June 16, 2016

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) meeting held on April 26, 2016. The meeting was hosted by the Air Line Pilots Association (ALPA) at their Herndon, VA facility. An office of primary responsibility (OPR) action listing (Atch 1) and an attendance listing (Atch 2) are appended to the minutes.

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

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

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

Copy to:

Mr. Steve VanCamp
FAA/AFS-420 (ISI/Pragmatics)
P.O. Box 25082
Oklahoma City, OK 73125

Phone: 405-954-5237
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 **16-02** is scheduled for **October 25-27, 2016** with Pragmatics, Inc. as host at their Reston, Va facility. ACF meeting **17-01** is scheduled for **April 25-27, 2017** with host TBD.

Please note that **meetings begin promptly at 8:30 AM**. Dress is business casual. Forward new agenda items for the 16-02 ACF-IPG meeting to the above addressees not later than October 6, 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

AERONAUTICAL CHARTING FORUM (ACF)
MEETING 16-01 April 26, 2016
HOST: Air Line Pilots Association (ALPA)

I. 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 Tuesday, April 26, 2016. ALPA hosted the meeting at their Herndon, VA facility.

II. ALPA WELCOMING COMMENTS: Darrell Pennington, ALPA Staff Engineer, provided welcoming comments on behalf of ALPA.

III. INTRODUCTIONS: Attendees introduced themselves and whom they represented. A sign in roster was circulated and a listing of attendees is included as attachment 2.

IV. REVIEW MINUTES OF LAST MEETING, ACF 15-02: Steve VanCamp, AFS-420, (ISI/ Pragmatics Contract Support), briefed that the minutes of ACF-IPG 15-02, which was held on October 27, 2015, were electronically distributed to all attendees and contacts on the ACF Master Mailing List on Dec 14, 2015. There were no changes submitted, and the minutes are accepted as distributed.

V. BRIEFINGS:

Tom Schneider (AFS-420) briefed and demonstrated proposed, revised FAA Forms 8260-3/4/5/7A. These forms, which will be incorporated into FAA Order 8260.19H (planned to be effective in the November 2016 timeframe), will be of interest primarily to procedure developers and cartographers, since they show source information for chart producers. The new forms are in a report format using Adobe LiveCycle. The benefit is a continuous flow of information without having a continuation Form (Form 8260-10). (EX. 1 2 3 4 5 6 7) Tom showed some of the forms and demonstrated the new style and advantages. As the form is filled out, selections “drive” the form for all associated required information. FAA Order 8260.19H, chapter 8, will change to follow the flow of information as shown on the forms. Jill Olson (AJV-5) asked about automation being ready with the release of the Order. Tom said he has been coordinating with AIS and they indicate the automation will be ready by the time procedures make it thru the coordination process. A benefit of the LiveCycle format is the ability for electronic coordination and signatures. When completed, the final form will not show all the boxes (i.e., check boxes, drop downs menus, etc.); it will be in a “clean” PDF format.

Tom Schneider (AFS-420) briefed the revision to FAA Order 8260.43B, Flight Procedures Management Program. AFS-460 (Keith Butcher) is lead on the Order rewrite and provided a progress report.(view) There is a complete rewrite of the Order underway; several meetings have taken place already, and one change (for example) is the current RAPT and NAPT (Regional and National Airspace Procedures Teams) are going away. The decision and prioritization process for procedures will be changing to a 10 year, executive oversight decision making team concept (not finalized yet). Agenda items 12-01-299 and 16-01-325 are related to the status of this order.

VI. OLD BUSINESS (Open Issues)

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

Tom Schneider (AFS-420) briefed that Rich Boll (NBAA) has done extensive work on the issue with multiple work group meetings formed after ACF meeting 15-02. Bob Lamond (NBAA) briefed from the attached slides (View). Recommendations have been completed and were provided to the ATO in October 2015. These DCPs have gone out for coordination with comments due back no later than May 5, 2016. Tom provided the DCPs for those interested in seeing them; one changes RNAV holding information and the other changes the definition for Along-Track-Distance (ATD).(Hold DCP)(ATD DCP).

Status: NBAA requests item remain open one more cycle to ensure completion and will plan on closing this agenda item at ACF 16-02 **Item Open:** AFS-420

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

Tom Schneider (AFS-420) briefed that Gary Petty (AFS-420) said Order 8260.58A has been published and includes the new language (View). NBAA concurs with closing item.

Status: Item closed.

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

John Bordy (AFS-420) (View) said the AFS-400 memorandum issued December 4, 2014 (see ACF 15-01 for discussion) is still active, with the intent to incorporate those concepts into Order 8260.43. New language in Order 8260.3C (published) has a focus on procedure development and points to Order 8260.43 (View) as the RAPT having final authority as outlined in the Memo. Bob Lamond (NBAA) inquired if the memo would be rescinded. John said not until it is incorporated into Order 8260.43, adding the Memo says it is FAA policy to publish Cats A-D as much as possible, recognizing the responsibility the airport may have publishing Cat D minimums. Airport representation in the RAPT will watch for possible financial obligations that may be incurred with the inclusion of Cat D minimums. The RAPT approves what is charted. Bob said they like this, and John added the Office of Airports is involved and wants to form a group to work out issues, adding this is part of the Order 8260.43 process. AFS-460 (Keith Butcher) is the point of contact and provided the draft language; there is no set date for publication (at least one year out).

