November 21, 2011

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) held on October 25, 2011. The meeting was hosted by the FAA Aeronautical Navigation Products Office (AeroNav Products) at their 1305 East-West Highway, Silver Spring, MD, 20910, facility. An office of primary responsibility (OPR) action listing (Atch 1) and an attendance listing (Atch 2) are appended to the minutes.

Please review the minutes and attachments for accuracy and forward any comments to the following:

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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 **12-01** is scheduled for **April 24-26, 2012** with the **Air Line Pilots Association (ALPA), 535 Herndon Parkway, Herndon, VA** as host. Meeting **12-02** is scheduled for **October 23-25, 2012** with the host TBD.

Please note that **meetings begin promptly at 8:30 AM**. Dress is business casual. Forward new agenda items for the 12-01 IPG meeting to the above addressees not later than April 5, 2012. 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 11-02
FAA Aeronautical Navigation Products Office Silver Spring, MD
October 25, 2011

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 25, 2011. The FAA Aeronautical Navigation Products Office (AeroNav Products) hosted the meeting at their Silver Spring, MD facility. John Moore, AJV-3B, made welcoming and administrative comments on behalf of AeroNav Products. 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 11-01, which was held on April 26, 2011 were electronically distributed to all attendees as well as the ACF-IPG Master Mailing List on May 16, 2011. No comments were received; therefore, the minutes are accepted as distributed.

3. Briefings:

Al Herndon, MITRE, presented a briefing on a MITRE study regarding Flight Management Computer (FMC) handling of RNAV holding. The study was comprehensive in assessing 15 FMC manufacturers/aircraft combinations in a no-wind assessment. A key point was confirmation that a DO 236B RNP entry (all Boeing aircraft with advanced FMCs) will make a direct entry to the holding pattern and will not overfly the holding waypoint. It was noted that there is currently no FAA criteria for RNP holding. A discussion ensued regarding the no-wind aspect of the study. It is MITRE's assumption that wind will not affect RNAV holding as the FMC will fly the holding pattern as designed to the bank angle limits of the aircraft. Wind only affects the outbound leg of timed holding. The study clarified that an FMC always computes a distance-based holding pattern and cannot fly timed holding. Al briefed that AFS-470 is in the process of revising AIM language for the RNP holding entry to support some avionics systems. A copy of Al's briefing slides is attached here. Upon completion of the briefing, Rick Dunham, AFS-420, stated that AFS-400 has been slow in responding to the three holding issues before the ACF due to internal organizational re-alignments, higher priority taskings, and personnel changes. From day forward, Steve Jackson, AFS-420, is the point person that will assume responsibility for working with the applicable OPR to resolve all holding issues, tracking those issues to resolution, and keeping the ACF-IPG apprised of the ongoing status. Rick stated it is his goal to have a new 8260-Holding order drafted in 2012 that will provide improved criteria for conventional and PBN holding. The MITRE study may be expanded to assess wind effect.

4. <u>Old Business</u> (Open Issues):

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

Kel Christianson, AFS-470, introduced Mike Cramer, MITRE, who has been serving as the lead analyst for the cold temperature altimetry analysis contract. Mike provided a briefing to explain the methodology used in the study and to clear up misconceptions of the earlier MITRE study. He also briefed the changes in the current study and explained the parameters being used. Significantly, the study has been automated and was expanded to include Alaska and Hawaii and all runways 4000 ft or greater in length. A total of 8,177 non-precision and ILS (initial and intermediate segments) approaches at 1,869 airports were analyzed using the lowest recorded temperature over the last 5-years. Data was analyzed to determine the probability that total altitude error may exceed the ROC for a given procedure segment at the coldest temperature. This probability defines the risk, if the segment were to be flown at the coldest temperature. If the risk exceeds 1%, the coldest temperature at which the risk is equal to or less than 1% is applied as the minimum temperature at which the procedure may be flown without compensation. This temperature will be published in some manner on the procedure chart. This will provide the desired cold temperature loss of ROC mitigation. Based on these assumptions, Mike offered a mitigation plan and recommended the issue be closed; a new issue should then be opened to track implementation, pilot educational material, etc. A copy of Mike's briefing slides is included here.

A lengthy discussion ensued. Rick Dunham, AFS-420, stated that it is an AFS-400 Division goal to develop some type standard that pilots and controllers alike can accept. Mike interjected that there is no current required procedural mitigation although application of the altitude corrections published in the AIM will accomplish it. Steve Serur, ALPA, expressed concern over closure, especially when there is the total loss of ROC. Mike clarified that the risk is not 1% of the time, but 1% of altitude error exceeding ROC when an aircraft is flying the approach at the minimum temperature. The risk factor of 1% is the same as the allowed risk of exceeding the laterally protected area in the missed approach on an RNP approach upon loss of GPS at DA. Roy Maxwell, Delta Airlines, stated 1% may be acceptable for unintended circumstances; GPS loss is random, but the temperature is known. Rich Boll, NBAA, asked whether the analysis included non-airliner type altimetry. Mike responded that they had data from Cessna and others. Bruce McGray, AFS-410, stated there are special procedures in Alaska for small aircraft operations below -10F. He suggested that perhaps some feedback could be obtained from these users. Paul Eure asked whether any consideration had been given to aircraft vertical separation. The AIM allows pilots to apply the ICAO table correction at their discretion; therefore, some pilots may, while others may not. Additionally, there is no requirement for a pilot to advise ATC when applying cold temperature corrections. Tom Schneider, AFS-420, stated that this was a good point and asked whether ATPAC has addressed the ATC issue. He stated that we do not want to add further confusion by bringing ATC concerns into the ACF-IPG agenda item. Pierre Laroche, Transport Canada, voiced the concern that as this would only apply to US charts, it is possible that American pilots flying into Canada might not apply the standard ICAO compensation as is the standard practice in Canada. Tom Schneider, AFS-420, responded that it is the pilot's responsibility to be aware of the rules for the host country in which he/she is flying. JD Hood, Horizon Air, questioned the application of the AIM standard vice individual charts. Kel responded that the proposal will not take away the pilot's option to compensate manually as prescribed in the AIM. Valerie Watson, AJV-3, stated that the AeroNav Products IOU to bring publication of the ICAO table in the US TPPs and DOD FLIPs was discussed at the last IACC MPOC meeting. She stated that the MPOC members indicated they would support publication of the table and explanatory

