

**GOVERNMENT / INDUSTRY AERONAUTICAL CHARTING FORUM
CHARTING GROUP
Meeting 12-02
Air Line Pilots Association
October 24-25, 2012**

I. Opening Remarks

The Aeronautical Charting Forum (ACF) was hosted by Air Line Pilots Association (ALPA) at their Headquarters in Herndon, VA. Valerie Watson, FAA/AJV-3B, opened the Charting Group portion of the forum on Wednesday, October 24, 2012. Valerie acknowledged the ACF Co-chair Tom Schneider, FAA/AFS-420, who chaired the ACF Instrument Procedures Group meeting held on October 23. Minutes of that meeting were distributed separately.

Valerie acknowledged and expressed appreciation to ALPA for hosting the ACF and the support given by Steve Serur during the three days of the ACF.

II. Discussion of Next ACF

Valerie Watson, FAA/AJV-3B, informed the Forum participants that ACF 13-01 (April 23-25, 2013) would be hosted by Innovative Solutions International and held at Pragmatics, Inc. Corporate Headquarters in Reston, VA.

III. Review of Minutes from Last Meeting

The minutes from the 12-01 ACF meeting were distributed electronically last spring via the AeroNav Products website: http://www.faa.gov/air_traffic/flight_info/aeronav/acf/. The minutes were accepted as distributed with no changes or corrections.

IV. Agenda Approval

The agenda for the 12-02 meeting was accepted as presented.

V. Presentations, ACF Working Group Reports and ACF Project Reports

A.) ICAO/IFPP Committee Report

Mike Webb, FAA/AFS-420 and U.S. Member of the ICAO Instrument Flight Procedures Panel (IFPP), provided an update on the ICAO/IFPP Committee activities and an overview of the key topics of the recent ICAO/IFPP Integration Working Group (IWG) meeting.

Mike stated that one of the major outcomes from the September 2012 meeting is a White Paper, currently in draft form, to be part of a State Letter regarding PBN naming conventions.

Mike added that there had been two meetings of the Integration Work Group and discussed a number of the tasks being discussed by the group ([see slide #3; complete list of IWG tasks can be found on slides 4 and 5](#)).

Mike provided a detailed update on the progress made regarding ICAO Naming Concepts for PBN Instrument Procedures. Mike stated that the proposed use of parentheticals in procedure titles is currently supported by ICAO Member States and the group is looking into how use of the parentheticals can be expanded in the future naming of PBN procedures. He discussed the meaning of the various parentheticals (or lack thereof) with regard to specific lines of minima ([see Slides #9 and #10](#)).

Mike also briefed the group regarding the group's discussions regarding the Approach PBN Requirements Box ([see slide #11](#)) and Arrival/Departure Requirements Box ([see slide #12](#)). Various chart concepts were shown as part of the briefing, [see slides 13 – 15](#).

When asked about procedures using both conventional & RNAV components, Mike stated that those cases were still being looked into.

ACTION: Mike Webb, FAA/AFS-420, will provide an update at the next ACF.

B.) Declared Distances

Rich Boll, NBAA, was not in attendance, but submitted the following statement:

The ACF-CG's Declared Distances Working Group (DDWG) was very active since the 12-01 meeting in April. On May 1 2012, FAA Airport Engineering Division released Draft Advisory Circular (AC) [150/5300-13A, Airport Design](#) for public comment. This AC contains FAA guidance regarding the determination and notification of declared distances. The DDWG conducted several meetings to review draft AC and formulate comments and recommendations aimed at addressing ACF-CG agenda items [07-01-192 Usable Runway Lengths for Takeoff and Landing](#) and [09-01-215 Reporting and Depiction of Stopways](#).

On September 28, 2012, FAA Airports Division published the revised Airport Design AC. The DDWG has not an opportunity to review the AC and its implications with respect to the two agenda items before the ACF-Charting Group. However, our initial reading of the AC revealed that FAA ***did not*** adopt the DDWG's primary recommendation to address Charting Group agenda item [07-01-192 Usable Runway Lengths for Takeoff and Landing](#),

which was to require airports subject to the AC to publish declared distances for each runway end.