Status: John said the issue will remain open. He will follow up with the Office of Airports to ascertain status. **Item open**: AFS-420

12-01-301: Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment *also includes issue 13-01-309*.

Tom Schneider (AFS-420) briefed (View) that the associated US-IFPP issue 13-02-18 is closed, and AFS-420 has been involved in several working group meetings on the issue. Orders 8260.3C (VDA design criteria) & 8260.19G (Note changes) have been published, and the AIM (guidance) was published on 12-15-2015. John Collins (General Aviation) commented that he has seen both old and new notes on current charts, and Valerie Watson (AJV-5) said procedures will be updated with the new obstacle profile note as

they are reworked, but they are not being processed solely to apply the new note. Ted Thompson (Jeppesen) said they are charting the advisory angle and TCH based on data provided in the ARINC data record that is incorporated into the 8260 series Forms. This includes the new note as the procedures are updated. Jeppesen wants to ensure the chart and data base do not have conflicting information (i.e., "chart/database harmonization"). Tom said there is some internal FAA discussion about having the angle and TCH in the data base, the new chart note, but no angle/TCH charted on procedure. Ted again said the Jeppesen chart will include the angle and TCH for database compatibility. John said the General Aviation community does not understand this and needs it to be explained. Ted said it is an education issue and they were under pressure (customers) to put angles and TCH back on the charts. Tom said on the FAA chart you will not see the angle or TCH, just the note, but the information will be in the database. Lev Prichard (APA) added he thinks the FAA will have problems not charting the angle/TCH with the users of AIS charts, since the database will not match the charts. Tom will take this information back for internal discussion, and was not aware Jeppesen and Lido were publishing the angle and TCH along with the new note. Chris Hill (Delta), Larry Hill (FedEx) and other industry representatives all like the Jeppesen approach, so the database and chart are compatible. John Collins added most General Aviation pilots were unaware that the angles being restored to Jeppesen charts, but likes it.

Status: With the publishing of Orders 8260.3C, 8260.19G & the AIM/AIP updates, those portions of the issue are completed. Tom will take the charting disconnect issue back (Jeppesen and Lido supplying angle and TCH on charts and FAA is not) for discussion at the US-IFPP. **Item Open:** AFS-420

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

Tom Schneider (AFS-420) had an IOU to update FAA Order 8260.19, and displayed (View) draft language. Input was requested from participants at ACF 15-02, and comments were received and considered. The order is now in coordination within the FAA. Mike Webb (AFS-420) will brief another aspect of the issue during the charting portion of meeting. John Collins (GA pilot) inquired on timeline, and Tom said issue invoves: publication of Order 8269.19H; Valerie Watson (AJV-5) will address the charting RD process and IACC specifications; Ted Thompson (Jeppesen) and other charting service providers will be kept informed of progress. Kevin Allen (American Airlines) inquired if the PBN requirements box has been coordinated with ICAO. Mike said ICAO Annex 4 does not specify how the box is to be presented, just that it has to be on the chart. The guidance is State specific by data house providers and users, with the Order 8260.19H being specific to our State. Ted added Jeppesen and Lido plan to follow US method, providing the PBN requirements are determined at the design level, specifically documented on procedure source and not left to cartographers. Mike said the NavSpec for the procedure will be first item in the requirements box, with the US following AC 90-105A in naming of the NavSpec, adding this is tied to ICAO Doc 9613 naming also. Discussion followed on charting notes for RNP/RNAV/RNP-AR and conventional procedures with RNAV legs on the charts, along with various combinations of equipment. Ted said there were two aspects to the issue: What should the note read; and how should the note be charted. Gary McMullin (Southwest Airlines) said pilot training will be required on this change. Tom added guidance will be out November 1 (Order 8260.19H), and Valerie will have the RD (charting portion) around the same time frame. AIM/IPG guidance will be required for transition from notes now to notes in future.

Status: Tom will provide status update on Order 8260.19H. Valerie will provide update on status of charting portion. **Item open:** AFS-420/AJV-5

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

Tom Schneider (AFS-420) briefed this issue had been on hold, but FAA Orders 8260.3C and 8260.58A are now published and now AFS-420 and the US-IFPP (Item 14-01-22) will be working the issue.(View) The lead is Gary Petty (AFS-420), and he was planning on forming a working group in May. Tom requested that suggestions/comments be sent to AFS-420 for consideration.

Status: Open item at the US-IFPP and a working group will be formed by Gary**. Item Open:** AFS-420

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

Tom Schneider (AFS-420) briefed that the proposed language is in draft Order 8260.19H. Nothing has changed from last ACF and the Order is in coordination, with anticipated publication in November, 2016. (View)

Status: Tom will track status of FAA Order 8260.19H through the coordination process. **Item Open:** AFS-420.

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

Mason Curling (AFS-470) advised AIM language (para 1-2-3) locked in and will be published 5-26-2016. (View) Bob Lamond (NBAA) requests item remain open until published.

Status: Mason will track status of the AIM update. **Item Open:** AFS-470.

15-01-320: Common Sounding Fix Names.