language. This option will remain on hold pending a decision on what will be implemented. Mike again recommended the issue be closed and a new issue opened regarding how to implement the MITRE study. Tom Schneider, AFS-420, commented that the results of the study have produced significant progress toward a solution; however, much work remains to be done regarding implementation and applicable pilot and controller guidance. Due to lingering concerns from ALPA, NBAA, Delta, and others, it was decided that an ad hoc group be formed to re-validate the MITRE model used to identify at risk airports & procedures and focus on implementation issues. Hopefully, the group can reach a conclusion prior to the next ACF meeting. The following personnel signed up for the cold temperature altimetry ad hoc working group:

Kel Christianson,	AFS-470,	202-385-4702,	kel.christianson@faa.gov
Mike Cramer,	MITRE,	616-296-9210	mcramer@mitre.org
Steve Serur,	ALPA	703-698-4333	steve.serur@alpa.org
Marc Gittleman	ALPA (United)	571-723-7524	marc.gittleman@alpa.org
Rich Boll,	NBAA	316-655-8856	richard.boll@sbcglobal.net
Roy Maxwell,	Delta Air Lines	404-715-7231	roy.maxwell@delta.com
JD Hood,	Horizon Air	800-451-0222x44346	jd.hodd@horizonair.com

Editor's Note: *Anyone not listed above who wishes to participate should contact Kel Christianson, AFS-470.*

Status: AFS-470 and MITRE will coordinate the issue through the ad hoc work group and report at the next meeting. Item Open (AFS-470 and MITRE).

b. 96-01-166: Determining Descent Point on Flyby Waypoints (Originally: Definition of "On Course").

Kel Christianson, AFS-470 briefed that the following was submitted for publication on July 21, 2011 and will be published in the February, 2011 AIM:

New AIM paragraph (either 5-5-16a,11 or 5-5-16b):

11. Definition of "established" for RNAV and RNP operations.
An aircraft is considered to be established on-course during RNAV and RNP operations anytime it is within 1 times the required accuracy for the segment being flown. For example, while operating on a Q-Route (RNAV 2), the aircraft is considered to be established on-course when it is within 2 nm of the course centerline.

NOTE: Pilots must be aware of how their navigation system operates, along with any AFM limitations, and confirm that the aircraft's lateral deviation display (or map display if being used as an allowed alternate means) is suitable for the accuracy of the segment being flown. Automatic scaling and alerting changes are appropriate for some operations. For example, TSO-C129 systems change within 30 miles of destination and within 2 miles of FAF to support approach operations. For some navigation systems and operations, manual selection of scaling will be necessary.

(a) Pilots flying FMS equipped aircraft with barometric vertical navigation (Baro-VNAV) may descend when the aircraft is established on-course following FMS leg transition to the next segment. Leg transition normally occurs at the turn bisector for a fly-by waypoint (reference paragraph 1-2-1 for more on waypoints). When using full automation, pilots should monitor the aircraft to ensure the aircraft is turning at appropriate lead times and descending once established on-course.

(b) Pilots flying TSO-C129 navigation system equipped aircraft without full automation should use normal lead points to begin the turn. Pilots may descend when established on-course on the next segment of the approach.

Status: AFS-470 to track publication. Item Open Pending Publication (AFS-470).

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

Rich Boll, NBAA, briefed that the AFS-410-NBAA Transport Airplane Performance Planning (TAPP) Working Group is jointly addressing this issue and issue 09-02-287 with a goal of identifying and addressing applicable guidance materials necessary to inform pilots of the operational issues. The group met on August 30 and October 24 and has drafted language for Change 3 to FAA Order 8900.10 that will clear up guidance for inspectors regarding take-off obstacle rules. They have also queried the Society of Aircraft Performance and Operations Engineers (SAPOE) to look into airport data acquisition and reporting methodology and provide recommendations on changes and additional information that may be required. The group had hoped to have made better progress in obtaining manufacturer-provided all engine climb data, but that aspect is lagging. JD Hood, Verizon Air, requested a synopsis of the issue, which Rich provided. JD suggested that the issue title should be changed to delete the "Air Carrier" stipulation as he is concerned it may lead to additional requirements. Ted Thompson, Jeppesen, re-iterated that many departure procedures have climb gradients, but the pilot has no way of knowing whether the aircraft can meet those gradients. Rich added that once the performance data is known, the next step will be the question of how we show that the aircraft can meet the climb gradient. Roy Maxwell, Delta, agreed stating that early on in a departure, the pilot has no way of knowing whether the aircraft can meet the specified climb gradient over the earth. Kel Christianson noted that there has been no additional discussion by the PARC on this issue and AFS-400 is considering whether to request the PARC re-address the issue. The issue will remain open to be addressed by the TAPP.

Status: 1) AFS-410 and NBAA keep the ACF-IPG apprised of the TAPP progress, and 2) AFS-470 to decide whether to re-engage the PARC.
Item Open (AFS-410/NBAA and AFS-470).

d. 02-01-238: Part 97 “Basic” Minima; ATC DP Minima, and DP NOTAMs.

Bill Hammett, AFS-420 (ISI) briefed that all actions have been completed. SIDs and STARs were placed under the FDC NOTAM process effective June 30, 2011, as promulgated in Notice N JO 7930.91. Keywords were also introduced for FDC NOTAMs on this date. The Notice was cancelled and this policy included in Change 2 to FAA Order JO 7930.2M, which was effective on October 20. Bill recommended the issue be closed and the group agreed.

Status: CLOSED.

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

Bill Hammett, AFS-420 (ISI) briefed the following revision was published in Change 3 to FAA Order JO 7210.3W, Paragraph 10-2-2-4(f), which satisfies the Terminal Service Unit IOU:

"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. Additionally, 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."

