

May 16, 2011

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) held on April 26, 2011. The meeting was hosted by Tetra Tech AMT at 1515 Wilson Blvd, Suite 1100, Arlington, VA 22209. 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:

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 **11-02** is scheduled for **October 25-27, 2011** with the **FAA Aeronautical Navigation Products Office, SSMC4, 1305 East-West Highway, Silver Spring, MD 20910** as host. Meeting **12-01** is scheduled for **April 24-26, 2012** with the **Air Line Pilots Association (ALPA), 535 Herndon Parkway, Herndon, VA** tentatively scheduled as host.

Please note that **meetings begin promptly at 8:30 AM**. Dress is business casual. Please forward new agenda items for the 11-02 IPG meeting to the above addressees not later than October 7, 2011. 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 11-01

Tetra Tech AMT - Arlington, VA.

April 26, 2011

1. Opening Remarks:

Mr. 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 April 26, 2011. Tetra Tech AMT (formerly Advanced Management Technology, Inc.) hosted the meeting at their Arlington, VA facility. John Moore of AeroNav Products made welcoming and administrative comments on behalf of Tetra Tech AMT. 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 10-02, which was held on October 26, 2010 were electronically distributed to all attendees as well as the ACF-IPG Master Mailing List on November 23, 2010. One comment was received from Mark Ingram, ALPA, requesting a correction to issue 92-02-110. The minutes were revised and a corrected version was distributed at the meeting and posted on the ACF-IPG web site. No further comments were received; therefore, the revised minutes are accepted as revised.

3. Briefings:

- Leo Eldredge, AJW-913, presented a briefing on GPS Jamming/Interference. The briefing was informative in making the audience aware of the vulnerability of GPS, especially LAAS, to interference by commercially available mobile GPS jammers (A.K.A. Personal Privacy Devices). This is especially noticeable at airports where the LAAS antenna is near a major highway; e.g., Newark, NJ and the New Jersey Turnpike. A copy of Leo's briefing slides is included here .

- Lev Pritchard, APA, presented a briefing on ATC assigned speeds to the final approach fix (FAF) that are contrary to stabilized approach criteria. Lev asserted that ATC is routinely assigning 180 knots to the FAF, which causes two problems. It creates difficulty in establishing a continuous, stabilized descent from the final approach fix to landing. AC120-71A, Appendix 2 defines a *Stabilized Approach Concept*, as one in which the aircraft should be in landing configuration by 1000 ft AGL and stabilized by 1000 ft AGL in IMC conditions and 500 ft AGL in VMC. The second problem is that a desire to comply with speed requests all the way to the FAF leads to expensive flap overspeed inspections. Lev is recommending a change to JO 7110.65, *Air Traffic Control*, to revise controller guidance. APA will present this issue before ATPAC at their next scheduled meeting. A synopsis of Lev's briefing is included here .

- Brad Rush, AJV-3B, presented a briefing to announce a new AeroNav Products URL (http://www.faa.gov/air_traffic/flight_info/aeronav/). A copy of Brad's briefing slides is included here . Mitch Scott asked whether a comparison chart will be available whenever a standard RNP chart is revised. Brad responded yes.

- John Collins, CFI, CFII, MEI was scheduled to give a briefing on advisory vertical guidance for RNAV Localizer Performance (LP) approaches; however, was unable to attend due to flight cancellations.

4. **Old Business** (Open Issues):

Prior to opening the discussion of open issues, Tom Schneider, Chair of the ACF-IPG, briefed that he had made a request at the last US-IFPP meeting that all applicable working groups add ACF-IPG open recommendations to their meeting agendas and record progress independently by issue number in their minutes. Since many open issues are dependent on the US-IFPP, this will provide a better methodology for tracking progress. This progress will be consolidated from all applicable working groups, briefed at the full panel meetings and also included in the final US-IFPP meeting minutes. Extracts from the final US-IFPP meeting minutes will then be included in the ACF-IPG discussion and minutes. The US-IFPP Executive Director had no objections and agreed this would commence at future meetings.

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

Kel Christian, AFS-470, briefed the results of the MITRE study thus far. The study examined 10,328 approach segments considered at potential risk. The study reveals that there are 41 airports with 60 approaches at potential risk where the altitude error could exceed ROC. The risk is considered excessive if the condition exists more than 1% of the time. The proposed solution is to publish a minimum temperature at which ROC will not be exceeded and annotate the procedure accordingly. It was noted that the study did not include Alaska or precision approaches. Kel added that additional studies are continuing; however, MVA and MIA charts are not included as they are not under AFS-470 purview. Steve Serur, ALPA, noted that, Mark Ingram, also an ALPA representative, had expressed concern at previous meetings over the fact that the MITRE study only indicates there is a problem when **all** ROC is lost. It appears that the current concept will apply a temperature correction that compensates to the zero ROC point; if so, this concept is flawed. Mitch Scott, Continental Airlines, asked what is the long term goal of the study. Rick Dunham, AFS-420, responded that the current goal is to publish a minimum temperature at which point the procedure is no longer authorized vice having pilots do the math; continuing analysis will include additional factors. Rick added that until a final solution is reached, AFS does not want to impede pilots from applying current AIM guidance and the associated correction table. Steve asked what weather data was considered. Kel responded the analysis was based on the coldest temperature recorded in the last 5-years. Rich Boll, NBAA, stated that the aforementioned 1% risk factor was misleading. He stated that any time the temperature gets cold, the risk is there. FAA needs to move past the study and get the information and procedures before the pilot. He recommended publishing the ICAO table that is in the AIM in the front of the TPP and tell the pilots to apply it. Additionally, he recommended publishing corresponding guidance in FAA Order JO 7110.65 so controllers are aware of what it means when a pilot states he is applying cold temperature altitude corrections. Ted Thompson, Jeppesen, advised that Jeppesen does publish the table in its Airway Manual. Brad Rush, AJV-3B, expressed support for the TPP recommendation if the table is to be a part of the overall solution. JD Hood, Horizon Air, stated the MITRE study may cause confusion by indicating no correction is required at a temperature that, according to AIM guidance, DOES require altitude compensation. JD also supports developing guidance in the 7110.65 to ensure controller awareness of the AIM guidance. Paul Eure, AJE-31, agreed that pilots and controllers must be on the same page. He also stated that the ATO is revising MVA and MIA policy to consider cold temperature adjustments when considering rounding down ROC. These initiatives are expected to be complete this Summer.