Gary Fiske (AJV-82) briefed that some of the identified Dallas area similar sounding/spelled fixes (NAVYS, NAAVY and NAVYE) were supposed to change on March 31, however they did not. In Atlanta, one of the identified fixes (SHELE & SCHEL) will change, and they may eliminate the ONYON arrival anyway (SHELE), but no specific time line given by ATL approach (probably 8-12 months due to staffing). Gary stated that several other instances were identified and have been fixed already, adding there is a tremendous amount of resistance to many changes due to facility preferences. Lev Prichard (APA) inquired about criteria, noting these issues have existed for a long time. Gary said criteria already exists in Order 7400.2 to look for similar sounding fix names within 300 miles, but it is a manual process and not easily applied. Tom Schneider (AFS-420) pointed out you only hear about these when something happens (i.e., ASRS report). Gary said many fix requests are not from the National Flight Data Center (NFDC) supplied list, but rather commemorate someone or something. Lev asked why there was no program to search out and identify potential issues. Bennie Hutto (NATCA) said on a Metroplex project, a list of names is requested and they do not check for similarities because they believe the list is already usable for that area. Gary said the problem is that even though names are unique, there can be spelling and pronunciation

issues (i.e., the Dallas fixes). Also regional dialect can sway pronunciation. Frank Fortuna (AFFSA) said ICAO uses the International Codes and Routes Designators (ICARD) system which has an algorithm to check for these issues and suggested that it might be useful. Gary was unfamiliar with the ICARD system and said the FAA uses NFDC to check all the databases for fix name duplication, but that pronunciation is not an automated function. The point was made that when a fix is requested, sometimes NFDC asks the usage and wondered if that would affect the search parameters. Ted Thompson (Jeppesen) said they have business rules looking for same items, but it only looks at spelling, not pronunciation, and the issue is phonetics. He added with the different dialects in the US, when you have a non-English speaking crew, fix enunciation can sound completely different. Ted said he and Divya Chandra (VOLPE) attended a CNS Task Force meeting which had a presentation on a new metro plan. The plan had a list of about a dozen waypoint names, showing how each will look and how they should be pronounced. They both felt having a lexicon on how to pronounce a name should be a red flag. Tom asked if any NFDC personnel were present, and Jill Olson (AJV-5) said she was in email contact with NFDC (Scott Jerdan), he would be present tomorrow (27th), and she will inquire about these issues and if he is familiar with ICARD.

A brief follow up discussion occurred the next day on the ICARD search mechanism, and NFDC will take this back and examine along with looking at other search algorithms.

Status: Gary will continue to work on the identified similar fixes. Jill will discuss ICARD and other procedures with NFDC. **Item Open:** AJV-82 /AJV-5

Editor's note: Follow on correspondence with NFDC subject matter experts stated that the ICARD system sound-alike function only checks against names in its data base, the max range is 500nm, and the data base is not current (being rebuilt). They offered the following comments:

1. *NFDC could stop allowing users to create new 5LNCs. This would allow us to improve name quality by checking what we have more closely and deleting the bad names.*
2. *Use only names from the list that we have now.*
3. *Only reserve names when the user "knows" where it will be used…provide proposed coordinates. This would help with the sound-alike search.*
4. *Have the ARTCCs examine their list and eliminate problem names.*
5. *Have the requester/developer do the sound-alike search before using the name at a particular location. See 7400.2*

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

John Bordy (AFS-420) briefed that this issue involves hold down altitudes on the two approaches, which are non-standard. New language in Order 8260.3C clarifies the issue by stating altitudes other than the clearance limit altitude or an altitude to identify a turn point are not permitted, which should stop or stem the flow of these type missed approaches. AFS-400 would need to grant a waiver, and their position is to discourage this. A recommendation for the ARINC coding working group was developed, but the AFS-460 representative could not attend their February meeting and will attend next. One of the recommendations from the working group was specific missed approach verbiage related to hold down altitudes so that coders can discern intent and code appropriately. That is, instead of saying, for example, "…climb to 1000 until CRI VOR/DME, then climb and maintain 2000," we would say "climb and maintain 2000 until CRI VOR/DME then climb to 4000…" Regarding the specific procedures that drove this agenda item, they were scheduled for amendment in February, but changes did not occur. The FAA, (AIS and the FPT), are negotiating with the New York TRACON (N90),

trying to remove the hold down altitudes completely since the RNAV procedures to the same runways do not have any hold down restrictions. Tony Lawson (AJV-5) said they are involved in the waiver process, but do not like those type missed approaches, adding there are similar issues in Van Nuys, CA and at other airports. They would prefer the procedures be designed without hold down altitudes. Kevin Allen (American Airlines) said ATC wants flexibility to hold aircraft down, although procedure calls for higher altitudes. The recommendation was to code hard altitudes. John said the work group came to the same conclusion, but we generally do not establish policy on how to annotate/design non-standard procedures. In this case the altitude was coded as "at or above." If a procedure comes thru the Procedure Review Board (PRB) like this, we will ensure it is coded as "at or below," with the missed approach language something like "… maintain 2000 until crossing xxx, then…" Gary Fiske (AJV-8) asked N90 to provide the rationale for the RNAV and ILS missed approach differences. Tony advised that work is still on hold and being discussed at the region and they (AIS) are not involved in the discussion, but he has requested an update and will provide it when received. Lev Prichard (APA) expressed concern over the slow pace at which the FAA is reacting to correct this problem at JFK and feels coding guidance is needed for non-standard procedures to avoid this again. In the specific JFK cases, their crews have to manually catch this every time, so the pilots are asking why it is not fixed yet, and it has been over a year now, so why is it not at least coded correctly? Ted stated that the data base is coded as the FAA defines it on FAA source (i.e., 8260-series Form), but they still receive queries on these same procedures on a monthly basis. John said the issue needs a higher priority within the FAA. Coordination must be completed with the Eastern Region and N90. All altitudes specified on FAA Forms are "at or above" unless stated otherwise. Ted said that missed approaches are designed for obstacle clearance, not ATC needs, and that is the crux of the issue. Tony said from a design standpoint, the developer needs to know how long the aircraft must remain at a specified altitude due to required obstacle clearance. The FAA needs to look in the short term at a verbiage change initially then a procedure amendment to follow on these specific procedures.