Paul Eure, AJE-31, briefed that a similar change for en route facilities has cleared all hurdles and been forwarded for publication on July 26, 2012. Paul will track the change until published.

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

f. 03-01-247: Holding Pattern Criteria Selection

Bill Hammett, AFS-420 (ISI), briefed the following report as received from Steve Jackson, the newly assigned AFS-420 point person for holding issues: "The discussion of this item has lost focus on the basis for the original submission to the ACF. The original issue questioned the use of smaller holding protected airspace criteria in FAA Order 7130.3 for GPS holding vice that used for conventional holding over a fix or NAVAID. After analysis, AFS-400 issued a policy memorandum on June 17, 2004, specifying use of only conventional construction for RNAV (GPS) holding procedures. The climb in hold portion of the recommendation document is being addressed under issue 02-01-241 and was addressed in the AIM several years ago. The recommendations state that leg lengths must not be greater than the leg lengths for non-radar timed holding. Since all holding is based on conventional criteria at this time, this item is satisfied. The last recommendation is that positive course guidance (PCG) holding criteria be developed, but only after all IFR certified RNAV/GPS avionics are capable of positive course guidance (PCG) flight throughout the entry and entire circuit of the pattern, and in conformance with the containment criteria. That requirement is not yet satisfied by current equipment and no operational guidance has been written, nor is it anticipated in the near future. The original intent of this item has been achieved and AFS-420 recommends the item be closed." Bill added that advanced RNAV/RNP holding will be considered under issue 07-02-278. The group concurred with closure

Status: CLOSED..

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

Kel Christianson, AFS-470, reported that guidance updates have been approved by the AFS Document Control Board and were submitted into formal coordination on September 8, 2011. The guidance is currently in AFS-140. Kel clarified that all Part 91K operators will be able to apply for authorization. There will be no charting initiatives required as implementation will be accomplished through OpSpecs. AFS-470 will track the guidance until published and keep the ACF aware of the status.

Status: AFS-470 to track guidance until published. Item Open Pending Publication (AFS-470).

h. 05-01-259: Visual Climb Over Airport (VCOA).

Bill Hammett, AFS-420 (ISI), briefed the following from John Bordy, AFS-420 (ISI), the specialist addressing VCOA issues. "The discussion for this issue has diverged from the original submission and recommendations. Those original recommendations were: (1) *Publish a remain within distance in the Take-Off Minimums and (Obstacle) Departure Procedures* section of the TPP , and (2) *Revise the criteria to prohibit the use of sectorization.* AFS-420 does not support either recommendation for the following reasons: (1) The pilot is required to see and avoid all

obstacles until the aircraft crosses the specified point (normally the airport) at or above the specified altitude in accordance with the VCOA departure instructions. Publishing a "remain within distance" equal to the visual climb area radius wouldn't provide any additional measure of protection nor relieve the pilot in seeing and avoiding all obstacles. In addition, the intent of the current criteria is for the aircraft to remain in the vicinity of the airport as it climbs to the specified altitude. We should not encourage aircraft to routinely fly more than 3 NM from the airport during the visual climb by publishing distances of up to 7.3 NM. (2) Criteria are designed to detail construction that is permissible; it wouldn't be practical to also explicitly prohibit everything that is impermissible. Since the VCOA criteria do not describe any method to sectorize the areas, they cannot be constructed with sectors. The example at Meeker, CO, which was previously cited, was an unusual case that has since been corrected. It should be noted that discussion of the original issue has resulted in a change in VCOA definition for the Instrument Procedures Handbook requiring pilots to notify ATC prior to departure if a VCOA maneuver will be used. Order 8260.46 has also been revised to require a charted note specifying this provision. The discussions also prompted the development of new VCOA criteria for TERPS tentatively to be named Visual Climb to IFR Departure (VCID). The new criteria will be circulated for comment when complete. Since the concerns raised by the original issue have been addressed, AFS-420 recommends this issue be closed." Rich Boll, NBAA, questioned whether applicable pilot guidance in the AIM is affected. After discussion and a review of the AIM it was determined that the AIM language is satisfactory. The group agreed with closure.

Status: CLOSED.

i. **06-02-267:** Pilot Option to Use Standard Timing for RNAV IAP Holding Patterns

Tom Schneider, AFS-420, briefed the following report as received from Steve Jackson, the newly assigned AFS-420 point person for holding issues: "This was originally submitted as a pilot preference, or ease of flight issue. It would allow pilots who did not like the specified length of the holding pattern to apply timing rather than the specified length. Many RNAV(GPS) procedures have 4 NM legs specified. Timing on these patterns when utilized by faster aircraft, and/or a tail wind on the inbound leg could result in exceeding the specified distance outbound in order to make the inbound timing “good”, which is the subject of another ACF issue. We have seen in the past that when there is a blanket authorization to do something it is almost impossible to eliminate the practice. Additional chart notes or symbols would be required on future PBN based holding charts to indicate that distance really does mean distance, with no substitution allowed. We recommend closure of this item with continued compliance with current operational guidance on timed versus distance based holding." The group agreed with closure.

Status: CLOSED.

j. **07-01-269:** Diverse Vector Areas (DVAs).

Tom Schneider, AFS-420, briefed the following from John Bordy, AFS-420 (ISI), the specialist assisting in the development the DVA criteria: " Order 8260.56, *Diverse Vector Area (DVA) Evaluation,* was signed on August 2, 2011. This order contains DVA evaluation criteria, a new FAA Form 8260-15D on which to document the DVA evaluation, and the form completion instructions." Paul Eure noted that the Air Traffic guidance for DVAs that was included in FAA JO 7210.3, paragraph 3-9-5 is applicable to both terminal and en route facilities. Tom noted that these actions complete all criteria and policy requirements for DVA requests and development and recommended the issue be closed. Tom added that if NBAA or other

organizations desires DVAs be charted, this should be submitted as a new issue through the ACF Charting Group. Rich Boll, NBAA, stated that DVAs are currently being requested through the Regional Airspace and Procedures Teams (RAPTs); however, he has been advised by the Northwest Mountain Region RAPT that it could take up to two years to see development. Bill Hammett, AFS-420 (ISI) stated that procedure priority is the responsibility of the RAPT and beyond the scope of the ACF. Rich asked how the public could request a DVA. Art Blank, AJT-2A3, responded it must be accomplished through the ATC facility.