Status: 1) AFS-470 will continue to work the issue with MITRE support through the US-IFPP; and, 2) AJV-3B to bring publication of the correction table before the IACC for consideration.

Item Open (AFS-470 and AJV-3B).

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

Bruce McGray, AFS-410, briefed that all comments are in and AFS-470 is finalizing the AIM language. It is expected to be submitted in August for publication in February 2012.

Status: AFS-410 and 470 to develop AIM and other educational material.

Item Open (AFS-410 and AFS-470).

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

Bruce Mc Gray, AFS-410, briefed that this issue is being worked jointly with 09-02-287. It has been a difficult year to make progress on either issue. Bruce experienced significant health problems and the Division lost its subject matter expert for Part 25 and 91K users. He has been working with Rich Boll, NBAA, and Roy Maxwell, Delta, to expand the scope of the issues. He and Rich are trying to schedule a conference between FAA & industry concerning aircraft performance in the January-March 2012 timeframe. It is hoped that this conference will define the issue and develop the necessary training program. Bruce recommended the issue be placed on temporary hold pending this conference.

Status: 1) AFS-470 to continue to monitor PARC progress and report; and, 2) AFS-410 and NBAA actions on temporary hold until the April 2012 meeting.

Item Open (AFS-470 and AFS-410/NBAA).

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

Bill Hammett, AFS-420 (ISI) briefed that the ATO has slipped Change 2 to FAA Order JO 7930.2 from March 10 to June 2. The change will place SID and STAR NOTAMs under the FDC format as well as implement keywords for FDC NOTAMs. Flight Standards is working the change closely with Brad Rush, AJV-3B. AeroNav Products implementation of the new policy will be via internal policy memo until Change 1 to FAA Order 8260.19E, which will formally support this initiative for instrument flight procedure (IFP) NOTAMs, is published. It is up to the ATO to implement the policy to convert STAR NOTAMs from NOTAM D to FDC. The change will also introduce keywords to facilitate parsing IFP NOTAMs. The following keywords will be used for instrument flight procedure NOTAMs: "IAP" for Instrument Approach Procedure; "ODP" for Obstacle Departure Procedure; "SPECIAL" for Special Instrument Flight Procedure (regardless of type); "SID" for Standard Instrument Departure; "ROUTE" for Air Traffic Service Routes (Victor, Jet, Q and T); "STAR" for Standard Terminal Arrival and "VFP" for Visual Flight Procedure. The keyword "CHART" will be used to promulgate corrections to US government aeronautical charts. The issue will remain open until the applicable Orders are published.

Editor's Note: Immediately following the meeting, I received word that Air traffic was again postponing Change 2 implementation. The new target date is 1 July, however, that date may also be adjusted due to software programming.

Status: **Item Open Pending Publication (AJV-2 and AFS-420).**

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

Doug Marek, AJT-24, briefed that guidance has been completed for terminal facilities and will be published in Change 3 to FAA Order JO 7210.3, *Facility Operation and Administration*, on August 25. Paul Eure, AJE-31, briefed that his office is presently in the reconciling comments stage of the DCP process for guidance for en route facilities.

Status: 1) AJT-24: [Item Open Pending Publication \(AJT-24\)](#), and 2) AJE-31 will continue to develop en route guidance for Order 7210.3. [Item Open \(AJE-31\)](#).

f. 03-01-247: Holding Pattern Criteria Selection and Holding Pattern Climb-in-Hold Issues.

Tom Schneider, AFS-420, briefed the following from Steve Jackson, AFS-420, who is following the study: "Currently AFS has MITRE doing a survey of manufacturers to obtain and validate the assumptions to be used in the AFS-450 model. We also added several questions to a questionnaire going to helicopter avionics manufacturers concerning holding that will provide information for fixed-wing as well." No response was received from AFS-450.

Status: AFS-450 to continue ASAT/simulator analysis and report. [Item Open \(AFS-450\)](#).

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

Kel Christiansen, AFS-470, reported that applicable changes to Air Carrier OpSpec C073 authorizing use of DA(H) in lieu of MDA are in final stages of review and approval. He also advised that Advisory Circular AC 120-108, *Continuous Descent Final Approach*, has been updated and was effective January 20, 2011. He added that this effort included input from Jeppesen with regard to the "DA in lieu of MDA" reference notes that are included in the profile view of applicable Airway Manual approach charts. Kel added that other than an exception for Part 91K there are no plans to allow Part 91 operators to use DA in lieu of MDA. The rationale to allow Part 91K is that they also operate under Part 135. Rich Boll, NBAA, questioned this and asked why Part 91 with large transport aircraft could not be authorized the operation under a LOA. John Swigert responded that the FAA does not have plans to expand or exert additional oversight to include Part 91 operators for using a DA maneuver in lieu of MDA. Rich questioned what oversight would be necessary under an LOA. John responded that the decision had been made, Part 91 (except for Part 91K) is off the table.