Status: John will continue to work this through the US-IFPP regarding future criteria enhancements and look into raising the priority on this specific safety issue. **Item open:** AFS-420

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

Tom Schneider (AFS-420) stated that the status update will be in two parts. In part 1, Krystal Behrns (AJV-5) briefed an Aeronautical Information Services proposal (View) to remove takeoff notes from Standard Instrument Departure (SID) graphics, as outlined in the attached PowerPoint presentation. This proposal would reduce clutter, eliminate redundancy (as they are repeated in the textual takeoff section of the TPP), reduce number of continuation pages (currently 107), and leave Takeoff Obstacle Notes on all Obstacle Departure Procedure (ODP) charts. Vince Massimini (MITRE) discussed that if a pilot is given a different departure they would have to go look for notes elsewhere when busy rather than having them on the new SID, but agrees with the clutter issue. Michael Stromberg (Air Wisconsin) suggested that rather than placing all obstacle information at front of book, each airport have its own individual page, making the data readily available, but no chart clutter. Ted Thompson (Jeppesen) endorses this proposal. Jeppesen was compelled to provide notes when they began to appear on the 8260 series forms. Jeppesen then received airline feedback, questioning what to do with the notes (i.e., bushes, chain link fences, etc.), and were asked by the users of their

products to remove them from the procedure charts and place on separate page. Jeppesen decided that on procedures with few low, close-in obstacles (<6) to place them on the SID graphic, and if there was an “excessive” number, place them on separate obstacle page indexed to follow the SID procedure. Airlines with a tailored service could then opt to not receive the separate obstacle page (most opted out), because many airlines do their own obstacle data research/analysis for low, close-in obstacles. Ted added many pilots feel this is not useful information. Jeppesen maintains an obstacle base requiring a lot of effort, but they are not sure of any benefit and would prefer they go away. Gary Fiske (AJV-8) inquired if this was the Rich Boll (NBAA) proposal to just show highest/closest? The answer was no; this proposal is to reduce chart clutter by placing this redundant information (i.e., same information applies to multiple procedures) in a single location. A lengthy discussion ensued including: chart all obstacles; not show any at all; identify highest in certain proximity; append take off minimums per runway; etc. Tom Schneider (AFS-420) added this has been discussed for many years; originally pilots said they did not want to pull up a SID and then have to look elsewhere for the info on obstacles, so the decision was made to chart all information on each procedure chart to offer “one stop shopping”. Changes were made to accommodate this, but now we are trying to revert back to taking this information off the charts by having pilot, once again, being faced with having to go to two locations to get ***all*** the applicable information for the procedure to be flown. Tom asked if the FAA should chart as Jeppesen does, even though this would require the pilot to look for the information in a different place, but in the same area with the SIDs vs. in the Takeoff Minimums section in the front of the Terminal Procedures Publication. Valerie Watson (AIS) added pilots would still have a lot of reading to do, but the information *would not* be deleted. More discussion followed about the Jeppesen representation of the data, and Ted added that an irony of the digital age is it takes more work to look at a different page for the data electronically than flipping a book page. He questioned if anyone actually uses the data, either on chart or on an add-on page. Lev Prichard (APA) said some GA and military use the data, and supported moving the obstacle information to the single, ODP location; he believes users want the data somewhere. Valerie responded the FAA provides the digital Takeoff file containing the takeoff obstacles, but cannot control what industry does with it. She asked if the takeoff text were searchable by airport ID, would the group support removing it from SID graphics. Rune Duke (AOPA) said they at least want information in the front of the book, but searchable would be better. Larry Hill (FedEx) said, for example, the 6 ft. fences can go, but FedEx prefers some obstacle data on the chart in case of unplanned event. Michael inquired about color coding of obstacles. Ted said this would require more effort and he thought would be of marginal value. Tom said the issue has a short term and long term component; this short term fix places obstacles in a “single” list of their own. Valerie again asked the group if takeoff entries were searchable by airport and could perhaps be “clickable,” would that justify or make possible the removal of them from redundant locations. Group said yes, but Ted said this is harder to do than it sounds. Tom questioned if SID and ODP obstacle data are always the same, and both Valerie and Tony Lawson (AIS) said yes. Tony added that when you change one obstacle you must amend every chart affected. Listing the obstacle on only one FAA Form 8260-15A (Takeoff form) would significantly reduce maintenance by eliminating the current necessity of updating ALL of the SID forms at a given airport when a single obstacle is revised. Michael acknowledged the benefit for this information being in one location, mentioning the airport chart like Jeppesen does. Bill Wade (Delta Airlines) also likes the way Jeppesen displays the info where it does. A group discussion on Form 8260-15B usage and possible changes ensued. The group agreed that, in the FAA digital files, if the Takeoff section (and thus the takeoff obstacles) were searchable by

airport ident, it would be permissible to remove the redundant takeoff obstacle text from the planview of SID graphics. Valerie repeated that because there is no textual takeoff entry (with the subject obstacles listed) for graphic ODPs, this would NOT apply to them, but only to SIDs. Valerie will advise Ted before any changes are implemented. Valerie took an IOU to investigate making the textual takeoff section searchable by airport ident and to draft proposed revisions of IACC specs to support the removal of takeoff obstacle text from SID charts. She also agreed to label the current obstacle text "TAKOFF OBSTACLE NOTES" vs the current "NOTE" in the takeoff section so that the obstacle information is more obviously labeled and is in concurrence with the Form 8260-15A source document. If and when this proposal is implemented, AIS will issue a "Chart Notice" to address these changes. No objections received.