Regarding Charting Group agenda item [09-01-215 Reporting and Depiction of Stopways](#), it appears that FAA has largely addressed the concerns raised by the DDWG at part 139 airports regarding the designation of stopways and overruns. However, our concerns remain valid at civil, non-part 139 airports in light of review and analysis completed using the November 15, 2012 edition of the NASR database ([see attached to review document](#)).

The DDWG will meet after November 1st to review the revised AC and assess its implications with respect to Chart Group agenda items [07-01-192 Usable Runway Lengths for Takeoff and Landing](#) and [09-01-215 Reporting and Depiction of Stopways](#).

ACTION: Rich Boll, NBAA, will update the group following DDWG assessment of the revisions made to Advisory Circular (AC) [150/5300-13A, Airport Design](#).

C.) Airport Surveying – GIS Program

No update was provided at this ACF.

ACTION: Michael McNerney, FAA/AAS-100, will provide an update at the next forum.

D.) RNAV (RNP) SAAAR to AR (Authorization Required)

Brad Rush, FAA/AJV-3B, provided an update, stating that all FAA subject procedures have been updated (revising the special “Special Aircraft and Aircraft Authorization Required” note to “Authorization Required”). Two RNP SAAAR procedures, developed and maintained by a third-party entity, located at Deadhorse, AK (PASC) remain to be updated. AeroNav Products cannot change these two remaining procedures until either a P-NOTAM is issued or an amendment to the procedure is accomplished by the third party entity. Brad briefed that he has contacted AFS-460 regarding the necessary action.

ACTION: Brad Rush, FAA/AJV-3B, will provide an update at the next forum.

E.) Discontinuation of VOR Services

Ken Ward, Contractor, FAA/AJM-324, provided a general overview of the activities within the FAA toward establishing a plan for the discontinuation of VOR services as part of the overall migration to NEXTGEN IFR Infrastructure. Ken had prepared a PowerPoint which was not able to be shown during the briefing, but [is included here](#). He reported that the program charter is still a work in progress. On August 21, 2012, the FAA released an item in the Federal Register – [Next Generation Air Transportation System Transition to Performance Navigation, Federal Register Document No. 2012-20464](#). The Federal Register posting is the FAA’s response to the public comments received per Federal Register Notice [76 FR 77939](#) posted on December 15, 2011.

Various industry members within the audience expressed concern over the perceived lack of coordination both within the FAA and with industry regarding the actual implementation of the plan to decommission VORs. Ken emphasized that a plan had not been fully developed, but

was a work in progress. The general consensus from the discussion was that industry needs to be involved and have input **before** an FAA plan reaches maturity.

Deborah Miller-Adams, FAA/AJM-324, took several questions from various industry representatives and emphasized that the FAA is working to prepare itself for industry involvement in the migration to NEXTGEN. Deborah assured all the industry representatives that the FAA fully intends to have the industry involved and engaged in the migration process.

ACTION: Deborah Miller-Adams, FAA/AJM-324, (or a designated representative) will provide a briefing at the next ACF.

F.) Proposed Charting of National Marine Sanctuaries on VFR Products

Rick Fecht, FAA/AJV-321, provided an update on actions taken by Visual Charting for the depiction of the [NOAA-Regulated National Marine Sanctuaries published in the Federal Register on January 26, 2012](#). Rick stated that Visual Charting has completed the charting process and the NOAA-regulated areas are now depicted on VFR Terminal Area and Sectional charts. Rick [presented examples of current charts](#) depicting the Gulf of Farallones National Marine Sanctuary north of San Francisco.

Rick commented that the NOAA-regulated areas do not yet appear on current World Aeronautical Charts (WACs), which have a one-year update interval, but that the areas will appear on the next iteration of the WAC charts.

Ted Thompson, Jeppesen, asked about the source for the NOAA-regulated areas. Rick stated that the source is the Federal Register (URL: <https://www.federalregister.gov/articles/2012/01/26/2012-1593/overflight-regulations-for-the-channel-islands-monterey-bay-gulf-of-the-farallones-and-olympic-coast>).