Status: AFS-470 to continue to develop guidance and keep the ACF-IPG updated. [Item Open \(AFS-470\)](#).

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

Tom Schneider, AFS-420, briefed the following update as provided by John Bordy, AFS-420 (ISI), the specialist responsible for developing the new criteria for evaluating a VCOA (which will be re-named Visual Climb to IFR Departure (VCID) per ACF recommendation): "The new criteria is expected in 2011. A meeting was held between AFS-420 and AJV-3 on March 28 to discuss the draft VCID order. Based on comments received during the meeting, the draft VCID order is being revised. Estimated date for completion of the new revision is April 29, 2011.

Once complete, the revised criteria will be submitted to AFS-460 and AJV-3 for informal review and to solicit final comments before presenting the draft to the US-IFPP Departure Working Group. A target date for posting the draft on the US-IFPP DWG online forum is June 1, 2011. A date for convening the DWG to discuss the order is to be determined." Tom also briefed the following proposed VCOA definition change from Jim Rose, the AFS-420 OPR for the Instrument procedures Handbook (IPH):

"A visual climb over airport (VCOA) is a departure option for an IFR aircraft, operating in VMC equal to or greater than the specified visibility and ceiling, to visually conduct climbing turns over the airport to the published "climb-to" altitude from which to proceed with the instrument portion of the departure. A VCOA is a departure option developed when obstacles, greater than 3 SM, require a CG of more than 200 FPNM. These procedures are published in the Take-Off Minimums and (Obstacle) Departure Procedures section of the TPP. [Figure 1-31] Prior to departure, pilots are required to notify ATC when executing the VCOA."

Lastly, Tom added that Change 1 to Order 8260.46, which was effective on April 14, 2011 requires all future ODPs with a VCOA option to be annotated "When executing VCOA, notify ATC prior to departure". Currently published ODPs will receive this annotation as reviewed.

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

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

Tom Schneider, AFS-420, briefed the following from Steve Jackson, AFS-420, who is following the study: "Currently AFS has MITRE doing a survey of manufacturers to obtain and validate the assumptions to be used in the AFS-450 model. We also added several questions to a questionnaire going to helicopter avionics manufacturers concerning holding that will provide information for fixed-wing as well." No response was received from AFS-450.

Status: AFS-450 to continue ASAT/simulator analysis and report. Item Open (AFS-450).

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

Tom Schneider, AFS-420, briefed the following from John Bordy, AFS-420 (ISI), the specialist responsible for developing the DVA criteria: "The draft DVA criteria were coordinated through the formal coordination process and comments received on March 28, 2011. The comments included a non-concur from Mission Support Services, specifically AJV-3. As of April 21, 2011, the comments and the specialist's disposition to the comments are being reviewed by the AFS-420 criteria lead. Once the review of the comments and proposed disposition is complete, AFS-420 will attempt to mitigate the non-concur." Rich Boll, NBAA, asked whether DVA publication was still on the table. Tom responded yes, but charting will not be addressed until after criteria are developed. Paul Eure, AJE-31, briefed that expanded guidance for terminal facilities requesting a DVA were published in Change 2 to FAA Order JO 7210.3 (paragraph 3-9-5). A DCP to incorporate en route guidance is in work.

Status: 1) AFS-420 will continue to track DVA criteria development through the US-IFPP, and 2) AJT-28, jointly with AJE-31, will continue to track controller guidance for radar vectoring departures at airports where an ODP is established. Item Open (AFS-420, AJT-28, and AJE-31).

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: The issue has been discussed at the US-IFPP and draft Order 8260.3C includes the following text: "The angle of intersection between a feeder route course and the enroute 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." A US-IFPP working group for 8260.3C will be convened in May/June 2011 to begin the directive change process. Brad Rush, AJV-3B, pointed out that the criteria for RNAV procedures is 90 degrees. Tom stated the criteria is not final and is still open through the US-IFPP.

Status: AFS-420 will continue to track the issue through the US-IFPP.

Item Open [AFS-420 (US-IFPP)].

l. 07-01-272: Using an ODP in lieu of the Published Missed Approach Procedure.

Bill Hammett, AFS-420 (ISI), briefed that the AIM change, adding a note to paragraph 5-4-21h, to resolve this issue was published on March 10, 2011. A copy of the change as published was provided all attendees and is provided below:

5-4-21h. A clearance for an instrument approach procedure includes a clearance to fly the published missed approach procedure, unless otherwise instructed by ATC. The published missed approach procedure provides obstacle clearance only when the missed approach is conducted on the missed approach segment from or above the missed approach point, and assumes a climb rate of 200 feet/NM or higher, as published. If the aircraft initiates a missed approach at a point other than the missed approach point (see paragraph 5-4-5b), from below MDA or DA (H), or on a circling approach, obstacle clearance is not necessarily provided by following the published missed approach procedure, nor is separation assured from other air traffic in the vicinity.

In the event a bailed (rejected) landing occurs at a position other than the published missed approach point, the pilot should contact ATC as soon as possible to obtain an amended clearance. If unable to contact ATC for any reason, the pilot should attempt to re-intercept a published segment of the missed approach and comply with route and altitude instructions. If unable to contact ATC, and in the pilot's judgment it is no longer appropriate to fly the published missed approach procedure, then consider either maintaining visual conditions if practicable and reattempt a landing, or a circle-climb over the airport. Should a missed approach become necessary when operating to an airport that is not served by an operating control tower, continuous contact with an air traffic facility may not be possible. In this case, the pilot should execute the appropriate go-around/missed approach procedure without delay and contact ATC when able to do so.