Tom briefed part 2 (View) of this agenda item on how this was presented to the US-IFPP in January, and it also generated a lot of discussion. One concern raised by Flight Inspection was if obstacles are removed from the chart are we removing information that may be important to the pilot. Rob Kroeplin (AJV-5) briefed the US-IFPP on an AIS computer tool that groups obstacles. In some cases it may reduce number of obstacles (not all), but it helps procedure designers, especially with the proliferation of new survey generated obstacles. Kevin Allen (American Airlines) asked if any pilots in the room actually look at or read the obstacles on the chart, and only Jen Scott (AFFSA) said yes. Discussion followed on possibly listing controlling obstacles and placing generic note stating not all low, close-in obstacles are charted. Tom advised the US-IFPP Departure WG is being reenergized (long term concept work) for departure criteria, and there are also possible changes to the obstacle identification surfaces. Tom will brief this discussion at the June US-IFPP, and report back at ACF-16-02.

Status: Valerie took IOU to investigate making the takeoff section of the TPP searchable by airport, to draft proposed revisions to IACC specifications to remove text obstacles from SIDs and to revise the "TAKEOFF OBSTACLE NOTES" obstacle note label. They will issue a Chart Notice to alert users of the changes if/when implemented. No objections received. John Blair (AFS-410) took an IOU to look at flight ops and AIM/AIP changes required for guidance to pilots concerning the transition to the new method of charting; i.e., changes on some charts having obstacles, and some having the key indicating to look at front of book. Tom took an IOU to brief this discussion at the June US-IFPP, and report back at ACF-16-02. **Item Open:** AJV-5/AFS-410 /AFS-420

VII. NEW BUSINESS (New Agenda Items)

16-01-324: SID/STAR Naming Policy.

Tom Schneider (AFS-420) briefed this item submitted by Derek Benda (Love Travel Stops), stating there have been several ASRS reports on SID/STAR procedure naming when they begin with same first letter or the first two letters. This agenda item is similar to the pronounceable name discussion from earlier (Agenda Item: 15-01-320). Derek recommends naming graphic departure procedures (which consist of graphic ODPs and SIDs) and STARs so they do not start with the same first letter; or as an alternative, change the revision number of one procedure to make them different. Tom said that changing the revision number out of sequence would not work because the graphic departure procedure numbering process serves as indicating an amendment to the procedure has occurred and doing this would become a record keeping (i.e., historical tracking) nightmare. What we could do is provide guidance to the procedure developers

to be alert to watch for and avoid similar sounding names during the procedure development and design process. Example draft language was shown (View) that could go into Order 8260.46 for graphic departure procedures and Order 8260.19 for STARs. Bill Rabek (Atlanta ARTCC) said similar sounding letters when spoken would also need to be considered and cautioned this might be a difficult process to control. Tom said he understood, but the objective was to give the procedure developers guidance to at least look for and avoid, if at all possible, the similar sounding names. Bob Lamond (NBAA) agreed with the direction, but suggested a more general statement, such as "Consideration of names should be a factor reference similar sounding…" or something along those lines. This takes into consideration regional dialect variations such as southern and foreign accents, adding you will never be able to eliminate the problem, but this will at least be a great help. Bill agreed with Bob's thoughts, suggesting something like "Be cognizant of similar sounding names…" Question was asked if this should be tied Order JO 7400.2, Procedures for Handling Airspace Matters, tying it to the fix 300 NM discussion, and the responses were no. This particular issue, although tied to a fix name, belongs in the directives supporting specific procedure development. Tom said this issue should be a prime consideration at the beginning of Metroplex project development. Lev Prichard (APA) said, although he found only one instance of this reported in ASRS, he feels it is a problem, and following this procedure naming proposal would add one more layer of protection. Tom asked Jazz Armstrong (FAA/AOV-110) if there was any way that during evaluations these issues could be looked at since it appears system wide. Jazz said he would look in their operating guidelines and determine if feasible, but noting that adding this to their oversight is not really geared to the ATC system itself, so there was uncertainty whether this would be in the scope of their operating practices. Tom said NFDC has stated on a number of occasions that there are many pronounceable names available to use. Gary said the SID/STAR usually has some local area specific "theme" associated with it driving the naming request(s). Gary also asked about facilities that may have 26 SIDs and to use different first letters would be extremely difficult. Bill said ATL just added 22 new STARs on April 12, in addition to existing procedures, and he thinks DFW has more. Bill said the controllers/pilots want them pronounced a certain way and that the spelling may not completely match the pronunciation. In conclusion, short of any major policy changes to the naming processes already in place, it seems best to provide a reminder in our policy directives to have procedure developers consider the similar sounding names of graphic departure procedures and/or STARs while in the development phase.