STATUS: CLOSED

G.) Los Angeles Terminal Navigation Chart

Ron Haag, FAA/AJV-321, introduced a proposed new charting product, the Los Angeles Terminal Navigation Chart. This product represents a hybrid of the current Helicopter Route Chart, Sectional Chart & Terminal Area Chart. Ron stated that the chart was conceived after the Hudson River mid-air collision between a Piper PA-32R and a Eurocopter AS350 on August 8, 2009. One of the items discussed with the NTSB was simplification of complicated Class B airspace. Although AeroNav Products cannot revise regulatory airspace, it is thought that perhaps this new product could simplify and better display that airspace for both copter and fixed-wing users.

The Los Angeles area has one of the busiest and most complex airspace areas in the country, including, an irregularly-configured Class B area, 4 Class C areas and 14 Class D areas. The LA area also supports multiple helicopter routes and VFR Flyways that further complicate the airspace.

Ron [provided a presentation](#) of the current chart depictions of the LA airspace, showing examples of Helicopter, Sectional, Terminal Area and Flyway Charts. He then compared them to the proposed Los Angeles Navigation Chart.

A number of features and chart enhancements were presented:

1. Greater use of colors and screening to aid in the depiction of various chart features:
 - a. Class B, C, D floors are screened
 - b. Airspace borders are masked, making intersecting linework more easily distinguished.
 - c. Terrain relief colors are more distinguishable
 - d. VFR Flyways are depicted in orange
 - e. Helicopter routes are depicted in green
2. The chart combines Helicopter, Sectional, Terminal and Flyway Chart attributes. (Helicopter routes currently appear only on Helicopter Route Charts.)
3. The proposed six-month update interval of this product will provide helicopter pilots with a regularly updated chart with more current information. (Helicopter charts are currently only updated upon request and often several years can go by before a new helicopter chart is released.)
4. The chart scale has been increased, providing more visually distinguishable chart attributes.
5. The entire LA Class B airspace appears on one side of the chart. (On the current helicopter chart, the airspace is split between both sides of the chart.)

The prototype chart was developed in cooperation with the LA VFR Airspace Task Force and was well received by that group when the final was presented in January of 2012. The chart was also been displayed at EAA AirVenture and the ATCA Conference during CY 2012 and received positive feedback from potential users at both venues.

Lev Prichard, APA-American Airlines, commented that he approved in general of the chart, but was concerned about its readability at night and under redlight conditions. Rick Dunham, FAA/AFS-420, inquired as to the electronic display (Electronic Flight Bag [EFB]) aspect, and whether the colors that work well on paper will work as well on EFBs. Ron replied that the chart was still under development and that one of the items pending in the process within the FAA is a human factors review. This review will include assessment of color usage on the chart and will address readability at night and under redlight conditions.

George Sempeles, FAA/AOV-310, commented on the NextGen aspects that may come into play in the future, where a chart like the LA Terminal Navigation chart displayed on an EFB, may be viewable in discreet layers.

Lev commented that safety-wise, he believes that the inclusion of helicopter information on the new chart is very beneficial and would be an aid to situational awareness for fixed-wing pilots in areas where heavy helicopter activity is to be expected.

John Gale, NBAA, raised concern with regard to a helicopter pilot's ability to read the chart clearly, given the additional "clutter" in comparison to today's Helicopter Route Charts and considering the "egg beater like" flight experience/environment in a copter where the movement of the aircraft can make the reading of charts more challenging.

Ron replied that helicopter pilots who had the opportunity to view the concept chart were somewhat resistant to the new chart. In contrast, Ron added that the VFR fixed-wing community was very receptive to the new chart. Ron expressed that this chart may not replace the current Helicopter Route Chart series if copter pilots have major objections and that final decisions have not yet been made.

Ted Thompson, Jeppesen, inquired as to the expected timeline. Ron commented that a December 2012 meeting is schedule with the LA VFR Airspace Task Force review the chart. There are still some vetting & review processes within the FAA yet to be accomplished before the chart can be readied in its final form for official release. Once those processes are complete, Ron estimated that the chart would be able to go out within a short period of time.