Prior to initiating an instrument approach procedure, the pilot should assess the actions to be taken in the event of a bailed (rejected) landing beyond the missed approach point or below the MDA or DA (H) considering the anticipated weather conditions and available aircraft performance. 14 CFR 91.175(e) authorizes the pilot to fly an appropriate missed approach procedure that ensures obstruction clearance, but it does not necessarily consider separation from other air traffic. The pilot must consider other factors such as the aircraft's geographical location with respect to the prescribed missed approach point, direction of flight, and/or minimum turning altitudes in the prescribed missed approach procedure. The pilot must also consider aircraft performance, visual climb restrictions, charted obstacles, published obstacle departure procedure, takeoff visual climb requirements as expressed by nonstandard takeoff

minima, other traffic expected to be in the vicinity, or other factors not specifically expressed by the approach procedures.

Bill recommended the issue be closed and the group agreed.

Status: Item Closed.

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

Tom Schneider, AFS-420, briefed the following from Steve Jackson, AFS-420, who is following the study: "Currently AFS has MITRE doing a survey of manufacturers to obtain and validate the assumptions to be used in the AFS-450 model. We also added several questions to a questionnaire going to helicopter avionics manufacturers concerning holding that will provide information for fixed-wing as well." No response was received from AFS-450.

Status: AFS-450 to continue ASAT/simulator analysis and report. Item Open (AFS-450).

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

Bill Hammett, AFS-420 (ISI), briefed that AFS-450 estimates that the results of the study to determine whether vertical guidance is required for close simultaneous operations will be available July 15, 2011. Brad Rush, AJV-3B, advised that he had provided Rich Boll, NBAA, a listing of the locations that had simultaneous approach operations. Rich, in turn, began coordinating procedure amendments through the applicable RAPT to alleviate the altitude deviations. The Chair of the Great Lakes RAPT advised that the "track glideslope" issue was being addressed by the NAPT. Brad added that when his organization attempted to temperature correct the fixes on the LAX approaches, they were advised to keep the fixes exactly as currently located with the requested minimum crossing altitudes. Bruce McGray, AFS-410, briefed that the current note in the simultaneous ILS approach profiles will be removed. The AIM guidance published under issue 09-01-283 mandates that pilots fly the approach vertical profile as published. He added that an AFS Information For Operators (InFO) emphasizing this fact was published on March 28, 2011. A copy of the InFO is included here  Ted Thompson, Jeppesen, commented about the impact to chart production and asked for the time frame and number of charts to be amended. Brad responded that the note will be eliminated via P-NOTAMs, hopefully over the next 6-months. Rich emphasized that with the summer season and hot weather approaching, the notes should be deleted ASAP to preclude further pilot deviations. Brad added that simultaneous approach policy needs to be removed from Order 8260.3 (TERPS). Rick Dunham, AFS-420, responded that his Branch agrees and this recommendation is already being addressed through the US-IFPP.

Status: 1) AFS-420 to revise Order 8260.19 to remove the requirement for the "intercept glideslope" note; 2) AJV-3 to amend currently published procedures to remove the profile notes; note. Item Open (AFS-AFS-420 and AJV-3B).

o. 09-01-283: Intermediate Fix Altitudes & ILS Glide Slope

Bill Hammett, AFS-420 (ISI), briefed that the recommended AIM change to add an explanatory note below paragraph 5-4-5-b4 to resolve this issue was published on March 10, 2011. A copy of the change as published was provided all attendees and is included below:

Note 2. *The ILS glide slope is intended to be intercepted at the published glide slope intercept altitude. This point marks the PFAF and is depicted by the "lightning bolt" symbol on U.S. Government charts. Intercepting the glide slope at this altitude marks the beginning of the final approach segment and ensures required obstacle clearance during descent from the glide slope intercept altitude to the lowest published decision altitude for the approach. Interception and tracking of the glide slope prior to the published glide slope interception altitude does not necessarily ensure that minimum, maximum, and/or mandatory altitudes published for any preceding fixes will be complied with during the descent. If the pilot chooses to track the glide slope prior to the glide slope interception altitude, they remain responsible for complying with published altitudes for any preceding stepdown fixes encountered during the subsequent descent.*

Bill recommended the issue be closed and the group agreed.

Status: Item Closed.

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

Janet Nichols, AFS-410, reported that the issue is still being worked through ATPAC under Area of Concern 102-2. Doug Marek, AJT-24, reported that a Document Change Proposal (DCP) was coordinated and received a non-concur. The DCP has been revised and was released for FAA internal coordination last week. Issue remains open pending further action after ATPAC resolution.

Status: 1) AFS-410 will continue to follow and report on ATPAC actions to resolve the issue; and, 2) AJT-24 to report on status of the proposed change to FAA Order JO 7110.65.

Item Open (AFS-410 and AJT-24).

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

Jim Arrighi, AJV-14, whose office is spearheading this effort was not available for an update. Rich Boll, NBAA, stated that it is not a controller issue, but rather one of pilot understanding. Rich, in concert with Lev Prichard, APA, have drafted the following AIM language which will be forwarded to AFS-410 for coordination/publication:

"Standard Instrument Departure Procedures (SIDs) may or may not include an initial "climb and maintain altitude" in the SID verbiage. If an altitude is not printed on the procedure, ATC will issue an altitude in its original IFR clearance (usually from clearance delivery or by PDC). In either case, this is your original clearance altitude, and pilots should comply with all altitude restrictions published on the departure procedure. If anytime thereafter, a new altitude is assigned by ATC, all previous restrictions are canceled unless they are re-issued by ATC such as "Climb and maintain XXXX, comply with restrictions".

