Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) meeting held on October 27, 2015. The meeting was hosted by the United States Geological Survey, 12201 Sunrise Valley Drive, Reston, VA. An office of primary responsibility (OPR) action listing (Atch 1) and an attendance listing (Atch 2) are appended to the minutes.

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

Mr. Tom Schneider Copy to: Mr. Steve VanCamp

FAA/AFS-420 (ISI/Pragmatics)

P.O. Box 25082 P.O. Box 25082

Oklahoma City, OK 73125 Oklahoma City, OK 73125

Phone: 405-954-5852 Phone: 405-954-5237 FAX: 405-954-5270 FAX: 405-954-5270

E-mail: steve.ctr.vancamp@faa.gov

The AFS-420 web site contains information relating to ongoing activities including the ACF-IPG. The home page is located at:

https://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 **16-01** is scheduled for **April 26-28**, **2016** with ALPA as host at their Herndon, Va facility. ACF meeting **16-02** is scheduled for **October 25-27**, **2016** with Pragmatics, Inc. as host at their Reston, VA headquarters..

Please note that **meetings begin promptly at 8:30 AM**. Dress is business casual. Forward new agenda items for the 16-01 ACF-IPG meeting to the above addressees not later than April 7, 2016. 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

GOVERNMENT / INDUSTRY AERONAUTICAL CHARTING FORUM INSTRUMENT PROCEDURES GROUP

Meeting 15-02
U.S. Geological Survey (USGS)
12201 Sunrise Valley Drive
Reston, VA 20192
October 27, 2015

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 27, 2015. The USGS hosted the meeting at their Reston, VA facility. Lance Christian made welcoming and administrative comments on behalf of the USGS. A listing of attendees is included as attachment 2.

2. Review of Minutes of Last Meeting:

Steve Vancamp, AFS-420, (ISI/Pragmatics Contract Support), briefed that the minutes of ACF-IPG 15-01 were electronically submitted on June 15, 2015. There were two corrections made, and the corrected copy is on the ACF-IPG web page.

3. Briefings:

- **a.** Tom Schneider, AFS-420, briefed on revisions to FAA Order 7910.5, *Aeronautical Charting Forum*. Some office symbols changed and the timeframe for minutes' publication extended to 45 days. The order is in coordination.
- **b.** Catherine M. Graham, AFS-470, briefed on work to utilize reduced visibility minima (1800 RVR) on GPS approaches. In a similar effort in 2008, 1800 RVR was briefed for use on ILS approaches, and work is now proceeding toward applying the same concept for satellite based approaches. A PowerPoint presentation was () discussed, outlining: Requested action, background, runway requirements, lighting and ancillary equipment, operational safety review, and the way forward. This authorization does not affect the approach, but increases procedure availability by permitting use during lower visibility conditions, and could affect 347 LPV and eight GLS approaches (with requirements as noted). In the absence of TDZ/CL, the intent is to use the same note as the ILS chart does, and issue a P-NOTAM to allow the use of 1800 RVR until the chart note can be added. There is no specific timeline but the FAA is moving forward with this and will it eventually result in an update to FAA Order 8400.13, *Procedures for the Evaluation and Approval of Facilities for Special Authorization Category I Operations and All Category II and III Operations*.

4. Old Business (Open Issues):

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

Kel Christianson, AFS-470, briefed the original issue regarding cold weather affect on altimeters and the procedures needed to compensate. The FAA worked with MITRE and identified approach procedures affected by cold weather. Those procedures are now listed in the Notice to Airman Publication (NTAP) and procedure plates have been updated to reflect a numerical temperature at which adjustment needs to be made. Cold weather procedures are mandatory