Status: Tom said AFS-420 will work on the draft language for Orders 8260.19 and 8260.46 and report back at the next meeting. **Item open:** AFS-420

16-01-325: Priority of Terminal Procedure Amendments.

John Kernaghan (NBAA) briefed that the SFO DYAMD TWO RNAV STAR final altitude at ARCHI was scheduled to be amended to 7000, along with a change to the associated Class B airspace floor. The STAR amendment was processed, but the Class B change was not, which put arrivals below the floor of the Class B airspace. A temporary NOTAM was issued to amend the DYAMD TWO to 8000, but it looks like an 18 month fix. Even though it is the responsibility of the pilot-in-command to be familiar with all NOTAMs, this violated the 224 day NOTAM limit because a temporary NOTAM does not revise the data base or the charts. NBAA requests a change to FAA Order 8260.43B, Flight Procedures Management Program, to prioritize the timing and importance of related procedure development. Bob Lamond (NBAA) added they just heard the Western

Service Area, Regional Airspace and Procedures Team (RAPT) has stopped meeting due to a backlog of scheduled procedure development work with publish dates more than two years out. The Metroplex projects seem to always have issues and there needs to be a way to affect corrections sooner without using 18 month temporary NOTAMs. Tom Schneider (AFS-420) said the T-NOTAM has a 224 day limit, and again spoke of the revision work under way with FAA Order 8260.43B. Bennie Hutto (NATCA) said there is ATC phraseology to correct issues like this (preferable to NOTAMS), and added the DYAMD THREE STAR is scheduled for publication in July 2016 addressing the problem. Bob said this is the first NBAA heard of the July publication for the DYAMD THREE. Brian Townsend (American Airlines) agreed with Bennie that ATC using phraseology is a quick fix, however even though NOTAMs are the legal fix, procedure via NOTAM is not good and there needs to be an expedited process in place for these corrections. Lynette Jamison (AJR-B1) reminded the group that "estimated" NOTAMs (i.e., "EST" following the expiration date of the NOTAM) drop out of system at 224 days (In this case, October 2). Lev Prichard (APA) asked if a NOTAM will just drop on an important issue like this, and Lynette said yes, adding it is the responsibility of the NOTAM originator to monitor NOTAMs to determine if it is still needed. Tom said he believed that the NOTAM issuer would be notified before it expired and dropped, and Bill Rabek (ATL ARTCC) said they are not notified. Lynette said if the NOTAM Manager system is used to issue the NOTAM, there will be a three day notification; the ARTCCs do not use this system and do not get the notification. Lev said this shows work is needed on the issue. Lynette said there is no one person looking at these; no oversight; no specific office is looking at STAR NOTAMS with "PERM"; nor are the old "FIT NOTAMS" that are still in the NOTAM system being monitored. Valerie asked if these "old NOTAMS" are being cleaned up when STAR oversight is turned over to AFS, and Tom said no; these are ATO items. Lynette added it should be the responsibility of the issuing authority to ensure validity of all the NOTAMS they have issued. The discussion had moved off the original topic of the agenda item and the discussion ended. Tom Schneider will take the IOU to monitor progress of the Order 8260.43 revision and report back at the next meeting on the latest proposed changes.

Status: AFS-420 will monitor Order 8260.43 revision work under way (by AFS-460) and report back. **Item open:** AFS-420

16-01-326: FAA Order 8260.46F, "Top Altitude" Charting Constraints.

Bennie Hutto (NATCA) presented the issue (View). Order 8260.46F published in December, 2015, and allows for two Top Altitudes per procedure for a Standard Instrument Departure (SID). Bennie gave an example of a procedure being developed that served six airports, and AIS advised the limit was still only two Top Altitudes for the entire procedure; NATCA feels the Order 8260.46F, Appendix D and E examples, which do show variations, are misleading and do not follow text of the Order. At this location, Jeppesen charted three airports on one SID, and individual procedures on the other three airports. The FAA charts each airport individually (no combined procedures). NATCA would like to retain the two Top Altitude restriction, but expand it to accommodate the multiple airport aspect by allowing two Top Altitudes per procedure, per airport. An associated issue is the definition of what a "Top Altitude" is in Order JO 7110.65 and Order 8260.46F, and because of this ATC must issue a Climb Via clearance (even though many published procedures are truly not Climb Via). Kevin Allen (American Airlines) said he feels industry would prefer to see satellite airports coded as separate procedures.