Status: CLOSED.

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

Tom Schneider, AFS-420, presented the following update from T.J. Nichols, the AFS-420 conventional TERPS criteria specialist: "A US-IFPP working group for 8260.3C was convened in July 2011. Revisions to Draft 8260.3C to incorporate the working group recommendations is in progress. The Working Group discussion focused on differences between RNAV and conventional turn limitations and whether RNAV substitution on conventional routes needed to be considered. AJV-3 participants expressed strong reservations about imposing RNAV restrictions on conventional procedures. The AFS-420 participant acknowledged the concerns, but emphasized that criteria needs to distinguish between RNAV and conventional. The most current draft of the proposed criteria for what will become Volume 1, paragraph 2-20a now reads:

a. Alignment.

(1) General. When the feeder route or portion of the feeder route meets “no-procedure turn” (NoPT) initial segment descent/alignment standards and is suitable for terminal operations, consider developing as a NoPT initial segment instead (See paragraph 2-30). When connecting to a course reversal segment, the area considered for obstacle evaluation is oriented along the feeder route at a width appropriate to the type of route; e.g., VOR, NDB, or RNAV. The area terminates at the course reversal fix, and is defined by a line perpendicular to the feeder course through the course reversal fix.

(2) Routes based on Conventional ground-based NAVAIDs. The angle of intersection between the feeder route course and the en route structure must not exceed 120 degrees. The angle of intersection between a feeder route course and the next segment (feeder/initial) course must not exceed 120 degrees except when connecting to a course reversal segment.

(3) RNAV routes. Apply current Performance-Based Navigation (PBN) standards.

Rick Dunham, AFS-420, briefed that the re-write of Order 8260.3C (TERPS) is approximately 80% complete. Brad Rush, AJV-3, re-stated the AeroNav Products concern over two standards; i.e., RNAV is restricted to 90 degrees, whereas conventional criterion allows 120 degrees. The issue will continue to be worked through the US-IFPP.

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

l. 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 newly assigned AFS-420 point person for holding issues: "This item is mislabeled as advanced performance of holding. A basic concept of distance based holding is to turn at the specified slant range distance. It is the only way to accomplish distance based holding with VOR/DME or basic GPS equipment. The pilot reads the slant range distance from the holding point and then starts a turn inbound. There is no operational guidance to adjust this distance for wind, like there is with timing. The distance the aircraft extends past the published distance is a function of tailwind on the inbound leg, and not related to the published distance and template size. Even if the large excursion past the specified turn point was acceptable in some holding template sizes, it would not be acceptable in the smaller templates. After some discussion, it appears that the recommendation to publish a maximum inbound leg distance, basically coding a shorter distance on the inbound leg than the published outbound leg length, is contradictory to the ACF item requesting that timing be allowed due to patterns being too short. The distance published is derived from the template being used and when there are conflicts with other operations, a shorter distance is specified and a portion of the template is not applied. Flying past the published distance is not only an obstacle issue if the aircraft exits the obstacle clearance area, but may also be an ATC issue if the area is being used to separate aircraft in holding from aircraft in adjacent holding or airways. Resolution of this issue is complex. Reevaluation of all the existing holding patterns to allow the anticipated excursion past the distance based on anticipated winds would take years. It could also have the unintended consequences of raising minima on approaches, having to move holding patterns further from the airport resulting in increased flight distance, and impacting airspace usage by ATC. One method to eliminate this issue is for crews to comply with existing operational guidance to turn when reaching the charted distance, manually if necessary. Additional operational guidance could be issued on this subject and is probably the most expeditious solution. Other solutions would involve changes to equipment that is also time consuming and expensive. This issue requires input from operational specialties and ATC." Rick Dunham, AFS-420, stated that an AFS-420 goal for 2012 is to publish a new holding criteria order to include PBN holding. Al Herndon, MITRE, noted that during the MITRE holding test, it was noted that some government charts specified timed holding whereas the Jeppesen charts specified distance. Ted Thompson, Jeppesen, responded that this problem exists on older charts because Jeppesen formerly did not receive the complete Form 8260-2. It has been resolved, but will take time to correct all charts. AFS-420 will address the issue in the revised holding criteria Order.

Status: AFS-420 to track the issue for further analysis and report. Item Open (AFS-420).

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

Tom Schneider, AFS-420, briefed that per AFS-450 Study Number DOT-FAA-AFS-450-73, it has been determined that simultaneous ILS operations may be temporarily continued if the glide slope goes out of service. However, to support CAST initiatives, vertical guidance must be available when developing all simultaneous procedures. Change 2 to Order 8260.19, paragraph 8-54m(7)(a) will delete the "LOC NA During Simultaneous Operations". However, the "LP and LNAV NA During Simultaneous Operations" note is retained until further notice. Rick Dunham, AFS-420, emphasized that this policy is for a temporary GS outage on one of the ILSs; at least one of the involved ILSs must have an operational GS. He added that the information will be advertised via ATIS and controller advisories. Brad Rush, AJV-3, briefed that AeroNav Services is working with the Terminal Service Unit to determine the applicability of the

current notes and adding RNAV notes. Brad added that Houston Intercontinental will be publishing simultaneous RNAV approaches on December 12. Gary McMullin, Southwest Airlines, asked if there is any impact on simultaneous PBN IAPs. Rick responded that there is pilot confusion as to what to fly when LNAV and LNAV/VNAV minimums are published; better pilot education is required. He added that the original studies indicated that vertical guidance was required for simultaneous operations; however, further study is underway to resolve vertical guidance requirements. Rich Boll, NBAA, asked the status of getting the current notes removed. Brad responded that AeroNav Services will start removing notes in the near future. Al Herndon, MITRE, stated that there are lots of Part 121 operators that do not have classic VNAV, but only advisory VNAV and some have no VNAV at all.