this winter at identified locations. Every year the list of affected procedures will be updated using temperature records from the previous five years. The NTAP entry will be revised and an InFO listing the changes will be published. Airports may be added, deleted or the specific numerical threshold temperatures may be revised in this annual reassessment and will precipitate revised National Flight Data Digest (NFDD) airport remarks and resultant chart changes. Rich Boll, NBAA, inquired about Midway Airport in Chicago, where all approaches have a snowflake icon, yet a cold temp adjustment does not apply to all the approaches. Kel stated why this happens and Rich understood, but noted when a snowflake is charted on "all" the approaches at the airport, the pilot would apply the temp correction to all approaches. Kel said the wording at the front of the TPP will be changed to reflect more clearly what is meant (i.e., Cold Temperature adjustment "on this approach" will be revised to "at this airport."). The disparities at Midway occurred because of O'Hare traffic separation issues, and Gary Fiske, AJV-82, added that. Midway is unique and he does not see this happening anywhere else. Kel said if any pilot decides to correct at a different temperature, rather than the NTAP value (or if no correction value is published), they will likely encounter delays by ATC. Kel said the intent is to release a new NTAP in the late summer or early fall every year with the annual changes. Gary said some FAA Order JO 7110.65 (and AIM changes) did not make the cut-off for publication, so a notice may be issued to bridge the gap. Ted Thompson, Jeppesen, advised that he is receiving a lot of feedback on the number of removed and added airports in the program and those with only a one-degree change. He also voiced that users are confused by the cold temperature values and those in the Baro-VNAV notes. Kel said he is willing to handle any guestions and that user concerns could be referred to him. A general discussion followed touching on issues/concerns such as: should AFS-470 put FAQs on their web site? (Kel will consider); the opportunity for miscalculation of numbers in the cockpit (i.e., should the numbers be in the NAV data base?): speculation that some concerns may arise or be alleviated once procedures have actually been utilized; application of cold temp correction to procedure segments vs. the entire procedure; and lack of time to preplan in case of diverted destination. Kel proposed the issue be closed, saying that it is his position that the original ACF issue has been addressed and any new items related to cold temperature should be submitted as new ACF agenda items or via other means. He said that even though the issue is closed in the ACF, his office will provide support for any Cold Temperature related issues. Tom Schneider, AFS-420, suggested that all participants give the program two years, determine whether changes are needed and if so, bring them forth as new agenda items.

Status: Item Closed.

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

Gary Fiske, AJV-82, briefed that several years ago the ATO submitted DCPs to their orders addressing how terminal facilities do their CIH assessments. This spring they finally came to an agreement on how to handle these on the terminal side, but he received several non-concurs from En Route, specifically Anchorage ARTCC. In trying to resolve the non-concur, Gary received feedback from Aeronautical Information Services (AIS) and AFS-420 during a telecon, wondering if this is an issue in 2015 with today's improved Radar surveillance, with the exception being that Anchorage does have non-radar airspace. Some of the expectations are different in 2015 and Gary sees no value and recommends dropping and closing the issue. Rich Boll, NBAA, asked if CIH is charted, and Tom Schneider, AFS-420, said if CIH is required it is stated on the applicable procedure chart. Gary said they are mostly on missed approaches. Tom said the problem is not on procedures where CIH is stated, but rather on the ad-hoc ones; i.e., is it clear to the ATC facility if ad-hoc CIH is issued, an assessment has not been done to support the higher airspeed permitted when climbing in a holding pattern that will ensure the

aircraft remains within protected airspace? Gary said it is altitude dependent since there is no issue when the aircraft is above the MVA/MIA, and the reality is surveillance has gotten better. FAA Order 7130.3, which is driving all of this, was written in the 1960's. John Moore, Jeppesen, inquired about placing information in a bulletin? Tom said the guidance is in the terminal section of FAA Order JO 7210.3, just not in the en route. Rich said he will take the aircraft speed issue in ad-hoc en route holding back to his ACF holding group and look at some additional AIM guidance to address this. ALPA representatives agreed that with both the completed work and this IOU from Rich, the issue should be closed.

Status: <u>Item Closed</u>.

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

Tom Schneider, AFS-420, advised that a change will be made to FAA Order 8260.19H, removing the sentence in para 8-2-5.e regarding enroute obstacle clearance criteria applied to feeder routes. John Collins, GA pilot, agreed to close issue.

Status: Item Closed.

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

Rich Boll, NBAA, formed a Working Group (WG) after ACF 15-01 to look at issues with holding. The group has representatives from the FAA, manufacturers/industry. There have been eight telecons and members new have a good understanding on how RNAV systems work with holding. Rich provided () a presentation covering topics including: list of WG participants; proposed guidance materials; OEM provided information; principal recommendations for the AIM (e.g., speeds, entry procedures, substitution, etc.); recommendations for ATC and Pilot/Controller Glossary; and future actions. The WG determined that entry speed into the pattern (including slowing to pattern speed before the holding fix) is needed for containment, and some of the more advanced RNAV equipment will calculate the deceleration point for the pilot. Rich reminded all that the FMS will calculate the holding pattern size based on the speed you cross the holding fix at and to not use a turn bank limiting mode (i.e., criteria is based on 25 dg bank at all altitudes). FB vs. FO turns at the holding fix were discussed. Changes to FAA Order JO 7110.65 (ATC) & holding criteria were not the focus of the WG, but ATC agreed to process changes into their orders. Mike Stromberg, Air Wisconsin, inquired if FMS manufacturers will change their equipment going forward to fly these correctly. Rich said that he thinks more equipment manufacturers will incorporate RTCA DO-283, but it is not a requirement. Kevin Bridges, AIR-131, added that DO-283B (new MOPs) will be out soon with a two class system, and will contain the "Advanced RNP" function (which includes holding). Proposed AIM language () is included and was sent separately to all ACF roster email addresses. Rich requested that all interested parties review the proposal and submit comments NLT 11-15-2015 for consideration. This will allow for final consolidation, review by AFS-420, and publication in the summer 2016 AIM revision.