Bennie replied that is problematic in some areas due to the amount of different procedures that would exist for ATC to remember in same area, which is why ATC wants to "tie" as many as possible together (i.e., use same procedure that goes to the same waypoints). The only issue ATC is having is the Top Altitude. Ted Thompson (Jeppesen) says they use an "also serves" concept to reduce the sheer number of procedures. Gary Fiske (AJV-8) said a "Climb/Descend Via Working Group" was formed (no longer active) that discussed the issue, and Tom Schneider (AFS-420) said that group was trying to avoid confusion about a limitless number of Top Altitudes charted and ATC having to worry about which airport an aircraft departed from (different Top Altitude). The anticipated workload for the controller drove the two altitude limit per procedure decision. Tom said AFS (responsible for the Order on source document for charting) will put whatever limit on "Top Altitudes" the ATO requests. Bennie said again the definition of Top Altitude, defined in both Orders, is forcing ATC to issue Climb Via clearances. Tony Lawson (AJV-54) stated that he was part of QC process and when they asked for clarification from AT Headquarters, they were told two per procedure. Gary McMullin (Southwest Airlines) said a Top Altitude does not belong on every procedure (use "climb and maintain" may be applicable phraseology). Brian Townsend (American Airlines) added the Top Altitude is just the ATC clearance limit on the SID, whereas the "Bottom Altitude" on a STAR is a constraint. The Climb Via phraseology for all SIDs with a Top Altitude, even though no published altitude constraints, leads to confusion. There is a recommendation at the Pilot Controller Procedure and Systems Integration (PCPSI) work group to clear up this issue; but as a first step there are a number of facilities that are being forced to apply a Climb Via clearance with their SIDs. There needs to be leeway so that even if a Top Altitude is present and the procedure has no other altitude constraints, a "climb and maintain…" clearance can be used. This would not require the removal of a top altitude if the facility wants it. Ted added that in Houston, if you split out all the procedures separate, the Jeppesen published number would go from 50 to 240. Tom inquired if the Climb/Descend Via working group is being reenergized and some thought so. Gary felt the issue should not go back to AJV-8 thru him, but rather a different avenue. Since "Top Altitude" remains a topic in the PCPSI group, Brian will bring it back to that group for consideration.

Status: Brian Townsend will take the issue to the PCPSI work group and report back. **Item open:** PCPSI

VIII. NEXT MEETING:

ACF 16-02 is scheduled for October 25-27, 2016, hosted by Pragmatics, Inc. Reston, VA.

ACF 17-01 is scheduled for April 25-27, 2017, host TBD.

Please note the attached Office of Primary Responsibility (OPR) listing (attachment 1) for action items. It is requested that all OPRs provide the Chair, Tom Schneider, AFS-420, a written status update on open issues not later than October 6th, 2016 - a reminder notice will be provided.

IX. Attachments (2): 1. OPR/Action Listing
2. Attendance Listing

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 16-01

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-420	**07-02-278:** (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	Track publication status of the DCPs and provide status update at next ACF.
AFS-420	**12-01-299:** (Loss of CAT D Line of Minima in Support of Circle-to-Land Operations)	Track status of Order 8260.43C and provide status update at next ACF.
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*)	Work the issue thru US-IFPP and provide status update at next ACF.
AFS-420/AJV-5	**13-02-312:** (Equipment Requirement Notes on Instrument Approach Procedures)	AFS-420 will provide status update at next ACF. AJV-5 will update of Charting RD.
AFS-420 (US-IFPP)	**14-01-315:** 90 Degree Airway-to-RNAV-IAP Course Change Limitation; Arrival Holds	Monitor US-IFPP action and provide status update at next ACF.
AFS-420	**14-01-316:** RNAV Fixes on Victor Airways Used for RNAV SIAPs	Draft work done in Order 8260.19H; Provide status update at next ACF. (Should publish November 2016)
AFS-470	**14-02-317:** Use of GPS on Conventional (Ground-Based NAVAID) Instrument Approach Procedures (IAPs)	Track status on AIM update and provide status update at next ACF. (Should publish 5-26-2016)
AJV-8/AJV-5	**15-01-320:** Common Sounding Fix Names	AJV-8 will continue work resolving identified fixes and brief progress at next ACF. AJV-5 will report on NFDC discussions.
AFS-420 (US-IFPP)	**15-01-321:** Coding of Missed Approach for ILS31L and ILS31R at KJFK	Work on raising priority on this specific safety issue, and monitor US-IFPP action on future criteria enhancements and brief progress of working group meetings at next ACF.
AFS-420/AJV-54	**15-02-323:** Depiction of Low, Close-In Obstacles on SIDs & ODPs	Being worked in US-IFPP Departure Working Group. Report status at next ACF.
AFS-420	**16-01-324:** SID/STAR Naming Policy.	Work draft language for Order 8260.19 & Order 8260.46 and report status at next ACF.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 16-01

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-420	**16-01-325:** Priority of Terminal Procedure Amendments.	Monitor Order 8260.43 revision (by AFS-460) and report status at next ACF.
PARC-PCPSI WG	**16-01-326:** FAA Order 8260.46F, “Top Altitude” Charting Constraints.	Issue to presented to PCPSI WG to discuss and report status at next ACF.