Status: AJV-3 to amend currently published procedures to remove the profile notes. Item Open (AJV-3B).

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

Janet Nichols, AFS-410, reported that the ATO Document Change Proposal (DCP) for Order JO 7110.65, paragraph 4-8-1, has been finalized to resolve the issue. There was a Safety Management Study (SMS) accomplished that resolved issues surrounding the proposed change and a Safety Risk Management Document (SRMD) written. Due to the significance of the changes, air traffic controller training was recommended. Paul Eure, AJE-31, stated that the training requirements have been completed and forwarded to the FAA National Training Organization to format and distribute. George Bland, AFFSA, asked whether the training requirements had been coordinated with DoD. Paul responded that he did not know. Rich Boll, NBAA, asked who is on the hook for reviewing and updating (if required) the applicable AIM guidance. Bill Hammett, AFS-420(ISI) responded that the OPR for AIM paragraph 5-4-7i is within AFS-400 and took an IOU to ensure that office was advised.

Editor's Note: *Post meeting research indicates the OPR is AFS-410. Also, the secretary was advised by Rich Boll, NBAA, that a draft of DCP for an AIM change that complements the changes to JO 7110.65, paragraph 4-8-1, is being circulated among the DCP 4-8-1 SRMD participants. The AIM DCP should be released soon.*

Status: 1) AJT-24 to track and report status of the proposed change to FAA Order JO 7110.65; and, 2) AFS-410 to review proposed changes to JO 7110.65 and make necessary changes to AIM 5-4-7i. Item Open (AJT-24 and AFS-410).

o. 09-02-286: Initial "Climb & Maintain" Altitude on Standard Instrument Departure Procedures

No progress has been made on this issue. Kyle McKee, AJV-14, reported that his office is awaiting the working group to form. Rich Boll, NBAA, reported that due to miscommunications between NBAA and AFS-410, the proposed AIM change was not forwarded for publication. Rich added that he will ensure the change is forwarded to Bruce McGray, AFS-410, immediately following the ACF-IPG meeting, which should allow all coordination to be complete prior to February 9, 2012, for publication in the August 2012 AIM.

Status: AJT-24, with support from AJE-31 and AJV-14, to form a sub group to study the issue and report; and, 2) AFS-410 to coordinate the draft NBAA AIM change. Item Open (AJT-28, AJE-31, AJV-14, and AFS-410).

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

Rich Boll, NBAA, briefed that the AFS-410 - NBAA Transport Airplane Performance Planning (TAPP) Working Group is jointly addressing this issue and issue 98-01-197 with a goal of identifying and addressing applicable guidance materials necessary to inform pilots of the operational issues. The group met on August 30 and October 24 and has drafted language for Change 3 to FAA Order 8900.10 that will clarify guidance for inspectors regarding take-off obstacle rules. They have also queried the Society of Aircraft Performance and Operations Engineers (SAPOE) to look into airport data acquisition and reporting methodology and provide recommendations on changes and additional information that may be required. The group had hoped to have better progress on the issue of having manufacturers provide all engine climb data, but that issue is lagging. JD Hood, Verizon Air, requested a synopsis of the issue, which Rich provided. Ted Thompson, Jeppesen, re-iterated that many departure procedures have climb gradients, but the pilot has no way of knowing whether the aircraft can meet those gradients Rich added that once the performance data is known, the next step is how can we show the data that the aircraft can meet the climb gradient. Roy Maxwell, Delta, agreed stating that early on in a departure, the pilot has no way of knowing whether the aircraft can meet the specified climb gradient over the earth. Kel Christianson noted that there has been no additional discussion by the PARC on this issue and AFS-400 is considering whether to request the PARC re-address the issue. The issue will remain open to be addressed by the TAPP.

Status: AFS-410 and NBAA keep the ACF-IPG apprised of the TAPP progress.
Item Open (AFS-410 and NBAA).

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

Tom Schneider, AFS-420, briefed that per the secretary's post-meeting note in the minutes of the last meeting, AFS-400 issued a policy memorandum on August 10, 2011, clarifying that LNAV/VNAV minimums must always be published whenever the glidepath qualification surface (GQS) is clear. A copy of the memo was included in the meeting folder and is attached here Tom recommended the issue be closed. Rich Boll, NBAA questioned that the memorandum appears to address the potential disconnect between Straight-In and Circling, but does not address the other related concern where LNAV/VNAV minimums (in accordance with applicable criteria) may be noticeably higher than LNAV-only. Bruce McGray, AFS-410, confirmed that it is confusing for pilots to see precision minimums that are excessively higher than the non precision minimums. Rich referred to the Harrisburg, PA RNAV (GPS) RWY 13 approach that prompted the original issue paper. The LNAV/VNAV DA is 392 feet higher than the LNAV and circling MDAs. Additionally, the visibility requirement is 5 miles, much higher than the LNAV and circling visibility requirements. Rich suggested we may be giving pilots the message that it is safer to make a circling approach rather than a vertically guided straight-in approach. JD Hood, Horizon Air, interjected that it is not a safety discrepancy adding that there are other locations with the same situation. He emphasized that his airline does not want to lose LNAV/VNAV minimums and capability. Rich responded that using baro-VNAV under OpsSpec C-073 will provide the same vertical guidance benefit to the lower LNAV MDA. Rich added that an alternative to his recommendation would be to provide an explanation for this minima in the AIM and Instrument Procedures Handbook (IPH). Tom Schneider asked whether this would resolve the issue for NBAA. Bruce McGray, AFS-410, took the action item to develop and coordinate proposed wording for the AIM and IPH with the concerned parties (NBAA, APA, and Horizon Air)

Status: AFS-410 to develop AIM and IPH language in concert with NBAA, APA, and Horizon Air. Item Open (AFS-410).