Status: Provide update on work being done by sub-group. Item Open: NBAA (Rich Boll), Ad-Hoc sub group/AFS-420.

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

Gary Fiske, AJV-82, advised all DCPs are approved and other changes are completed in FAA Orders JO 7110.10, 7110.65, and the P/CG have been completed and will be published December 10th, 2015. Gary recommends closing the issue. Rich Boll said NBAA is having problems with certain facilities (opting out of VCOAs); one example is a facility where they are trying to get a VCOA due to an ODP 500 ft/NM to 3000 above field (elevation 5000 ft). Bob Lamond, NBAA, stated this one is being worked through the service area, since the local facility was thinking the VCOA wouldn't be requested by every pilot, every time. Tom Schneider, AFS-420, acknowledged there may still be an airport with the issue; however, we believe that it is being resolved with the additional guidance now established in FAA Order 8260.46. As other facilities become aware of these changes, this reluctance will disappear. Gary said VCOAs are not going away; the pilot will be required to coordinate before flying the procedure. John Collins, GA pilot, inquired about FSS clearance relays (non-tower facility) for use of a VCOA and Gary responded that guidance will also be in FAA Order JO 7110.10 for Flight Service to follow. Given that the policy has been published in FAA Order 8260.46 for a short time and many locations are in the process of implementing, there was no objection to closing this agenda item.

Status: Item Closed.

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

Tom Schneider, AFS-420, said guidance is in the draft FAA Order 8260.58A. The order is still being worked; there is nothing more to report at this time, and the issue will remain open to ensure no objections are received to the language changes during the coordination process.

Status: Track status of guidance getting published in FAA Order 8260.58A. Item Open: AFS-420.

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

Tom Schneider, AFS-420, briefed the Instrument Procedure Handbook (IPH) change () guidance, which has been published. Kevin Allen, American Airlines, asked Brad Rush, AJV-54, about progress of implementing these changes. Brad said of the four airports with converging procedures (Philadelphia and Minneapolis) have been changed; Washington Dulles is scheduled for this year; and Dallas is delayed due to the Metroplex project. Aeronautical Information Services will continue to watch these. Tom advised guidance has been published in FAA Order 8260.19G. Kevin said as long as Dallas is not dropped, the issue can be closed. There were no objections.

Status: Item Closed.

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

Tom Schneider, AFS-420, briefed we are awaiting publication of FAA Order 8260.3C. In addition, FAA Order 8260.43 (RAPT order) is being reworked by AFS-460. John Bordy, AFS-420, added that an AFS-400 policy memo is out directing to provide CAT C & D minimums as much as possible, but need to consider the impact on airport owners/sponsors (i.e., Would adding CATC and/or D minima incur any costs for them?). Lev Prichard, APA, inquired what was changing. John said the memo was done in conjunction with FAA Airports (ARP), to tell everyone the FAA wants CAT C & D minimums published as much as possible, adding that the RAPT needs to bring all parties together in the process when procedures are being approved. There are process guidelines currently in FAA Order 8260.43 and since the order is under

revision, changes must be anticipated. Bob Lamond, NBAA says he monitors all new procedures in the RAPT to ensure that if CAT C & D lines of minima are feasible, they are included, or challenge why they are not. The issue is when the airport does not want them and it is usually a perceived cost for infrastructure changes needed to support larger aircraft. He encourages all operators and organizations to participate in these RAPT discussions. Lev added it is operationally advantageous to have the higher minimums, and Bob agreed. Lev inquired if any consideration to adding one category higher if there is a circling approach. Tom said this had been talked about from operational, TERPS and airport standpoints, and all options are being considered. It appears that work on FAA Order 8260.43 is the best avenue. with the expanded guidance for when procedures are requested thru the IFP gateway and specified in the request. Lev inquired if an airport supports CAT C straight in, is there any reason CAT D circling would be restricted, and John thought not (infrastructure wise), just an extra evaluation for the circling. Tom added when CAT D is added, it would be interpreted that now CAT D aircraft can operate/land there. Bob said that is something the FAA needs to educate on and wishes the FAA airports division would emphasize to airport operators that these are two completely different issues. Rich and Bob will review any future changes to the Airport design Advisory Circular (for airport design and approach categories), to ensure when referencing approach categories a reference is made that a higher category may be required to support turbulence.

