly-off from the FAF at the existing altitude couldn't be used to create a higher descent angle. Ted Thompson, Jeppesen, commented that the use of vertical descent angles in databases has been around for decades and gained momentum after the Winsor Locks, CT (KBDL) accident. The original purpose of the VDA/VNAV angle was to facilitate a stabilized descent down **to** the MDA – **not below** MDA while simultaneously designed to clear minimum altitudes at step-down fixes. There was never any intent to clear 34:1 surface obstacles below the MDA. Ted emphasized that if VDAs are removed wherever a 34:1 penetration occurs, it will result in the loss of stabilized descent for thousands of approaches. Tom Schneider, AFS-420, also noted that if VDAs are removed from charts as recommended by Flight Inspection, a descent angle may be included in the database, even if not specified on the associates FAA 8260-series form. If the fly-off suggestion is desired, it will have to be addressed by the US-IFPP. Ted emphasized that pilot education is the key to understanding the purpose of VDAs. Rick Dunham, AFS-420 commented that the FAA has expanded the explanation and use of VDAs in the proposed change to the IPH, which is currently in coordination. FAA will also look into expanding up the AIM language. Val Watson, AJV-3B, agreed that pilot education is the key to a solution and suggested that perhaps an annotation to existing VDAs in the chart profile to show "**3.00 to MDA**" might add emphasis. John Collins, GA Pilot, stated that he had accomplished an informal survey of non-precision approaches in North and South Carolina; 10-15% had the "stipple", 10-15% had a VDP, and the other 80% had nothing. Gary McMullin, SWA, added that we need to be careful about removing descent angles, as if the angle is removed, the procedure will be removed from the database. Increasing the angle is helpful provided the increase does not exclude certain Category aircraft. The better option is to re-design the procedure. Tom wrapped up the discussion saying the issue will be referred to the US-IFPP. In the interim, AFS-420 will track the IPH change and recommend better AIM language.

Status: AFS-420 will forward the issue to the US-IFPP for consideration and monitor IPH and AIM changes. Item Open (AFS-420 (US-IFPP)).

5. New Business:

a. 12-02-302 Climb Gradients on Standard Instrument Departure (SID) Charts

New recommendation presented by Kevin Allen, US Airways. Kevin expressed concern that there are SIDs that have multiple climb gradients published; one for obstacle clearance and one (or more) for ATC altitude restrictions. This appears to be a contradiction between two FAA 8260-series Orders. Order 8260.3, *US Standard for Terminal Instrument Procedures (TERPS)* allows only one climb gradient for obstacle clearance purposes. However, FAA Order 8260.46, *Departure Procedure (DP) Program*, allows multiple climb gradients when necessary for ATC purposes. These multiple climb gradients, especially when duplicated, contribute to unnecessary chart clutter. US Airways recommends the FAA revise policy to specify that only the highest required climb gradient for any given segment of a SID be specified for the departure procedure. Kevin also recommended that charting could use a slash (/) vice "per" when specifying the climb gradient; e.g., "360'/NM" vice "360' per NM". Bill Hammett, AFS-420 (ISI) responded that there are restrictions on the use of symbols allowed in international NOTAMs; however, he was unsure if the slash is restricted. Tom Loney, Canadian Air Force, mentioned that not all aircraft have the same climb performance capabilities; therefore, pilots of less capable aircraft should have all the relevant information available. Tom Schneider, AFS-420, stated that criteria drives policy. The new Order 8260.58, which was effective September 12, 2012 and replaced Orders 8260.44, 8260.45, 8260.52, and 8260.54, as the

standard for RNAV procedures, removed the provision that allowed multiple climb gradients. As noted above, Order 8260.3 also allows only one climb gradient; therefore, all reference to multiple climb gradients has been removed in the upcoming guidance in Change 3 to Order 8260.46. The premise is “one altitude at a fix will define one climb gradient”. The scenario used in the example given by US Airways will be eliminated in the future. Chris Jones, AFS-410 (Support), stated that this scenario could cause an adverse impact in that some operators who cannot meet the specified climb gradient may not be able to use the procedure. Tom Schneider, AFS-420, responded that this has been discussed at several FAA/industry ad hoc departure meetings/telcons and the consensus was that this is acceptable. The group consensus is that the issue may be closed based on Order 8260.58 and the Change 3 to Order 8260.46.