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

Tom Schneider, AFS-420, provided the following update that applies equally to this issue and 09-02-290 from Jack Corman, AFS-420, and Ron Brumback, AFS-420 (ISI): "Order 8260.19 will continue to require procedure specialists to list the type leg used in the design of the procedure on the associated 8260-series form. However, AFS cannot, at this time, mandate how manufacturers apply the designated code. The US-IFPP Database and Coding working group (WG) has been working on establishing an FAA coding standard. However, many US-IFPP initiatives have been halted because of the impact any regulatory guidance (standards) would have on the proprietary nature of existing navigation databases and systems. For example, the US-IFPP Coding WG did address the issues and drafted a letter to AVS for a formal tasking to develop regulatory guidance for coding. However, after the last Coding WG meeting, the letter was cancelled and there has not been any progress since then due to Nav Lean priorities. Until such a coding standard is established, PBN criteria will only contain example ARINC combinations that may or may not guarantee track compliance since all FMSs may not implement the codes in the same manner." There was much discussion on this issue centering around the fact that not all manufacturers code the path terminators specified on the procedure source. Brad Rush, AJV-3, emphasized that procedure developers know best the intent of the procedure design and document that on the source 8260-series form using ARINC 424 path terminators. If an FMS manufacturer can't accomplish the specified type path terminator, then they must get approval to deviate. Mike Cramer, MITRE, stated that there is an ARINC 424 standard that everyone has implemented; however, there are still differences. He questioned whether this means the FAA must set standards. Rick Dunham, AFS-420, stated that it is a difficult challenge to create criteria and policy that can be used by all. Basically the agency provides the information of what we want the aircraft to do, and expect industry to make it happen. Brad emphasized that ARINC 424 has allowable path terminators listed. If an FMS can't accomplish the maneuver as specified, then it is a Certification issue under AC 20-153. Rich Boll. NBAA, responded that all systems don't play buy the same rules and procedures that can't be flown should not be designed. Rich added that only two of NBAA's issues and recommendations were addressed by the recent changes to the .46D. The issue that remains open is the continued use of VA legs to a hard "climb & maintain" altitude. Certain combinations of FMS/GPS and Flight Guidance Systems do not sequence appropriately in this situation. Rich volunteered to draft language for the 8260.46D concerning the use of VA path terminators in conjunction with hard altitudes. Rich said the issue may be closed when this third concern is resolved,

Status: 1) NBAA to draft and forward language for the 8260.46D to AFS-420; and, 2) The Executive Director of the US-IFPP will keep the ACF apprised of the issue status. Item Open [NBAA and AFS-420 (US-IFPP)]).

s. 09-02-290 Call for Review and Revision of ARINC Leg Types Used in Construction of RNAV Departure Procedures

Tom Schneider, AFS-420, provided the following update that applies equally to this issue and 09-02-289 from Jack Corman, AFS-420, and Ron Brumback, AFS-420 (ISI): "Order 8260.19 will continue to require procedure specialists to list the type leg used in the design of the procedure on the associated 8260-series form. However, AFS cannot at this time mandate how

manufacturers apply the designated code. The US-IFPP Database and Coding WG has been working on establishing an FAA coding standard. However, many US-IFPP initiatives have been halted because of the impact any regulatory guidance (standards) would have on the proprietary nature of existing navigation databases and systems. For example, the US-IFPP Coding WG did address the issues and drafted a letter to AVS for a formal tasking to develop regulatory guidance for coding. However, after the last coding WG meeting, the letter was cancelled and there has not been any progress since then due to Nav Lean priorities. Until such a coding standard is established, PBN criteria will only contain example ARINC combinations that may or may not guarantee track compliance since all FMSs may not implement the codes in the same manner." Rich Boll, NBAA, emphasized that this issue was submitted with the goal of getting long-term standardized coding for RNAV departures. Tom Schneider, AFS-420, added that this issue is being addressed by the US-IFPP Departure Working Group as a revision to Order 8260.44.

Status: The Executive Director of the US-IFPP will keep the ACF apprised of the issue status. Item Open (AFS-420 (US-IFPP)).

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

Tom Schneider, AFS-420, briefed the following update as received from T.J. Nichols, the AFS-420 lead specialist for conventional TERPS criteria. "This issue was briefed at the June 2011 US-IFPP meeting where consensus was to reject the previous proposal. Participants acknowledged that there is an intentional difference in the alignment and dimensions of the different visual areas. Assuming that the standard visual area to the circling runway is suitable for its purpose, the US-IFPP participants agreed that it is illogical to impose a restriction on the circling approach based on the straight-in or offset analysis which, in many cases is based on a completely different final approach path. The recommendation was for Flight Standards to determine whether the current standard visual area provides adequate protection for the visual portion of a circling approach from the point the aircraft leaves CMDA. A request for AFS-450 analysis has been made to evaluate the adequacy of the standard visual area defined in Order 8260.3B, Volume 1, paragraph 3.3.2d. This request has been forwarded and is pending AFS-450 acceptance." Rick Dunham, AFS-420, briefed that the study is to determine whether the straight-in and circling surfaces can be harmonized. It will include checking historical aspects behind the current criteria. Hard data is necessary to support a criteria change. Rich Boll, NBAA, restated that it is difficult to understand how a straight-in RNAV (GPS) approach is not authorized at night, yet circling to that same runway is allowed. Steve Serur, ALPA, stated that years ago, some VASI system were locally installed but may not have had a commissioning flight inspection. He recommended checking the NASR database and if the VASI system has not been formally commissioned, then it shouldn't be used as a mitigation for night operations as it cannot be assumed the obstacle surface is clear. Tom added that there is a wider area analyzed for a straight-in approach to transition to runway centerline because of the wider final approach trapezoid and the fact that the final approach course may not be aligned with the runway centerline. The circling area is more narrow because the pilot is visual in the circling area and normally descends when aligned with the runway. Rick added that even though the pilot may be confused, the analysis is safe. He added there are more and more RNAV (GPS) approaches being published with a "NA at night if VASI inop" note.