Status: Item Open: AFS-420 (status of FAA Orders 8260.3C and 8260.43C).

i. 12-01-301: Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment (*includes Issue 13-01-309 LP Procedure Canceled Because of VDA Not Being Charted*)

Tom Schneider, AFS-420, and John Bordy, AFS-420, briefed (X) that draft FAA Order 8260.3C language is in place, but there are ongoing discussions that could result in changes to what is in the current draft. FAA Order 8260.3C has not gone out for coordination. Rick Dunham, AFS-420, added that the FAA wants criteria/language that encourages vertical guidance to the maximum extent possible; adding that if the procedure cannot be developed with vertical guidance, it may not be developed. The objective is to make VDA mandatory and possibly moving towards removing LP approaches. Rich Boll, NBAA, asked about Flight Standards review of procedures. Tom said there is a Procedures Review Board that looks at the procedure to see if it should go forward. Kevin Bridges, AIR-131, inquired about when considering LNAV and LP approaches, if there is an obstacle in the visual segment but nowhere else, the procedure will not be published. Rick said that is not correct. Maybe the airport is willing to remove the object or consider other options in order to get an instrument procedure. The FAA wants to provide vertical guidance wherever it can. This concept will not happen overnight. Lev Prichard, APA, likes the policy statement. Rune Duke, AOPA, agreed and said vertical guidance is very important, but there is value in LNAV and LP to provide access to many general aviation airports. Rick added this is a long term goal. Kevin added that the issue is whether you will have vertical guidance or not, and this discussion is for approved vertical guidance (LNAV/VNAV criteria) with stabilized approaches (everything clear/no obstacles). John added FAA will still calculate a VDA and try to design at three degrees. Tom said there is an effort between FAA Airports and Flight Standards to harmonize airport and TERPS surfaces. Tom outlined changes to FAA Order 8260.19, mentioning that IPH guidance is already out, and the AIM change will be published in Dec 2015. Brad Rush, AJV-54, said what you will see on the approach chart in the profile is a note and there will be no angle or TCH charted in the profile view, but data will be in the database. Ted Thompson, Jeppesen, briefed how Jeppesen will handle the data. A discussion followed commenting on how the pilot can generate the angle;

stabilized approaches; advisory angles - MDA vs. DA; obstacles below the MDA; OpsSpec authority for certain users; obstacles that may not be on centerline but VDA was eliminated; the ongoing effort to "marry" VDA with TERPS criteria; pilots using an advisory angle as if it was an approved angle.

Status: Provide update from sub-group. **Item Open:** AFS-420.

j. 13-02-312: Equipment Requirement Notes on Instrument Approach Procedures

Mike Webb, AFS-420, briefed () proposed changes to get consensus on the equipment requirements box usage from the forum so that work can commence on the IACC specifications. A decision must also be made regarding PBN procedures (PBN requirements box) utilizing the same space as conventional procedures equipment requirements box. The effort is to consolidate the notes for equipment requirements that are scattered on the plan view and in the briefing strip into one place in the briefing strip for the pilot. The goal from the ACF discussion today was to gather opinion on whether to also specify what portion of the approach requires the specified equipment. Group discussions followed on several related topics including: What would notes look like; examples of PBN/conventional/missed approach shown; PBN to conventional (i.e., RNAV transition to an ILS); procedure naming differences (i.e., title of the procedure) between the U.S. and overseas (i.e., changing from RNAV to RNP outside U.S. and not here). Rick Dunham, AFS-420, said FAA current position is no change to procedure naming. Questions were raised about ICAO standards and pilots understanding the differences. There was discussion on NavSpecs (i.e., AC-90-100A/101A/105A/107) with concerns raised on the process of having to learn all the capabilities defined under current and future NavSpecs. There were questions on apparent redundancy for GPS in notes. It was brought up whether there would be too much text information in one box (Ted Thompson, Jeppesen, says yes) resulting in volumes of text like on SIDs & STARs. Radar Required – what does that mean and why necessary came up again and Tom Schneider, AFS-420, advised that is spelled out in current policy and it is explained in the AIM.

In summary, there was support for the equipment requirements box idea. Rick said we need input/feedback, since the goal is to simplify the planview and create a briefing strip for the pilot to focus in on when determining requirements for executing the approach. Brad Rush, AJV-54, questioned the required level of detail needed in the requirements box to fly the approach. Valerie Watson, AJV-553, said the question is do we put only those notes pertaining to the entire procedure (FAC, Missed or all transitions) in the briefing strip and those uniquely pertaining to transitions in the planview, *or* do we place ALL equipment requirement notes in briefing strip. Mike Webb said that all participants need to mark up the slides presented today and send back to us as specific feedback. Tom requested that all participants also review FAA Order 8260.19 draft data () and comment on that as well.

Status: All participants to please review the presentations and forward input to Mike Webb and Tom Schneider. **Item Open:** AFS-420.

k. 14-01-315: 90 Degree Airway-to-RNAV-IAP Course Change Limitation; Arrival Holds

Rick Dunham, AFS-420, said there has been no resolution and the issue is tabled UFN. Tom Schneider, AFS-420, added it is an open agenda item in the US-IFPP and if there are any developments, AFS-420 will brief the ACF at that time.