Status: ITEM CLOSED

b. 12-02-303 Charting Computer Navigation Fixes (CNFs)

Tom Schneider, AFS-420, presented this new recommendation as offered by Robert Katz, GA Pilot. Mr. Katz is proposed that FAA cease publishing all CNFs, making the case that they are confusing and of no value to pilots. In briefing the issue, Tom noted that some of the specific examples of CNFs used in the recommendation document are charted incorrectly on the VOR/DME RWY 35 IAP at Dalhart Muni and there may be a problem with the CNF portrayed on L-13 IFR Low Altitude En Route Chart. These were referred to Brad Rush, AJV-3B, for corrective action. Tom noted that CNF inception and charting standards are a direct result of an ACF recommendation made through the Charting Group (Charting issue 97-01-91, Depiction of GPS Database Points on IAPs). The rationale behind charting CNFs is exactly contrary to Mr. Katz's suggestion; they are charted to provide chart/database harmonization to eliminate, rather than cause, pilot confusion.

> ***Editor's Note:*** *Quote from the minutes of ACF Charting Group Meeting 97-02: "The ATA/Charts, Database, and Avionics Harmonization Committee recommended computer navigation fixes (CNFs) be placed on NOS charts so that pilots will be able to crosscheck the CNF with their airborne database."*

Ted Thompson, Jeppesen, presented the following comments based on internal discussions by Jeppesen’s corporate technical leaders on behalf of its Standards Team:

- The inclusion of CNFs came about as a result of the Cali accident. CNFs were adopted as a response to affect standardization between charts and cockpit displays.
- CNFs do provide a standardized element between chart and database; however, CNFs are not in the ATC database.
- Despite the benefits of CNFs, there is a definite lack of a formalized process to promulgate them. The FAA does not maintain CNFs like they normally do waypoints and intersections. Although CNFs are currently being added to most 8260-series procedure source documents, CNFs are not otherwise sourced in detail as are waypoints and intersections. For example, 8260-2-series forms exist for only a portion of the total number of CNFs in the USA.
- While Jeppesen acknowledges that eNASR data is not considered to be official FAA source, we must use it in order to fully represent CNFs throughout the NAS. Unfortunately, the eNASR data is incomplete, which poses problems.

- eNASR also provides the data differently for terminal use than it does for enroute use. For example, we can only identify 100 terminal CNFs from the eNASR file and yet we know there are many, many more in existence. And the placement of the “flag” in eNASR for the terminal use CNFs is inconsistent requiring additional analysis and comparison of the data.
- Another related aspect is that the CNF concept has never been adopted by ICAO. This results in necessary reliance on points-in-space which are not officially designated or published or recognized by State authorities. Instead, in order to properly code routes and procedures, these points are instead created by commercial entities such as Jeppesen. This situation demonstrates the lack of international harmonization around the CNF concept
- While the total removal of CNFs is probably a short sighted idea, there are certainly enough issues with the concept and its current state of implementation within the USA that discussion at the FAA ACF-IPG is certainly worthwhile, especially if the discussion leads to a re-focus on FAA CNF maintenance and promulgation.

John Moore, Jeppesen, asked what FAA Order contains policy for CNFs. Tom responded, Order 8260.19 contains guidance for documenting CNFs. John went on to state there seems to be a lack of understanding regarding CNF use, little guidance on how to use them, and a need for better AIM guidance. Brad Rush, AJV-3, responded that AFS has begun steps for standardization and that his office is participating in the process. Brad added that the FAA’s plan is to convert CNFs into pronounceable named airspace fixes (waypoints or intersections) wherever possible as airways or terminal procedures are reviewed and updated. CNFs that meet criteria are being converted into pronounceable named fixes; those that do not will remain CNFs. As a result of this ongoing program, approximately 70% of the original CNFs have been sourced on FAA Form 8260-2s. Where applicable, CNFs are also referenced on FAA Form 8260-3/5. Lev Prichard, APA, stated that CNFs are necessary to allow use of RNAV when flying conventional procedures. Paul Eure, AJE-31, commented that controllers in various regions complain frequently about CNFs and, in fact, take steps to remove them from their host computers. Curtis Davis, AJV-21, stated that there are about 1800 CNFs in the NAS, of which approximately 400 are “undocumented”; i.e., there are no FAA Forms 8260-2 to support them or they are not listed on an FAA Form 8260-3 or -5. Approximately 300 are in compliance with the new "CFXXX" naming methodology. Lance Christiansen, NGA, asked what it would take to document the remaining CNFs. Brad responded the timeline would be predicated on available resources and priorities. In summary, the group consensus was to not accept the recommendation to cease charting all CNFs. The consensus was that CNFs must remain published for chart/database harmonization. It was noted that information in the AIM should be improved to aid overall understanding for pilots and controllers. Lastly, it was recommended that guidance in Order 8260.19 regarding CNFs be more robust.