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

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

Tom Schneider, AFS-420, briefed that Jim Rose, AFS-420, has completed VCOA guidance for the IPH. The revised guidance will add the phrase "Prior to departure, pilots are required to notify ATC when executing the VCOA" to the existing guidance. Bruce McGray, AFS-410, stated that they are re-writing AIM guidance for departure procedures and ODPs will be addressed in toto. Every effort will be made to complete this in time for the February, 2012 cutoff for the August 2012 AIM. Danny Hamilton, AFS-460, briefed that AFS-460 is still regularly receiving requests from ATC facilities to cancel VCOAs. Rich Boll stated that loss of the VCOA option on ODPs at airports with high climb gradients can sometimes cause pilots to lose IFR departure capability. Paul Eure, AJE-31, advised Rich that if he would provide a listing of airports of concern, he would coordinate to have the VCOAs re-instated. Terry Pearsall, AJT-28 recommended a Mandatory Briefing Item (MBI) be issued for terminal facilities. Bill Hammett, AFS-420 (ISI) mentioned that the ATO had published controller guidance for VCOAs in the February 2006 Air Traffic Bulletin (http://www.faa.gov/air_traffic/publications/bulletins/media/atb_feb_06.pdf). Much of this material may be of use in the MBI.

Status: 1) AFS-420 track applicable IPH guidance until published; 2) AFS-410 to Develop AIM and AIP educational material; 3) AJT-28 to develop a MBI for terminal facilities; and 4) NBAA and AJE-31 to work jointly to re-establish VCOAs at selected mountainous airports. Item Open (AFS-420; AFS-410; AJT-28; and, NBAA and AJE-31).

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

Tom Schneider, AFS-420, briefed the following update as received from John Bordy, AFS-420 (ISI), the specialist assisting in addressing the ATC response as endorsed by Jack Corman, the AFS-420 lead RNAV criteria writer: "The latest iteration of the draft Document Change Proposal (DCP) to Order 7110.65, paragraph 4-8-1 requires ATC to radar monitor any "direct-to" application associated with a clearance for an RNAV (RNP) approach. This requirement will be valid for all RNAV (RNP) approaches, without regard to the RNP value of the segment associated with the fix used for the "direct-to" clearance. AFS-420 is satisfied with the language of the DCP and recommends closure of this item". Terry Pearsall, AJT-28 briefed that the Safety Risk Management Decision (SRMD) was uncontested. The group consensus was to leave the issue open until published in JO 7110.65. AJT-24 to track the DCP change until published

Status: AJT-24 to track the DCP change. Item Open Pending Publication (AJT-24).

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

Kurt Swanick (FAA AFS-240) reported that the issue is expected to be reviewed within the ATA CNS/ATM Task Force. According to Kurt, the original proponent, Lev Pritchard, APA, who was not present, expressed the desire to leave this agenda item open until next spring's ACF 12-01 meeting. Bill Hammett, AFS-420 (ISI), who is also recording secretary for the ACF-IPG, expressed concern that an issue should not be worked by two different groups. History has proven that this causes miscommunication and duplication of effort. Bill recommended that since the issue was presented before the ACF, that it be addressed by an ad hoc working group of the ACF-IPG. Participants from the CNS Task Force are welcome to participate. Alternatively, the issue should be closed from the ACF-IPG and worked entirely by the CNS Task Force. Al

Herndon, MITRE, stated that he serves as recording secretary of the CNS Task Force and has no knowledge of a current working group to address this issue. Ted Thompson, Jeppesen, stated that as someone with experience in both the ACF and CNS Task Force, the ACF has a better record for working and tracking issues to resolution. He added that Lev had requested pilot education on this issue and Jeppesen is considering a briefing bulletin. The group consensus was to keep this issue on the ACF-IPG agenda in an 'inactive' status. open for tracking purposes only. The issue will be addressed by the ATA CNS/ATM Task Force who will direct their recommendations to the ACF IPG for consideration.

Status: Issue inactive to be addressed/tracked by the CNS/ATM Task Force. Item Open (CNS/ATM Task Force).

5. New Business:

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

New issue presented by Bruce McGray, AFS-410. The issue asserts that the current note used by the FAA to allow a NoPT routing when arriving at an IAF via airways is confusing. Some pilots correctly interpret the note as requiring the aircraft to be navigating via an airway. Other pilots interpret the note as NoPT is allowed from anywhere within the sector described by the applicable airway radials. A good discussion ensued. Bill Hammett, AFS-420 (ISI) stated that the current note; e.g., "NoPT for arrival on ABC VOR airway radials 235 CW 317" has been the standard since the early 1980s. He believes it odd that the note is only causing confusion now; perhaps pilot education could address the issue better than making changes to charts. Bill added that if a note change is made, it will take years to revise all the current charted notes. Paul Eure, AJE-31, stated that with the current proposal to allow ATC to clear aircraft direct to an IAF or IF and for a straight-in approach, the note may be a moot point. Ted Thompson, Jeppesen, stated that back in the early '80s, Jeppesen established one standard for charting these notes. The crux of the discussion is that the current note using the terms "radials" and "clockwise" as well as the Jeppesen depiction tend to support a sector interpretation. If the intent is to be via the airway, then the airway should be specified and not the associated radials, e.g., V1, V475, and V34. It was noted that if the airway is specified, then the direction of flight would also have to be specified to ensure turn angle requirements are not exceeded; e.g., "V1 northeast bound". Brad noted that some VORs have as many as 8 airways that qualify for NoPT arrivals and specifying a large number of airways and direction of flight could cause some lengthy notes. John Moore, AJV-3B, recommended that the AFS-400 Human Factors Specialist assess the issue. Bruce McGray took the IOU to accomplish this coordination.

Status: AFS-410 to coordinate the issue through the AFS-400 Human Factors Specialist and report. Item Open (AFS-410).