Status: Follow action being taken at US-IFPP. Item Open: AFS-420.

I. 14-01-316: RNAV Fixes on Victor Airways Used for RNAV SIAPs

Tom Schneider, AFS-420, briefed he and Brad Rush, AJV-54, agreed on changes coming out in FAA Order 8260.19H (), showing existing, changes and updated verbiage. The group discussed fix/waypoint placement on an airway and legal fix make-up requirements. Rich Boll, NBAA, said this issue resulted from an RNAV (GPS) approach with an RNAV fix that appeared to be on airway route (feeder) but was not (i.e., not in the data base for the airway), so there is no way to link the airway with the approach. He added that this problem is also occurring with decommissioning of VORs; for example, OTT (Nottingham) where some SIDs do not attach to the airways. Tom said this policy change will help, and Paul Gallant, AJV-11, agreed with Tom, adding this is a legal definition problem. Tom feels this is the best solution, and when out for coordination, comments can be made.

Status: Track status of FAA Order 8260.19H change as it works its way through the coordination process. Item Open: AFS-420.

m. 14-02-317: Use of GPS on Conventional (Ground-Based NAVAID) Instrument Approach Procedures (IAPs)

Kel Christianson, AFS-470, said currently we have substitute and alternate navigation with RNAV systems on conventional procedures up to the FAF, but it is not authorized inside the FAF, and these two do not require the pilot to monitor a NAVAID. Draft explanatory AIM language including a note () was shown. Lev Prichard, APA, said airlines under OpsSpec approval can directly substitute with suitable RNAV inside the FAF, but no one else can. Kel said C300 allows this currently (part 121 and some other operators can get this), but in general, aircraft cannot proceed inside FAF without monitoring the ground based navigation system. Rich Boll. NBAA, asked if once this is in the AIM, does it cancel the OpsSpec? Kel said no. adding without the provisions of OpsSpec C300, the underlying ground system must be operational and received in aircraft to ensure course alignment. Kel said this is a change, even though some pilots are incorrectly doing it now anyway. Larry Hills, FedEx, inquired if this language should be tightened up to refer to the NAS only, and Kel concurred. Jeff Kerr, AFS-470, explained the main point in OpsSpec C300 is that the airline is required to check flyability on the final approach segment. In the absence of C300 authorization, you must be able to monitor the underlying ground navigation system for course alignment. Lev commented about the confusion on this, and Kel added AC 90-108 explains the terms. Kel will make some minor word changes and keep the agenda item open until the AIM is published.

Status: Track status of AIM update. **Item Open:** AFS-470.

n. 14-02-318: Charting LNAV Engagement Altitudes

Tom Schneider, AFS-420, briefed that all references to "LNAV engagement altitude" in FAA Order 8260.46F have been deleted (was charted for VA-DF routing) and also they are being deleted during the transfer of FAA Order 8260.53 (Radar Vectors to RNAV) to FAA Order 8260.58A. Lev Prichard, APA, asked if those changes affect TERPs required altitudes (i.e., turning restriction vs. engagement altitude), which prompted a lengthy group discussion including: chart clutter; hybrid procedures; placing fixes to require navigation to those points; the AFS-420 IOU to look at San Antonio (SAT) procedure and associated language in FAA Order 8260.46F. Tom summarized that there are a variety of options in FAA Order 8260.46F for the procedure developer and the ATC facility to use when developing what is needed. This has

been coordinated, commented on, and is currently up for AFS-1 signature (Note: Expect release within the next 30-45 days). Ted Thompson, Jeppesen, suggested closing this ACF item and Jeppesen will take an IOU to bring up any future issues that may arise with the FAA, or in another forum, if appropriate. There were no objections.

Status: Item Closed.

o. 15-01-319: Removal of the Epoch Year documentation on 8260-series FAA Forms

Tom Schneider, AFS-420, briefed that at ACF15-01 the group decided to keep Epoch Year documentation. This information was brought back to the submitter and with their concurrence the agenda item is dropped.

Status: <u>Item Closed</u>.

p. 15-01-320: Common Sounding Fix Names

Gary Fiske, AJV-82, discussed changes in the works concerning a number of previously identified similar sounding fix names in close geographic proximity, giving dates when changes will occur. NFDC already has proposed changes to guidance language in FAA Order 7400.2, (a copy is in the minutes of ACF 15-01). Item will remain open for one more cycle.