Status: 1) AJV-3B to review and correct the example procedures used in Mr. Katz's submission and develop better policy for depicting a CNF within a procedure turn; 2) AFS-420 review CNF policy in Order 8260.19 and update as necessary; 3) AFS-470 review and update AIM guidance regarding CNFs and consider moving CNF guidance to Chapter 5 vice Chapter 1. Item Open (AJV-3B, AFS-420, and AFS-470).

c. 12-02-304 FMS Coding of SIDs Containing Multiple or Differing Runway Transitions

New recommendation presented by Ted Thompson, Jeppesen, on behalf of Jeppesen, Garmin, and FAA. The issue revolves around the coding of SIDs with multiple climb out instructions for

the same runway. Ted briefed that most conventional SIDs are able to be coded and are provided in commercial navigation databases to support efficient flight operations and reduced pilot workload. When SIDs mandate two different sets of initial climb instructions (runway transitions); e.g., one set for "Jets" and another set for "All Others", it presents problems for navigation database coding. The TAMPA 5 DEPARTURE (TPA5.TPA) was presented as an example, although it is not unique - multiple climb out instructions from a single runway are common throughout the NAS. The design of the TPA5.TPA involves two different runway transitions for parallel runways 19L and 19R; one set for "Jets" and another set for "All Others"; however, it was noted that it is not known how many other discriminators exist or could be used. For example, the OHARE 6 DEPARTURE at KORD (Chicago, IL) uses DME capability as the differentiator. Ted emphasized that existing capabilities of the navigation database coding and corresponding electronic displays can accommodate only one runway transition per runway per departure. Since database providers, such as Jeppesen, are only able to code one transition per runway per departure procedure, under ARINC coding capabilities, Jeppesen's practice is to code the transition which supports Jet or Turbojet aircraft. Ted stated that there will be even more reliance on the FMS under the NexGen concepts; therefore, removing [conventional, non-RNAV] procedures that are not able to be coded may not be the best long term solution. As a result of all the concerns, Jeppesen agreed to present the issue before the ACF-IPG. The general discussion indicated that the problem is valid and perhaps separate procedures should be developed in these cases. Mark Cato, ALPA, concurred and added that admittedly, there will be an increased number of procedures published, but an increased safety margin will also be achieved. Josh Fenwick, AeroNavData, Inc., stated that he supports designing separate procedures; however, the ARINC 424 specification was updated to accommodate this type of procedure source and allows for a procedure with multiple types of transitions (Jet Only, Turboprop Only, etc.) to be coded as multiple procedures, one for each type of aircraft. Tom Schneider, AFS-420, briefed that corrective action has already been initiated on this issue. The following stipulation, which should resolve the issue, has been added under design constraints as new paragraph 2-1d(7) in Change 3 to Order 8260.46:

> (7) Do not establish DPs containing more than one initial departure route from the end of a runway to support different types of aircraft (jet, turbo-prop, etc.) or different equipment requirements (DME, non DME). Where this is necessary, separate procedures must be developed.

The group consensus is that the change will resolve the issue and AFS-420 will track the change until published.