ACF 16-01
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LIST

Last	First	Affiliation	Contact	Email
Ahmed	Kemal	Navtech	44 7515 577 163	kemal.ahmed@navtech.aero
Allen	Kevin	American Airlines	480-693-4637	kevin.allen@aa.com
Armstrong	Fred (Jazz)	FAA/AOV-110	202-267-1193	merrill.armstrong@faa.gov
Austin	Iain	NetJets/Dragon fly Aero	614-239-2071	iaustin@netjets.com
Ayers	Rick	ESRI	703-989-3221	rayers@esri.com
Beatse	Russell	FAA/ZME	901-368-8537	russel.c.beatse@faa.gov
Behrns	Krystle	FAA/AIS	301-427-4820	krystle.a.behrns@faa.gov
Blair	John	FAA/AFS-410	202-267-8986	john.blair@faa.gov
Bordy	John	FAA/AFS-420	405-954-0980	john.bordy@faa.gov
Burns	Andrew	FAA/AFS-400	202-267-9084	andrew.ctr.burns@faa.gov
Christian	Lance	NGA/XCF	571-557-3870	lance.d.christian@nga.mil
Cipriano	Mike	United Airlines	404-723-6220	michael.cipriano@united.com
Collins	John	GA Pilot	704-576-3561	johncollins@carolina.rr.com
Connell	Robert	FAA/AJV-14	202-267-4642	robert.connell@faa.gov
Couchman	Michael	NGA	571-557-7143	michael.r.couchman@nga.mil
Courtney	Dale	FAA	202-267-4537	dale.courtney@faa.gov
Curling	Mason	FAA/AFS-405	202-267-1428	mason.ctr.curling@faa.gov
Daniels	Daryl	FAA/AJV	404-305-5581	daryl.daniels@faa.gov
Duke	Rune	AOPA	202-509-9515	rune.duke@aopa.org
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
Gallant	Paul	FAA/AJV-11	202-267-9361	paul.gallant@faa.gov
Gifford	Robert	FAA/AeroNav Products	301-427-4842	robert.l.gifford@faa.gov
Gingras	Jeff	Jeppesen	303-328-4489	jeffrey.gingras@jeppesen.com

ACF 16-01
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LIST

Last	First	Affiliation	Contact	Email
Gold	Russell	FAA/AJV-14	703-717-3699	russell.gold@faa.gov
Goodson	Robert L	NGA FLIP/Charts	571-558-1714	robert.l.goodson@nga.mil
Graham	Catherine M	FAA/AVS	202-267-3327	Catherine.M.Graham@faa.gov
Grose	Dan	Jacobs Engineering	603-546-4500	dan.grose@jacobs.com
Hendi	Jennifer	FAA/AJV-553	301-427-4816	jennifer.l.hendi@faa.gov
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
Holden	Kenneth	US Army HDQA	312-656-3568	kenneth.d.holden.civ@mail.mil
Hutto	Bennie	FAA/NATCA	540-522-6775	critpbn@natca.net
Jamison	Lynette	FAA/AJR-B1	540-422-4761	lynette.m.jamison@faa.gov
Kelley	Justin	Lufthansa (LIDO)	720-257-4807	justin-jerome.kelley@lhsystems.com
Kernaghan	John	NBAA	610-996-2977	jkernagh@its.jnj.com
Kerr	Jeffrey	FAA/AVS	202-267-6389	jeffrey.kerr@faa.gov
Kuhnhenn	Juergen	LSY (LIDO)	41-44-828 6546	juergen.kuhnhenn@lhsystems.com
Lamond	Robert L	NBAA	202-783-9255	rlamond@nbaa.org
Lawson	Tony	FAA/AJV-54	405-954-2788	tony.r.lawson@faa.gov
Ledany	Rony	TerraPixel	202-642-6277	rony@terrapixel.com
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
McMullin	Gary	Southwest Airlines	469-603-0766	gary.mcmullin@wnco.com
Myers	Jon	FAA/AJV-5	301-427-5132	jonathan.p.myers@faa.gov
Nahlik	Justin	NGA	571-557-8803	justin.m.nahlik@nga.mil

ACF 16-01
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LIST

Last	First	Affiliation	Contact	Email
Newsted	Aric	Air Wisconsin	616-443-8443	anewstead@gmail.com
Olson	Jill	FAA/AJV-553	405-954-0414	jill.m.olson@faa.gov
O'Sullivan	Gerry	ALPA-Safety for Air traffic	570-878-3821	gerry.osullival@alpa.org
Rabek	Bill	FAA-ZTL	720-210-7657	william.t.rabek@faa.gov
Pennington	Darrell	ALPA	703-689-4333	darrell.pennington@alpa.org
Phillips	Edward	FAA/AJW-B620	540-422-4435	edward.s.phillips@faa.gov
Prestrude	Mark	NATCA	202-803-3259	mprestrude@natcadc.org
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
Rushton	Alex	FAA/AJV-553 (contractor)	301-427-5186	alex.ctr.rushton@faa.gov
Saenger	Phillip	FAA/AFS-400 (SAIC)	202-267-8898	phillip.ctr.saenger@faa.gov
Schmitz	John	Delta Airlines	404-715-7104	john.schmitz@delta.com
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
Sormus	Marit	Navtech	440 783 758-9721	marit.sormus@navtech.aero
Sosnowich	Terry	FAA/AJV-5	301-424-4812	terrence.sosnowich@faa.gov
Stromberg	Michael	Air Wisconsin	920-203-1493	michaelstromberg@airwis.com
Thompson	Ted	Jeppesen	303-328-4456 FAX: 4111	ted.thompson@jeppesen.com
Townsend	Brian	American Airlines	702-204-0007	brian.townsend@aa.com
VanCamp	Steve	FAA/AFS-420 (ISI)	405-954-5327	steve.ctr.vancamp@faa.gov
Von Valtier	Karl	NetJets Aviation	614-239-2071	kvonvaltier@netjets.com
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

ACF 16-01
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LIST

Last	First	Affiliation	Contact	Email
Webb	Mike	FAA/AFS-420	202-267-8942	mike.webb@faa.gov
Wentworth	Brandon	Southwest Airlines	469-603-0946	brandon.wentworth@wnco.com
Woodbury	Steve	Flight Safety Int'l	316-612-5300	steve.woodbury@flightsafety.com