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 draft NBAA AIM change.

Item Open (AJT-28, AJE-31, AJV-14, and AFS-410).

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

Bruce Mc Gray, AFS-410, briefed that this issue is being worked jointly with 98-01-197; however, it has been a difficult year to make progress on either issue. He had significant health problems and the Division lost its subject matter expert for Part 25 and 91K users. Bruce has been working with Rich Boll, NBAA, and Roy Maxwell, Delta, to expand the scope of the issues. He and Rich are trying to schedule a conference between FAA and industry concerning aircraft performance in the January-March 2012 timeframe. It is hoped that this conference will define the issue and develop the necessary training program. Bruce recommended this issue also be placed on temporary hold pending this conference.

Status: AFS-410 and NBAA actions on temporary hold until the April 2012 meeting.

Item Open (AFS-470 and AFS-410/NBAA).

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

Tom Schneider, AFS-420, briefed that discussion is on-going between AFS-420 and 470 to determine whether not publishing LNAV/VNAV minimums when there is a large difference in DA and MDA is of value. There is also discussion of whether a maximum value should be established when there is a difference, and if so, what that value should be. To date, the issue is still under discussion to determine whether there is any benefit in eliminating LNAV/VNAV minimums in this situation. Lev Prichard, APA, asked if LNAV/VNAV minimums are taken away, will some operators lose the approach. JD Hood, Horizon Air stated that most pilots will use LNAV/VNAV to set up the approach and use vertical guidance to fly to the LNAV MDA. Brad Rush, AJV-3B, stated that under current policy, if the airport meets GQS standards, LNAV/VNAV minimums will be published.

Status: AFS-420 to work the issue with AFS-470 through the US-IFPP and report.

Item Open (AFS-420 (US-IFPP) and AFS-470).

Editor's Note: A telcon was held on May 3, 2011 with participation from the managers of AFS-470, AFS-420, AJW-913, and AJV-3B, as well as staff specialists from AFS-420. It was agreed that in order to continually support Commercial Aviation Safety Team (CAST) initiatives, LNAV/VNAV minimums will continue to be established wherever possible regardless of the difference in LNAV minimums. The associated circling MDA must be no lower than the lowest straight-in MDA. A policy clarification memo has been prepared.

t. 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 Ron Brumback, AFS-420 (ISI), departure criteria specialist: "Based upon feedback from AFS-470 and AIR-130, RNAV departure criteria that outlines leg-type coding methods will be withdrawn. Coders can use whatever ARINC implementation their box requires to adhere to the path of the described construction." Brad Rush, AJV-3B, asked whether procedure designers would continue to document the leg type used in the procedure design. Ted Thompson, Jeppesen, asked whether this was discussed through the ATA CNS Task Force for input. Tom responded that he didn't think so, but AIR was a participant in the US-IFPP discussion. John Moore, AJV-3B, stated that when missed approach icons first appeared on

the scene, there was much confusion regarding interpreting the text on the procedure source to be depicted as a symbol. Likewise here, the intent of the procedure designer must be crystal clear for coding purposes. John added that it would be beneficial for the US-IFPP to bring industry into this conversation. Brad added that designers are putting the leg type used in the design and to be coded on the forms now. Don't change something that is working; additionally, a change will affect several ACs. Ted interjected that some avionics, especially older systems, may not be able to support the specified leg types. Rich Boll, NBAA, responded that pilots must always be ready to intervene if an aircraft is not going where it is supposed to. He also cautioned that the FAA must be careful in allowing coders to change the leg type specified to be coded and didn't believe that this allowance is good idea. Brad closed by saying that if coders are allowed to unilaterally change leg types from the specified source, then that practice must be sanctioned by AIR. The ACF-IPG comments will be addressed by the US-IFPP.

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

u. 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 Ron Brumback, AFS-420 (ISI), departure criteria specialist: "Based upon feedback from AFS-470 and AIR-130, RNAV departure criteria that outlines leg-type coding methods will be withdrawn. Coders can use whatever ARINC implementation their box requires to adhere to the path of the described construction." Brad Rush, AJV-3B, asked whether procedure designers would continue to document the leg type used in the procedure design. Ted Thompson, Jeppesen, asked whether this was discussed through the ATA CNS Task Force for input. Tom responded that he didn't think so, but AIR was a participant in the US-IFPP discussion. John Moore, AJV-3B, stated that when missed approach icons first appeared on the scene, there was much confusion regarding interpreting the text on the procedure source to be depicted as a symbol. Likewise here, the intent of the procedure designer must be crystal clear for coding purposes. John added that it would be beneficial for the US-IFPP to bring industry into this conversation. Brad added that designers are putting the leg type used in the design and to be coded on the forms now. Don't change something that is working; additionally, a change will affect several ACs. Ted interjected that some avionics, especially older systems, may not be able to support the specified leg types. Rich Boll, NBAA, responded that pilots must always be ready to intervene if an aircraft is not going where it is supposed to. He also cautioned that the FAA must be careful in allowing coders to change the leg type specified to be coded and didn't believe that this allowance is good idea. Brad closed by saying that if coders are allowed to unilaterally change leg types from the specified source, then that practice must be sanctioned by AIR. The ACF-IPG comments will be addressed by the US-IFPP.

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

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

Tom Schneider, AFS-420, briefed the following draft change proposal to FAA Order 8260.3 from T.J. Nichols, the AFS-420 lead conventional TERPS criteria specialist. The change will be presented to the US-IFPP at the next meeting:

"For each approach designed;

1. Require evaluation of the applicable visual area assessment (straight-in or offset) to the approach runway. If there are published approach procedures to other runways, the applicable visual area is assessed separately for that approach, and the procedure will be annotated accordingly. Therefore, no 'extra' standard visual area assessment is required.