Status: AFS-420 to track the change Order 8260.46.
Item Open Pending Publication (AFS-420).

d. 12-02-305 Conflict Between STAR VNAV Path and MEA

New recommendation presented by Lev Prichard, APA. Lev expressed concern that FMS coding of the EAGUL STAR at Phoenix causes pilots to violate the MEA on the segment from EAGUL to VNNOM by allowing descent to 10,000 prior to HOMRR, which is below the specified MEA of 12,000. Although the EAGUL STAR is used as an example, Lev, believes that policy should be established to preclude this from occurring . Kevin Allen, US Airways, stated that Flight Standards in the Southwest Region is aware of this problem and is working a fix. Lev recommends, as a short term solution to this specific problem, a NOTAM to specify a bottom altitude of 12,000 at HOMRR. This would make crews aware of the issue and force FMS calculated VNAV paths to stay above the MEA. The NOTAM should be followed up with a

revised STAR ASAP. Bill Hammett, AFS-420 (ISI) noted that while there is nothing in the current Order to prevent this, a new Order JO 7100.9E is currently in coordination that should resolve the problem by addition of the following in paragraph 7a(10)

> (10) Establish a minimum en route altitude (MEA) for each segment of the STAR. The MEA will be established based upon obstacle clearance over the terrain or manmade obstacles, adequacy of navigation coverage, and communication coverage. Follow the guidance in FAA Order 8260.19, to determine the communication requirements. Conventional, RNAV and RNP STARs follow guidance in FAA 8260 series orders to establish the MEA. At, at or above, and block altitudes may be charted to accommodate ATC requirements and profile descents. If possible avoid use of at or below altitudes. All altitudes must be at or above the established MEA. The termination altitude for STARs attached to an SIAP IAF, IF or Final Approach Course Fix (FACF) must coincide with the fix altitude published on the SIAP. For RNAV and RNP STARs, evaluate the Obstacle Evaluation Area (OEA) for feeder routes.

Brad Rush AJV-3B, stated that the procedure was correct, but the coding was wrong in that it should have accounted for the MEA of 12,000 to HOMRR. Josh Fenwick, AeroNavData, Inc., responded that the coding was according to the NFDD's source, but there was an error on the supporting form. All agree that the proposed text for Order JO 7100.9 will resolve the issue. Kyle McKee, AJV-14, took the IOU to track publication of the revised Order.

Status: AJV-14 will track publication of Order JO 7100.9E.
Item Open Pending Publication (AJV-14).

e. 12-02-306 Class B Airspace Containment of Instrument Approach Procedures

New issue introduced by Lev Prichard on behalf of the Allied Pilots Association, APA. Lev expressed concern that the ILS RWY 9 approach at Miami Int'l (KMIA) allows pilots, when intercepting and flying the glide slope (GS), to descend below the floor of Class B airspace. This causes the pilot to violate 14 CFR Part 91.131(a)(2). Kevin Allen, US Airways, noted that this problem is not isolated to KMIA, but also occurred at Phoenix and Las Vegas. Kevin added that it is concerning that when this type discrepancy is noted and reported, it takes years to amend the Class B airspace to contain the procedures. Gary McMullin, SWA, agreed that this is a nationwide issue as there are more and more problems associated with Class B containment of instrument procedures. He noted that the local ATC facility is the key link in ensuring containment via procedure design or Class B modification. Paul Eure, AJE-31, stated that the FAA Airspace, Regulations, and ATC Procedures Group, AJV-11 is undergoing a complete review of all Class B airspace. Thus far 6 have been modified and 12 others are under review. Bob Lamond, NBAA, stated that airspace re-design is a complicated process and added that he did not support two groups working the same issue. Bob stated that since Class B airspace is a continuing safety issue on the ATPAC agenda, he believes the issue should be expanded within ATPAC to address the APA concerns. Steve Serur, ALPA, noted that the Class B airspace initiative had begun as a corrective action after a 1986 Aero Mexico aircraft accident in Cerritos, California and he believes the issue should be worked through the ACF-IPG as it violates established rules. Bill Hammett, AFS-420 (ISI), agreed with the NBAA representative in that two entities should not be working the same issue and this particular issue should be worked through ATPAC. Airspace within the NAS is under the purview of the ATO, specifically, the Airspace, Regulations, and ATC procedures Group, AJV-11. Currently the Manager of AJV-11 is Gary Norek, who is also the current Acting Executive Director of ATPAC. Having the same person in charge of these two organizations should provide an added benefit in getting expeditious action on the issue. As noted, ATPAC is currently sponsoring a review of all Class B airspace areas. The APA issue should be able to be incorporated in this study or