Status: Report status at next meeting. Item Open: AJV-82 (Gary Fiske).

q. 15-01-321: Coding of Missed Approach for ILS31L and ILS31R at KJFK

John Bordy, AFS-420, briefed () that this situation is related to a hold down altitude on the missed approach. The issue was referred to the US-IFPP and a working group was formed to look at procedure design and coding. There have been two meetings so far, looking at missed approach design options, guidance in FAA Order 8260.19, and ensuring language is consistent with departures. There is an effort to ensure missed approach instructions are clear to pilots and controllers. The intent is to make it easy for the database coder to know what is desired by the procedure developer and to try and avoid complicated procedures as much as possible. The group is looking at "at or above," "at," and "at or below" altitudes on forms. The intent is to avoid early level-off segments. The next amendment of FAA Order 8260.3 will explicitly prohibit hold down altitudes in the missed approach segment. The hold down of 1000 ft at JFK is being worked now with an expected publication date of February 2016. One option being explored is a missed approach that is similar to the RNAV MA to the same runway, which does not require a hold down altitude. Tony Lawson, AJV-54, said there is no criteria to evaluate a missed approach with a hold down altitude. General discussion followed on fixing the missed approach at JFK and pilot workload during a missed approach. Rick Dunham, AFS-420, assured the forum this is being worked and discussed within several groups. Rich Boll, NBAA, said this issue has come up before with the RNAV 4L/4R MA's coding not matching. Ted Thompson, Jeppesen, said Jeppesen has changed coding multiple times on missed approaches for users, and continues to this day. Tom Schneider, AFS-420, recommended discussing the issue with the ARINC 424 group. John thinks the WG will have a recommendation by February 2016.

Status: Report results of sub-group meetings and US-IFPP decisions. Item Open: AFS-420.

r. 15-01-322: Charts for SID, STAR, and ODP do not provide accurate information for filing a flight plan in many cases

Tom Schneider, AFS-420, briefed guidance has been placed in FAA Order 8260.19G (STARs) and FAA Order 8260.46F (SIDs). The statements will allow the ATC facility to request a chart note be placed on the procedure saying "Do not file - to be assigned by ATC". John Collins, GA pilot, said this is good going forward, but inquired about existing procedures. Tom said this would be addressed during periodic reviews and procedures will be up numbered. A discussion followed on HOST computer filing, codes utilized, and how some filed procedures are being "kicked-out". Gary Fiske, AJV-82, added some procedures are coded using a three letter identifier that does not exist. Tom said the policy for those computer codes has been in existence for years and policy may not have been followed. This cannot be fixed here at the ACF and specific instances may need to go back to the applicable facility. Gary took an IOU to work with John to fix identified locations (about 20-30). Brad Rush, AJV-54, said AIS is also working an initiative now to clean up computer codes on SIDs and STARs and requested John supply him with the same list. The ACF issue will be closed.

Status: <u>Item Closed</u>.

5. New Business:

a. 15-02-323: Depiction of Low, Close-In Obstacles on SIDs & ODPs

Rich Boll, NBAA, presented this issue with several industry partners supporting this position. FAA policy since around 2000 is to publish low, close-in obstacles (LCIO) on SIDs & ODPs. An example was provided for Chicago's Midway Airport (MDW) Runway 31R. It was noted that not all obstacles in the Initial Climb Area (ICA) are listed since they can be grouped per criteria (i.e., highest/closest per grouping policy specified in FAA Order 8260.46). One problem is that many locations have very long lists of obstacles and this can result in procedures being split into two pages (i.e., first page being the procedure graphic and the second page just for the list of obstacles). Not all obstacles are in the LCIO notes, with some penetrating the 40:1 surface to a height above 200 ft, requiring a higher climb gradient/visibility restriction to see and avoid. The actual obstacle that you may need to avoid can be difficult to pick out of the list. Another issue is that new survey data being submitted is resulting in many more obstacles being identified, adding to an already extensive list of obstacles. The proposal is to change the LCIO obstacle notes section, when LCIOs are present, to identify the highest and closest obstacles to DER in the ICA for the pilot to be aware of. This change would have to be explained in the AIM and IPH. Obstacles that the pilot must be aware of that must be considered and avoided will still be listed and would be easier for the pilot to identify. There should be no charting or TERPs criteria changes required, just the method used in stating these obstacles. Discussions followed on: turns in low visibility to avoid a LCIO; listing of the highest obstacle vs. obstacle requiring the highest climb gradient; see and avoid issues; planning departure to avoid obstacles (i.e., take off sooner); due to the long lists of obstacles, some pilots are not reading them at all; some pilots do not plan correctly; Rich said LCIO obstacles are useless for performance engineering; situational awareness function of listing these obstacles; AIS software tool in development to help group obstacles by using highest/closest to DER in each group; and displaying data on a tabular list vs. a run on list. FAA personal, Jeppesen, AOPA, Airline representatives and most attendees cited the benefits and endorsed the NBAA proposal to attempt to find a better way of disseminating this information. Consensus was that the existing lengthy lists of obstacles are cumbersome and are of questionable value to most pilots and that listing only crucial ones would be preferable. Rick supports the proposal to work on finding a better way to provide this information to the pilot and AFS-420 will take on the issue, working in conjunction with AIS on examples for ACF 16-01 (utilizing their new software for obstacle grouping) and charting specs.