2. Require an additional standard visual area assessment only to those runways without a published approach procedure and to which circling is authorized.

3. Annotate the approach procedure to indicate that each runway with a documented unlit, unmitigated 20:1 visual area penetration is not available at night; e.g.,

Option 1. "RWY 36 NA at night" or "RWY 36 and 27 NA at night".

Option 2. "RWY 36 straight-in and circling NA at night" or "RWY 36 straight-in and circling and RWY 09/18/27 circling NA at night."

Lev Prichard, APA, stated that Option 1 was confusing and he believed Option 2 is preferred. the group agreed.

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

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

Tom Schneider, AFS-420 briefed that Change 1 to the .46D was signed on April 14. Paragraph 2-1b(11) was revised to read: "When a visual climb over airport (VCOA) has been established, publish a note that requires the pilot to inform ATC prior to departure when executing the VCOA; e.g., "When executing VCOA, notify ATC prior to departure." Conversation with Jim Rose, AFS-420 indicates that IPH guidance is still under development. Bruce McGray, AFS-410, stated that they are re-writing AIM guidance for departure procedures and ODPs will be addressed in toto.

Status: 1) AFS-420 will develop applicable IPH guidance; and, 2) AFS-410 to Develop AIM and AIP educational material. **Item Open (AFS-420 and AFS-410).**

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

Tom Schneider, AFS-420, briefed the following update as received from Jack Corman, the AFS-420 lead RNAV criteria writer: The following is the US-IFPP's latest proposal, but no one has authorized us to go forward and issue a NOTICE detailing the evaluation. "Where (if) ATC assumes obstacle clearance responsibility with radar monitoring until the aircraft is established on the inbound course, there is no objection. Without ATC accepting obstacle clearance responsibility until the aircraft is established on course, RNP values <1.0 must be successfully evaluated prior to "direct-to" clearance application." Tom noted that at the last meeting the Terminal Service Unit representative (Gary Fiske, AJT-28) stated that "ATC will radar monitor all "direct to" clearances; however, they do not care what RNP value is designed in the procedure. He asserted that the MVA altitude at the IF where the turn commences provides 1,000 feet of

ROC, twice the intermediate segment requirement of 500 feet." This represents a disagreement between ATC and AFS that the US-IFPP must address.

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

y. 10-01-295 Official Source for Charting Fix Makeup

Mike Oudemans, AJV-21, briefed that NFDC has been working with Jeppesen regarding the process of posting form 8260-2s on FADDS. The first posting occurred for the May 5 AIRAC cycle and feedback was positive. The plan is to post the forms every 2-weeks and keep them on the FADDS web site until 2-weeks after the specified procedure effective date. Val Watson, AJV-3B asked whether the ultimate fix was to place the entire -2 in NASR. Mike responded that a replacement for NASR is under consideration and having the entire -2 information is a desired feature. Brad Rush, AJV-3B stated that eventually, it is hoped that IFP-FIX will be the source for all fix data. Tom Schneider, AFS-420, asked whether FADDS is now the source for fix information. Bill Hammett, AFS-420 (ISI) responded that the NFDD is still the primary method of promulgating -2 data; however, FADDS may be used to access additional information. Bill asked whether the issue could be closed and all agreed.

Status: **Item Closed**.

5. New Business:

a. 11-01-296 Magnetic Variation Differences and FMS systems

New issue presented by Lev Prichard on behalf of APA. Lev states that the application of a different magnetic variation (MV) for RNAV vs. conventional routes over the same ground track creates confusion. He offered examples of RNAV and conventional STARs into Chicago O'Hare (KORD) that show a 6 degree difference between an RNAV route and the conventional route over the same ground track. The problem is caused by the different MV application. RNAV procedures use the airport MV of record, while VORs use an assigned MV. Lev believed that guidance in Order 8260.19 should be amended to make RNAV and conventional charts agree. John Moore, AJV-3B asked how making charts agree would resolve FMS differences. Valerie Watson, AJV-3B, stated that there is no charting solution and that airport or NAVAID MV of record applied when each procedure is designed must be retained. NASR provides the sanctioned source for MV for both airports and NAVAIDs and that source must be used by chart makers until revised. Brad Rush, AJV-3B, stated that the only resolution to the differences is to use True North for everything. He stated that there are varying tolerances for assigned MV. For example, CAT II and III ILS must be within 1 degree of the actual runway MV. Every attempt is made to keep VORs within 3 degrees of the actual MV; however, changing a VOR MV has a major ripple effect (airways, procedures, ATC video maps, etc.). This is especially true when the VOR has many airway radials emanating from it. Ted Thompson, Jeppesen, stated that the agenda item, as briefed, is incorrectly characterized as a "charting problem". He stated the issue is relative to source, chart, and database compatibility issues; i.e., magnetic courses - conventional vs. RNAV; holding patterns - chart vs. FMS; runway MV - runway heading vs. ILS course; etc. Brad reminded everyone that although the numerically published courses may differ, the ground tracks are the same. Ted also mentioned that Jeppesen produces a set of NavData text pages in its Airway Manual that are intended to help explain differences between charts and navigation databases. These pages were produced as a result of past recommendations from the industry. Ted offered to discuss the matter within Jeppesen and

consider the possibility of creating a Jeppesen Briefing Bulletin to promote increased education and awareness of these issues among pilots. Lastly, Ted read an explanation provided by John Kasten, Jeppesen, which provided an overview and background information. A summary of John's comments as shared by Ted is included . A side bar began regarding some FMSs initiating holding in the wrong turn direction. Bill Hammett, AFS-420 (ISI) interrupted stating that this was off the subject matter. If APA desired to discuss the holding pattern direction of turn issue, it should be via a separate issue paper. John Swigart, AFS-470, offered to review and enhance AIM language regarding MV. Ted offered to discuss the matter within Jeppesen and consider the possibility of creating a Jeppesen Briefing Bulletin to promote improved awareness of MV issues