accepted as a separate ATPAC Area of Concern. ATPAC has an assigned membership of 17 organizations, including APA and American Airlines. Bill stated that while he is pleased that APA and others acknowledge the ACF as an organization that achieves results, he also believes that ATPAC can be more effective on this and other issues, especially if encouraged by their membership. Lastly, Bill stated that the current policy in FAA Order JO 7400.2 mandates that the Class B vertical limit "....*must encompass, as a minimum, all final approach fixes and minimum altitudes at the final approach fix*...." This policy could not be more clear; however, the applicable offices may need to be reminded that on ILS approaches, there are two final approach fixes (FAFs), one for the ILS and one for the LOC. These points may or may not be co-located as in the case of KMIA. The glide slope intercept point is approximately 5 NM from and 1,500 higher than the designated LOC FAF. This should have been noted by the Service Area Flight Procedures Team and/or the ATC facility during the coordination phase of the approach and fixed prior to publication (either by moving the glide slope intercept point or amending the Class B vertical limit). In short, if the current policy was followed, the situation would not exist. Rick Dunham, AFS-420, asked what should be done in the interim. Gary McMullin responded that a note could be placed on the charts, something to the effect "procedure may exit Class B Airspace." Brad Rush, AJV-3B, spoke against this recommendation, stating that if a chart note were accepted as mitigation, AT would never enforce compliance. No other suggestions were offered. Tom Schneider, AFS-420, as ACF-IPG Chair agreed the issue should be worked through ATPAC and the issue will be closed from further consideration by the ACF-IPG. Tom stated that he will forward a copy of the APA issue and the record of the ACF-IPG discussion to the ATPAC Executive Director and recommended APA (with support of other interested ATPAC members) present the issue as an Area of Concern at the next ATPAC meeting.

> ***Editor's Note:*** *The following additional reminder has been added to Change 3 to FAA Order 8260.19 under paragraph 5-8c: "The Class B vertical limit must encompass, as a minimum, all final approach fixes and minimum altitudes at the final approach fix to include the glideslope intercept point for ILS approach procedures."*

Status: ITEM CLOSED.

6. Next Meeting: ACF Meeting **13-01** is scheduled for **April 23-25, 2013** with **Innovative Solutions International (ISI)** as host at **Pragmatics, Inc.**, Reston, VA. ACF Meeting **13-02** is scheduled for **October 29-31, 2013** with the **Air Line Pilots Association (ALPA)**, Herndon, VA as host.

Please note the attached Office of Primary Responsibility (OPR) listing (attachment 1) for action items. It is requested that all OPRs provide the Chair, Tom Schneider (with an information copy to Bill Hammett), a written status update on open issues not later than April 5 - a reminder notice will be provided.