Status: AFS-420 to report back with a status and proposals. **Item Open:** AFS-420.

6. Next Meeting:

ACF 16-01 is scheduled to be held on April 26-28, 2016, hosted by ALPA at their Herndon, VA location.

ACF 16-02 is scheduled to be held on October 25-27, 2016, hosted by Pragmatics, Inc. at their Reston, VA headquarters.

<u>Please note the attached Office of Primary Responsibility (OPR) listing (attachment 1) for action items.</u> It is requested that all OPRs provide the Chair, Tom Schneider, AFS-420, a written status update on open issues not later than April 7th, 2016 - a reminder notice will be provided.

<u>7.</u> <u>Attachments (2)</u>: 1. OPR/Action Listing

2. Attendance Listing

AERONAUTICAL CHARTING FORUM INSTRUMENT PROCEDURES GROUP OPEN AGENDA ITEMS FROM MEETING 15-02

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
NBAA	07-02-278: (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	NBAA to consolidate comments from sub-group participants and forward to AFS-405 to submit proposed changes to the ATO for the next available AIM publication.
AFS-420	10-01-294: (RNP SAAAR Intermediate Segment Length and ATC Intervention)	Track publication status of FAA Order 8260.58A and provide update at next ACF meeting.
AFS-420	12-01-299: (Loss of CAT D Line of Minima in Support of Circle-to-Land Operations)	Track publication status of Order 8260.3C and Order 8260.43C and provide update at next ACF meeting.
AFS-420 (US-IFPP)	12-01-301: (Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment, also includes issue 13-01-309)	Track status of proposed changes to Order 8260.3C and AIM and provide an update at the next ACF meeting.
AFS-420	13-02-312: (Equipment Requirement Notes on Instrument Approach Procedures)	Work feedback received from ACF participants on material presented at ACF 15-02 and provide status update at next ACF meeting.
AFS-420 (US-IFPP)	14-01-315: 90 Degree Airway-to-RNAV-IAP Course Change Limitation; Arrival Holds	Monitor US-IFPP action and report status at next ACF meeting.
AFS-420	14-01-316: RNAV Fixes on Victor Airways Used for RNAV SIAPs	Proposed text in draft Order 8260.19H; monitor comments from coordination phase and report to next ACF meeting.
AFS-470	14-02-317: Use of GPS on Conventional (Ground-Based NAVAID) Instrument Approach Procedures (IAPs)	Track status on AIM update and report status at next ACF meeting.
AJV-8	15-01-320: Common Sounding Fix Names	Continue to work resolving common fix name changes at affected facilities and brief progress at next ACF meeting.
AFS-420 (US-IFPP)	15-01-321: Coding of Missed Approach for ILS31L and ILS31R at KJFK	Monitor US-IFPP action and brief progress of working group meetings at next ACF meeting.
AFS-420/AJV-54	15-02-323: Depiction of Low, Close-In Obstacles on SIDs & ODPs	Bring to US-IFPP for discussion, work issue with AIS and brief next ACF meeting.

ACF 15-02 INSTRUMENT PROCEDURES GROUP ATTENDANCE LIST

		<u> </u>		
Ahmed	Kemal	Navtech	44 7515 577 163	kemal.ahmed@navtech.aero
Allen	Kevin	American Airlines	480-693-4637	kevin.allen@aa.com
Austin	lain	Netjets Aviation, Inc	614-239-2071	iaustin@netjets.com
Ball	Alan	Netjets Aviation, Inc	614-239-4873	ball@netjets.com
Beatse	Russell	FAA/ZME	901-368-8537	russel.c.beatse@faa.gov
Blair	John	FAA/AFS-410	202-267-8986	john.blair@faa.gov
Boll	Richard	NBAA	316-655-8856	richjb2@rjb2.onmicrosoft.com
Bordy	John	FAA/AFS-420	405-954-0980	john.bordy@faa.gov
Bridges	Kevin	FAA/AIR-130	202-267-8526	kevin.bridges@faa.gov
Christian	Lance	NGA/MSRF	571-557-3870	lance.d.christian@nga.mil
Christianson	Kel	FAA/AFS-470	202-267-8838	kel.christianson@faa.gov
Collins	John	GA Pilot	704-576-3561	johncollins@carolina.rr.com
Couchman	Michael	NGA	571-557-7143	michael.r.couchman@nga.mil
Dietz	John R	FAA/AJV-82	202-267-0156	john.r.dietz@faa.gov
Duda	Andrew	FAA/AJV-83	202-267-1115	andrew.ctr.duda@faa.gov
Duke	Rune	АОРА	202-509-9515	rune.duke@aopa.org
Dunham	Rick	FAA/AFS-420	405-954-4633	rick.dunham@faa.gov
Edsall	Douglas	USAASA	703-806-4417	douglas.m.edsall.civ@mail.mil
Fiske	Gary	FAA/AJV-82	202-267-3156	gary.m.fiske@faa.gov
Fortunato	Frank	HQ AFFSA/XAP	405-739-9996	frank.fortunato@faa.gov
Frazier	John	Advanced Aircrew Academy	303-726-7423	ifrazier@aircrewacademy.com
Gallant	Paul	FAA/AJV-11	202-267-9361	paul.gallant@faa.gov
Goodson	Robert L	NGA FLIP/Charts	571-558-1714	robert.l.goodson@nga.mil
Graham	Catherine M	FAA/AVS	202-267-8842	Catherine.M.Graham@faa.gov
Haag	Ron	FAA/AJV-321	301-427-4901	ronald.s.haag@faa.gov
Hawkins	William	Lufthansa (Lido)	901-240-5602	william.hawkins@lhsystems.com
Hendi	Jennifer	FAA/AJV-553	301-427-4816	jennifer.l.hendi@faa.gov