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

New issue presented by Kevin Allen, US Airways, expresses concern that pilots flying converging ILS approaches may engage the autopilot LNAV mode for the missed approach and subsequently fly an incorrect missed approach procedure. The ILS in the FMS boxes allows coding of only one missed approach procedure and that is normally the one associated with the standard ILS approach. The missed approach for the standard ILS and the Converging ILS approaches differ and the possibility exists that if a pilot flying a Converging approach should use autopilot LNAV mode for the missed approach, he will incorrectly fly the standard missed approach routing. When the Converging approaches were first introduced, this problem did not

exist because all aircrews "hand flew" the missed approach. Kevin recommended that FAA Order 7110.98A be updated to allow for a revised naming convention so the FMS boxes can be modified to allow for more than one ILS approach per runway. Brad Rush, AJV-3B, briefed that he has forwarded this same issue to the US-IFPP as an agenda item recommending that all ILS variations have suffixes in the procedure title. Terry Pearsall, AJT-28, added that this should also be done for LDA procedures. Tom Schneider, AFS-420, stated that there is emphasis on controller phraseology when Converging approaches are used and pilots should be aware of the differing missed approach procedures. Gary McMullin, Southwest Airlines, endorsed the use of suffixes to clearly indicate to pilots that the procedures are separate. Ted Thompson, Jeppesen, added that there are about 45 Converging approaches in the U.S. and none outside the U.S. He also endorsed using a suffix and recommended retaining "Converging" in the IAP title and controller phraseology. John Moore, AJV-3B, stated that keeping "Converging" in the procedure title is against ICAO and, if you are using a suffix, why do you need both. It was mentioned that not all users are capable of using the suffix codes. Kevin responded that, in those cases, the crews would have to “hand fly” the procedure that was NOT included in their navigation database, something they’re already trained to do. Tom Schneider, AFS-420, concluded the discussion by noting that Brad Rush has forwarded the issue to the US-IFPP for consideration.

Status: The Executive Director of the US-IFPP will keep the ACF apprised of the issue status. Item Open [AFS-420 (US-IFPP)]).

6. Next Meeting: ACF Meeting **12-01** is scheduled for **April 24-26, 2012** with the **Air Line Pilots Association (ALPA)**, Herndon, VA as host. Meeting **12-02** is scheduled for **October 23-25, 2012** with host TBD.

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.

7. Attachments (2):

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

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 11-02

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-470 and MITRE	**92-02-110** (Cold Weather Altimetry)	Jointly coordinate the issue through the ad hoc working group and report.
AFS-470	**96-01-166** (Descent Point on Flyby Waypoints. Originally "on course")	Track proposed AIM change until published.
AFS-470 AFS-410 and NBAA	**98-01-197** (Air Carrier Compliance With Climb Gradients)	AFS-470: Decide whether to re-engage the PARC on the issue. AFS-410 and NBAA: Report on the Transport Airplane Performance Planning (TAPP) Working Group activity.
AFS-470	**04-02-258** (VNAV IAPs using DA(H) and OpSpec C073)	Continue to track guidance changes until published.
AFS-420 (US-IFPP)	**07-01-270** (Course Change Limitation Notes on IAPs)	The Executive Director of the US-IFPP to keep the ACF apprised of the issue status.
AFS-420	**07-02-278** (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	Track the issue for further analysis.
AJV-3B	**09-01-282** (Glide Slope Intercept Altitudes on ILS Parallel Approaches)	Remove currently published ILS intercept notes and report progress.
AJT-28 AFS-410	**09-01-284:** (Question of TERPs Containment with Late Intercepts)	AJT-24: Track and report status of proposed changes to Order JO 7110.65, paragraph 4-8-1 AFS-410: Review proposed changes to JO 7110.65 and make necessary changes to AIM paragraph 5-4-7i.
AJT-28 AJE-31 AJV-14 AFS-410	**09-02-286:** (Initial "Climb & Maintain" Altitude on SIDS)	AJT-28, AJE-31, and AJV-14: To form a sub group to address the issue. AFS-410: Review and coordinate the NBAA draft AIM language proposal.
AFS-410 and NBAA	**09-02-287:** (Operator Training Concerning OEI Contingency Planning For IFR Departure Procedures	Jointly work the issue through the Transport Airplane Performance Planning (TAPP) working group in conjunction with issue 98-01-197 and report progress.
AFS-410	**09-02-288:** (VNAV Minimums vs. Circle to Land)	Develop AIM and IPH language in concert with NBAA, APA, and Horizon Air.
NBAA AFS-420 (US-IFPP)	**09-02-289:** (Use of Leg Combinations and Altitude Constraints on RNAV Departure Procedures)	NBAA: Draft and forward language for Order 8260.46D to AFS-420. AFS-420 (US-IFPP): The Executive Director of the US-IFPP will keep the ACF apprised of the issue status.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 11-02

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-420 (US-IFPP)	**09-02-290:** (Call for Review and Revision of ARINC Leg Types Used in Construction of RNAV DPs)	The Executive Director of the US-IFPP will keep the ACF apprised of the issue status.
AFS-420 and AFS-450	**09-02-291:** (Straight-in Minimums NA at Night)	Jointly continue to work the issue through the US-IFPP and report.
AFS-420 AFS-410 AJT-24 AJE-31 and NBAA	**10-01-292:** (Removal of VCOA Option at Mountainous Airports)	AFS-420: Track IPH guidance until published. AFS-410: Develop pilot VCOA guidance for the AIM and AIP. AJT-28: Develop a MBI for terminal facilities. AJE-31 and NBAA: Work jointly to re-establish VCOAs at selected mountainous airports
AJT-28	**10-01-294:** (RNP SAAAR Intermediate Segment Length and ATC Intervention)	Track the DCP change to JO 7110.65, paragraph 4-8-1 through publication.
ATA CNS/ATM Task Force AFS-240	**11-01-296:** (Magnetic Variation Differences and Flight Management Systems)	ATA CNS/ATM Task Force: Work the issue and report conclusions to the ACF-IPG. AFS-240: Monitor ATA CNS Task Force activity on the issue and report progress.
AFS-410	**11-02-297:** (Airway "NoPT" Notes on IAPs)	Coordinate issue through the AFS-400 Human Factors Specialist
AFS-420 (US-IFPP)	**11-02-298:** (Converging ILS Coding and Chart Naming Convention)	The Executive Director of the US-IFPP to keep the ACF apprised of the issue status.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
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AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 11-02

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AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 11-02

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