8. Attachments (2):

1. OPR/Action Listing.
2. Attendance Listing.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 12-02

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-470	**92-02-110:** (Cold Weather Altimetry)	Develop and coordinate a cold temperature implementation plan.
AJE-31	**02-01-241:** (Non-Radar Level and Climb-in-hold (CIH) Patterns	Track change to JO 7210.3.
AFS-420	**07-01-270:** (Course Change Limitation Notes on IAPs)	Track TERPS Change 26.
AFS-420	**07-02-278:** (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	Continue development of revised holding criteria.
AJV-3B	**09-01-282:** (Glide Slope Intercept Altitudes on ILS Parallel Approaches)	Remove currently published ILS intercept notes and report progress.
AJT-2A3, AJE-31, and AFS-410	**09-01-284:** (Question of TERPs Containment with Late Intercepts)	AJT-2A3 and AJE-31: Track changes to Order JO 7110.65, paragraph 4-8-1 AFS-410: Review proposed ATO changes to JO 7110.65, paragraph 4-8-1 and make necessary changes to AIM paragraph 5-4-7i. AFS-410: Consider advance publication of AIM language as a Graphic Notice in the NTAP
AFS-410,AFS-470 and AJT-2A3	**09-02-286:** (Initial "Climb & Maintain" Altitude on SIDS)	Jointly work the issue and report progress. .
AFS-410 and AFS-420	**09-02-288:** (VNAV Minimums vs. Circle to Land)	AFS-410: Develop AIM language, in concert with NBAA, APA, John Collins, and Horizon Air. AFS-420:track IPH publication
AFS-420	**09-02-289:** (Use of Leg Combinations and Altitude Constraints on RNAV Departure Procedures)	Track change to Order 8260.46.
AFS-420, AFS-450 (US-IFPP)	**09-02-291:** (Straight-in Minimums NA at Night)	Jointly continue to work the issue through the US-IFPP and report.
AFS-420 AJE-31 AJT-2A3 AJE-31 and NBAA	**10-01-292:** (Removal of VCOA Option at Mountainous Airports)	AFS-420: Track IPH guidance and change to Order 8260.46 until published. AJE-31: Lead ad hoc WG to develop pilot VCOA guidance for the AIM and AIP. AJT-2A3: Coordinate whether an MBI for terminal facilities is required and if so, who is OPR. AJE-31 and NBAA: Work jointly to re-establish VCOAs at selected mountainous airports

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 12-02

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AJT-2A3	**10-01-294:** (RNP SAAAR Intermediate Segment Length and ATC Intervention)	Track the DCP change to Order JO 7110.65, paragraph 4-8-1.
AFS-470 and AFS-420	**11-01-296:** (Magnetic Variation Differences and Flight Management Systems)	AFS-470: Develop and coordinate AIM change. AFS-420: Monitor actions by RTCA SC-227 and the PARC.
AFS-410	**11-02-297:** (Airway "NoPT" Notes on IAPs)	Continue to work issue and report.
AJV-3B (US-IFPP)	**11-02-298:** (Converging ILS Coding and Chart Naming Convention)	Track and report US-IFPP actions on the subject.
AFS-420 (US-IFPP)	**12-01-299:** (Loss of CAT D Line of Minima in Support of Circle-to-Land Operations)	Lead a study group and address the issue through the US-IFPP.
AFS-470	**12-01-300:** (Public Access to RNAV Visual Flight Procedures)	Consider the ACF discussions and recommendation during update of Order 8260.55
AFS-420	**12-01-301:** (Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment)	Forward the issue to the US-IFPP for consideration and track IPH and AIM changes.
AJV-3B, AFS-420, and AFS-470	**12-02-303:** (Charting Computer Navigation Fixes(CNFs))	AJV-3B: Correct procedures used in the issue submission and assess policy for charting a CNF within a procedure turn. AFS-420: Review CNF policy in Order 8260.19. AFS-470: Update AIM guidance regarding CNFs.
AFS-420	**12-02-304:** FMS Coding of SIDs Containing Multiple or Differing Runway Transitions	Track change to Order 8260.46
AJV-14	**12-02-305:** Conflict Between STAR VNAV Path and MEA	Track change to JO 7100.9.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 12-02