ACF 15-02 INSTRUMENT PROCEDURES GROUP ATTENDANCE LIST

Herndon	Al	MITRE	703-983-6465	aherndon@mitre.org
Hill	Chris	Delta Air Lines	404-715-1929	christopher.w.hill@delta.com
Hills	Larry	FedEx	901-224-5170	larry.hills@fedex.com
Jamison	Lynette	FAA/AJR-B1	540-422-4761	lynette.m.jamison@faa.gov
Jones	Bill	GA Pilot	478-955-7236	jonesw@mindspring.com
Jordan	Clifton	FAA/AJI-15	202-267-0818	clifton.d.jordan@faa.gov
Kerr	Jeffrey	FAA/AVS	202-267-6389	jeffrey.kerr@faa.gov
Lamond	Robert L	NBAA	202-783-9255	rlamond@nbaa.org
Lawson	Tony	FAA/AJV-54	405-954-2788	tony.r.lawson@faa.gov
Leitner	Jay	American Airlines	817-967-3120	jay.leitner@aa.com
Loney	Tom	Canadian Air Force	204-833-2500 x5512	tom.loney@forces.gc.ca
Massimini	Vince	MITRE	703-983-5893	svm@mitre.org
McGray	Bruce	FAA/AFS-410	202-267-9009	bruce.mcgray@faa.gov
Moore	John	Jeppesen	703-505-0672	john.moore@jeppesen.com
Nahlik	Justin	NGA	571-557-8803	justin.m.nahlik@nga.mil
Olson	Jill	FAA/AJV-553	405-954-0414	jill.m.olson@faa.gov
Phifer	Doug	FAA/AFS-470	202-267-5295	charles.ctr.phifer@faa.gov
Prichard	Lev	APA (American AL)	214-739-2912	levprichard@bigsky.aero
Reed	Jolda	AJV-W21	425-203-4535	jolda.reed@faa.gov
Richardson	Walter	FAA/AJV-5613	301-427-5139	walter.richardson@faa.gov
Rush	Brad	FAA-AJV-54	405-954-0188	brad.w.rush@faa.gov
Rushton	Alex	FAA/AJV-344 (contractor)	301-427-5186	alex.ctr.rushton@faa.gov
Saenger	Phillip	FAA/SAIC	202-267-8898	phillip.ctr.saenger@faa.gov
Schneider	Tom	FAA/AFS-420	405-954-5852 FAX: 2528	thomas.e.schneider@faa.gov
Schwinn	Bill	US Navy/NAVFIG	843-218-2381	william.schwinn@navy.mil
Scott	Jenipher	HQ AFFSA	405-734-5170	Jenipher.scott@us.af.mil
Stromberg	Michael	Air Wisconsin	920-203-1493	michaelstromberg@airwis.com

ACF 15-02 INSTRUMENT PROCEDURES GROUP ATTENDANCE LIST

Swigart	John	FAA/AFS-408	703-487-3921	john.swigart@faa.gov
Thompson	Ted	Jeppesen	303-328-4456 FAX: 4111	ted.thompson@jeppesen.com
Torzone	Steve	FAA/AFS-410	202-267-4617	stephen.ctr.torzone@faa.com
VanCamp	Steve	FAA/AFS-420 (ISI)	405-954-5327	steve.ctr.vancamp@faa.gov
Wade	Charles	Delta Airlines	404-715-7888	charles.w.wade@delta.com
Watson	Valerie	FAA/AJV-553	301-427-5155	valerie.s.watson@faa.gov
Webb	Mike	FAA/AFS-420	202-267-8942	mike.webb@faa.gov
Woodbury	Steve	FlightSafety Int'l	316-612-5300	steve.woodbury@flightsafety.com