Status: 1) AFS-470 to review AIM language regarding MV; and 2) Jeppesen consider development of a Briefing Bulletin or some other educational method to help educate pilots on MV differences. **Item Open (AFS-470 and Jeppesen).**

6. Next Meeting: ACF Meeting **11-02** is scheduled for **October 25-27, 2011** with the **FAA Aeronautical Products Office**, SSMC 4, 1305 East-West Highway, Silver Spring, MD as host. Meeting **12-01** is scheduled for **April 24-26** 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 October 8 - 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 11-01**

<u>OPR</u>	<u>AGENDA ITEM (ISSUE)</u>	<u>REQUIRED ACTION</u>
AFS-470 AJV-3B	92-02-110 (Cold Weather Altimetry)	AFS-470: Continue to work the issue with MITRE support through the US-IFPP. AJV-3B: Coordinate publication of the ICAO correction table through IACC.
AFS-410 AFS-470	96-01-166 (Descent Point on Flyby Waypoints. Originally "on course")	AFS-410 and AFS-470: Jointly develop AIM and other pilot educational material.
AFS-470 AFS-410 NBAA	98-01-197 (Air Carrier Compliance With Climb Gradients)	AFS-470: Monitor PARC actions and report progress. AFS-410/NBAA: Report on sub group progress to address this issue and 09-02-287 (Note : Issue on temporary hold until April 2012).
AJV-11 AFS-420	02-01-238 (Departure Minimums and DP NOTAMs)	AJV-11: Report progress on re-write of JO 7930.2 to include SID/STAR NOTAMs under the FDC process. AFS-420: Report progress on Change 1 to Order 8260.19E.
AJT-24 AJE-31	02-01-241 (Non-radar Level and Climbing Holding Patterns)	AJT-24: Action complete - pending publication of change to JO 7210.3 for Terminal operations. AJE-31: Track DCP for change to JO 7210.3 to ensure controller awareness and education on what holding patterns are authorized for Climb-In-Hold for En Route operations
AFS-450	03-01-247 (Holding Pattern Selection Criteria)	Continue research/evaluation on the issue and report.
AFS-470	04-02-258 (VNAV IAPs using DA(H) and OpSpec C073)	Continue to track changes to Air Carrier OpSpec C073.
AFS-420 (US-IFPP)	05-01-259 (Visual Climb Over Airport)	Track new criteria development through the US-IFPP and report.
AFS-450	06-02-267 (Option to Use Standard Timing for RNAV Holding Patterns)	Assess use of timing in lieu of ATD for RNAV holding.
AFS-420 (US-IFPP) AJT-28/AJE-31	07-01-269 (Diverse Vector Areas)	AFS-420: Ensure DVA criteria are developed through the US-IFPP. AJT-22 and AJE-31: Jointly develop controller guidance for vectoring departures at airports with an ODP.
AFS-420 (US-IFPP)	07-01-270 (Course Change Limitation Notes on IAPs)	Continue to track issue through the US-IFPP.

**AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 11-01**

<u>OPR</u>	<u>AGENDA ITEM (ISSUE)</u>	<u>REQUIRED ACTION</u>
AFS-450	07-02-278 (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	Address the issue in conjunction with the other holding pattern studies under issues 03-01-247 and 06-02-267.
AFS-420 AJV-3B	09-01-282 (Glide Slope Intercept Altitudes on ILS Parallel Approaches)	<u>AFS-420</u> : Develop policy to eliminate requirement for early glideslope interception note on simultaneous close parallel ILS procedures. <u>AJV-3B</u> : Begin process of removing currently published ILS intercept notes.
AFS-410 AJT-24	09-01-284 : (Question of TERPs Containment with Late Intercepts)	<u>AFS-410</u> : Continue to track the issue through ATPAC and report. <u>AJT-24</u> : Report status of proposed changes to Order JO 7110.65.
AJT-28 AJE-31 AJV-14 AFS-410	09-02-286 : (Initial "Climb & Maintain" Altitude on SIDS)	<u>AJT-28</u> , <u>AJE-31</u> , and <u>AJV-14</u> : to form a sub group to address the issue. <u>AFS-410</u> : Review and coordinate the NBAA draft AIM language.
AFS-410 NBAA	09-02-287 : (Operator Training Concerning OEI Contingency Planning For IFR Departure Procedures)	<u>AFS-410</u> and <u>NBAA</u> : Jointly work the issue through the Transport Airplane Performance Planning (TAPP) working group in conjunction with issue 98-01-197. (Note : On temporary hold until April 2012).
AFS-420 AFS-470	09-02-288 : (VNAV Minimums vs. Circle to Land)	<u>AFS-420</u> and <u>AFS-470</u> : Jointly re-assess the issue through the US-IFPP and report.
AFS-420 (US-IFPP)	09-02-289 : (Use of Leg Combinations and Altitude Constraints on RNAV Departure Procedures)	Consider ACF-IPG comments from meeting 11-01 and provide status update for the next meeting.
AFS-420 (US-IFPP)	09-02-290 : (Call for Review and Revision of ARINC Leg Types Used in Construction of RNAV DPs)	Consider ACF-IPG comments from meeting 11-01 and provide status update for the next meeting.
AFS-420 (US-IFPP)	09-02-291 : (Straight-in Minimums NA at Night)	Continue to work the issue through the US-IFPP and report.
AFS-420 AFS-410	10-01-292 : (Removal of VCOA Option at Mountainous Airports)	<u>AFS-420</u> : Develop IPH guidance <u>AFS-410</u> : Develop pilot VCOA guidance for the AIM/AIP.
AFS-420 (US-IFPP)	10-01-294 : (RNP SAAAR Intermediate Segment Length and ATC Intervention)	Continue to work the issue through the US-IFPP and report.
AFS-470 Jeppesen	11-01-296 : (Magnetic Variation Differences and Flight Management Systems)	<u>AFS-470</u> : Review /update current AIM language. <u>Jeppesen</u> : Consider development of a Briefing Bulletin.

**AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 11-01**

Abbott	Deke	FAA/AFS-220	202-267-8266	deke.abbott@faa.gov
Ball	Al	NETJETS	614-239-4873	ball@netjets.com
Becker	Hal	AOPA	703-560-3588	hal.becker@att.net
Berry	Ron	AFS-410 (SIAC)	202-385-4856	ronald.ctr.berry@faa.gov
Boll	Richard	NBAA	316-655-8856	richard.boll@sbcglobal.net
Boynton	Mike	NGA	314-676-0406	michael.g.boynton@nga.mil
Canter	Ron	FAA/AJV-353	301-427-4770	ronald.l.canter@faa.gov
Christian	Lance	NGA/MRNF	571-557-3870	lance.d.christian@nga.mil
Christianson	Kel	FAA/AFS-470	202-385-4702	kel.christianson@faa.gov
Clayton	Michael	AFFSA/A3IS	405-739-9542	michael.r.clayton@tinker.af.mil
Duenas	Jerod	MITRE/CAASD	703-983-1259	jduenas@mitre.org
Dunham	Rick	FAA/AFS-420	405-954-4633	rick.dunham@faa.gov
Eure	Paul	FAA/AJE-31	202-385-8451	paul.eure@faa.gov
Frank	Mike	FAA/AFS-52	202-385-8447	mike.frank@faa.gov
Gale	John	NBAA	201-323-3598	john.gale@honeywell.com
Hambrick	Mike	FAA/AFS-410 (EIS)	202-385-4761 FAX: 4653	mike.ctr.hambrick@faa.gov
Hammett	Bill	FAA/AFS-420 (ISI)	603-521-7706	bill.ctr.hammett@faa.gov
Hood	JD	Horizon Air	503-384-4346	jd.hood@horizonair.com
Janoski	Greg	FAA/AFS-260	202-493-4830	gregory.janoski@faa.gov
Laroche	Pierre	Transport Canada	613-991-9927	pierre.laroche@tc.gc.ca
Lehman	Dan	NAVFIG	843-218-5282	dan.lehman@navy.mil
Lepine	Paul	FAA/AFS-260	202-267-3205	paul.lepine@faa.gov
Lockley	Marc	FAA/AJV-32	202-267-9801	marc.p.lockley@faa.gov
Loeffel	Hanspeter	Lufthansa Systems	901-338-6354	hanspeter.loeffel@lhsystems.com
Marek	Doug	FAA/AJT-24	202-385-8742	doug.marek@faa.gov

**AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 11-01**

McCurdy	Eric	NGA	314-676-0710	eric.d.mccurdy@nga.mil
McGray	Bruce	FAA/AFS-410	202-385-4625 FAX: 4937	bruce.mcgray@faa.gov
McKee	Kyle	FAA/AJV-14	202-385-4671	kyle.mckee@faa.gov
Meek	Jordan	Lufthansa (LIDO)	41 44 828 6976	jordan.meek@lhsystems.com
Moore	John	FAA/AJV-3B	301-427-5154	john.a.moore@faa.gov
Nichols	Janet	FAA/AFS-410	202-385-4530	janet.e.nichols@faa.gov
Oudemans	Michael	FAA/AJV-21	202-267-9296	michael.g.oudemans@faa.gov
Pearsall	Terry	FAA/AJT-28	202-385-8730	terry.pearsall@faa.gov
Prichard	Lev	APA	214-212-6357	lhp4@swbell.net
Rash	Suzette	FAA/AFS-470	202-385-4319	suzette.rash@faa.gov
Rich	Ben	Metron Aviation	703-234-0792	ben.rich@metronaviation.com
Rush	Brad	FAA/AJV-3B	405-954-0188 FAX: 4236	brad.w.rush@faa.gov
Rushton	Alex	FAA/AJV-3B (LM)	301-427-5186	alex.ctr.rushton@faa.gov
Schneider	Tom	FAA/AFS-420	405-954-5852 FAX: 2528	thomas.e.schneider@faa.gov
Scott	Mitch	Continental Airlines	713-324-1786 FAX: 8540	mitch.scott@coair.com
Serur	Steve	ALPA	703-689-4333	steve.serur@alpa.org
Swanick	Kurt	FAA/AFS-220	202-267-5754	kurt.swanick@faa.gov
Swigart	John	FAA/AFS-470	202-385-4601	john.swigart@faa.gov
Thompson	Ted	Jeppesen	303-328-4456 FAX: 4111	ted.thompson@jeppesen.com
Watson	Valerie	FAA/AJV-3B	301-427-5155	valerie.s.watson@faa.gov
Wiseman	Larry	FAA/AOV-330	202-267-3047	larry.wiseman@faa.gov