Allen	Kevin	US Airways	480-693-4637	kevin.allen@usairways.com
Becker	Hal	AOPA	703-560-3588	hal.becker@att.net
Blake	Michael	NATCA	603-218-9747	mblake@natca.net
Blank	Art	FAA/AJT-2A3	202-385-8599	art.blank@faa.gov
Burdette	Dan	FAA/AJW-331	405-954-6164	dan.g.burdette@faa.gov
Burns	Andrew	FAA/AFS-410 (Support)	202-385-4974	andrew.ctr.burns@faa.gov
Cato	Mark	ALPA	703-689-4189	mark.cato@alpa.org
Christian	Lance	NGA/MSRF	571-557-3870	lance.d.christian@nga.mil
Christianson	Kel	FAA/AFS-470	202-385-4702	kel.christianson@faa.gov
Collins	John	GA Pilot	704-576-3561	johncollins@carolina.rr.com
Connolly	Tim	Capitol Airspace	703-256-2485	tim.connolly@capitolairspace.com
Criswell	Chris	AJV-21	202-267-9302	christopher.criswell@faa.gov
Davis	Curtis	FAA/AJV-21	202-267-7755	curtis.davis@faa.gov
Dawson	Kemp	FAA/AJV-14	202-385-4572	kemp.dawson@faa.gov
DeAngelis	Randy	FAA/AFS-400 (Support)	202-385-4875	randy.ctr.deangelis@faa.gov
Dunham	Rick	FAA/AFS-420	405-954-4633	rick.dunham@faa.gov
Eure	Paul	FAA/AJE-31	202-385-8451	paul.eure@faa.gov
Fenwick	Joshua	Aero Nav Data, Inc.	618-281-8986 x107	josh@aeronavdata.com
Foster	Mike	USAASA	703-806-4869	james.m.foster1.civ@mail.mil
Gale	John	NBAA	201-323-3598	john.gale@honeywell.com
Geiser	Bill	FAA/AJW-334	405-954-1776	william.r.geiser@faa.gov
Gittleman	Marc	ALPA	571-723-7524	marc.gittleman@alpa.org
Gorman	Jeffrey	FAA/AFS-460	405-954-5774	jeffrey.c.gorman@faa.gov
Hammett	Bill	FAA/AFS-420 (ISI)	603-521-7706	bill.ctr.hammett@faa.gov
Hendi	Jennifer	FAA/AJV-3B	301-427-4816	jennifer.l.hendi@faa.gov
Hood	JD	Horizon Air	800-451-0222 x 44346	jd.hood@horizonair.com
Jones	Chris	FAA/AFS-410 (Support)	202-385-4570	christopher.p-ctr.jones@faa.gov

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 12-02

Kramer	Tom	AOPA	301-695-2064	tom.kramer@aopa.org
Lamond	Robert	NBAA	202-783-9255	rlamond@nbaa.org
Laroche	Pierre	Transport Canada	613-991-9927	pierre.laroche@tc.gc.ca
Lehman	Dan	NAVFIG	843-218-5282	dan.lehman@navy.mil
Loney	Tom	Canadian Air Force	204-833-2500 x5512	tom.loney@forces.gc.ca
McGinnis	Mike	APA	214-727-9310	msm1976@gmail.com
McGray	Bruce	FAA/AFS-410	202-385-4937 FAX: 4554	bruce.mcgray@faa.gov
McKee	Kyle	FAA/AJV-14	202-385-4671	kyle.mckee@faa.gov
McMullin	Gary	Southwest Airlines	214-695-1685	gary.mcmullin@wnco.com
Moore	John	Jeppesen	703-505-0672	john.moore@jeppesen.com
Prichard	Lev	APA	214-212-6357	lhp4@swbell.net
Renk	Ron	United Airlines	281-553-6573	ron.renk@united.com
Rush	Brad	FAA/AJV-3B	405-954-0188	brad.w.rush@faa.gov
Rushton	Alex	FAA/AJV-3B (LM)	301-427-5186	alex.ctr.rushton@faa.gov
Sabatini	Regina	FAA/AJV-21	847-294-7792	regina.h.sabatini@faa.gov
Schneider	Tom	FAA/AFS-420	405-954-5852 FAX: 2528	thomas.e.schneider@faa.gov
Serur	Steve	ALPA	703-689-4333	steve.serur@alpa.org
Smith	Lee	Capitol Airspace	703-256-2485	lee.smith@capitolairspace.com
Sosnowich	Terry	FAA/AJV-35	301-424-4812	terence.sonowich@faa.gov
Swierz	Greg	FAA/AFS-410 (Support)	202-385-4716	gregory.ctr.swierz@faa.gov
Thompson	Ted	Jeppesen	303-328-4456 FAX: 4111	ted.thompson@jeppesen.com
Ward	Ken	FAA/AJW-911	202-267-9080	ken.ward@faa.gov
Waterman	Jeff	NGA/PVP	314-676-0588	geoffrey.d.waterman@nga.mil
Watson	Valerie	FAA/AJV-3B	301-427-5155	valerie.s.watson@faa.gov
Webb	Mike	FAA/AFS-420	202-385-4603	mike.webb@faa.gov
Witucki	John	FAA/AJV-14	202-385-4348	john.witucki@faa.gov
Wood	Leah	Aero Nav Data, Inc.	703-859-3073	lwood@aeronavdata.com