The question was raised as to whether this chart would be expanded to all Class B airspaces areas. Ron responded that this chart species would only be done by request, that the LA chart was created in response to specific needs/requests from LA area users and that there are no current plans at this time to expand to all 30 Class B Terminal areas.

ACTION: Ron Haag, FAA/AJV-321, to report back on progress of the LA Terminal Navigation Chart as it proceeds through the approval process.

H.) Simultaneous Close Parallel Approaches – Use of PRM/Newly Proposed AAUPs

Joe Lintzenich, Contractor, FAA/AFS-410, briefed the topic. Joe reviewed current FAA criteria for pilots to fly an ILS/PRM approach; require pilots to monitor two frequencies – tower (or at SFO, final radar controller) and the PRM Monitoring Frequency. [Reference: [AIM 5-4-16 Simultaneous Close Parallel ILS PRM Approaches \(Independent\) and Simultaneous Offset Instrument Approaches \(SOIA\)](#)]. The [new criteria](#) retains the AAUP and requirement of two frequencies. Changes pertain to authorization of crews being able to fly the approach. If a crew is authorized to fly an ILS/PRM or LDA/PRM approach, then they are automatically authorized to conduct an RNAV (GPS) PRM approach with no OpSpec modification. However, if operators wish to include RNAV (GPS) PRM (Combined) as an additional approach type in their [Authorized Instrument Approach Procedures under Approaches with Vertical Guidance](#) column, OpSpec A002, the definition of RNAV (GPS) PRM, must be updated.

Joe discussed the changes in equipment pertaining to radars used to monitor aircraft flying Simultaneous Close Parallel ILS PRM Approaches (Independent) and Simultaneous Offset Instrument Approaches, noting that PRM e-scan was not going to be around much longer.

- Dual, Parallel Runway Spacing Between 3600' and 4299' – Standard ATC ASR Radar (Update Rate: 4.8 Seconds)
- Approved for Non Transgression Zone (NTZ) at airports less than 1000' MSL
- Dual, Parallel Runway Spacing Between 3000' and 3599' – High Update Rate Surveillance System is required (Update Rate: 2.4 seconds to 3400'; 1 second below 3400')
- Previously, PRM surveillance system was providing NTZ information to the controller on all PRM approaches. Under new criteria, this may not be the case.

Ted Thompson, Jeppesen, inquired as to when and how the changes per each procedure would be released. Is this special a special page and how will the page be coordinated and promulgated for publication?

Joe responded that none of the information was going to be published as there were no changes to the procedure itself.

Ted followed up inquiring as to whether the information was just criteria reference only. Joe replied that it was for OpSpec procedure reference only. The procedure would remain a PRM

approach. There were changes going on in the background regarding monitoring that would be transparent to the pilot/crew.

Valerie Watson, FAA/AJV-3B, inquired as to whether procedures with monitoring greater than 3599' would be impacted and if so, would the changes mentioned require changes made to those procedures. Joe replied that there would be no changes made to those procedures.

Steve Serur and Mark Cato, ALPA, commented that the changes in radars has an impact on the "Blunder Rates" where a pilot is at or below flight path and/or transgresses into the NTZ. If the radar rate is lower/slower than the previous rate, pilot deviations have the potential to increase.

Joe responded to ALPA stating that the blunder rates would not be impacted regardless of the radar rate at any given point of the approach.

Mark Cato, ALPA, inquired further as to who would own the "Blunder"/Separation bust, ATC, the pilot? Joes responded that it would be ATC, as it is today.

Joe stated that studies conducted did not show any significant impact on blunder/bust rate because of the surveillance system update rate used to monitor the NTZ.

Work is ongoing to publish AAUPs separate from the chart and to get the AAUP down to just one page. Currently, Jeppesen publishes one AAUP for one airport where possible versus the FAA which currently publishes one AAUP for each procedure. Ideally, the AAUP for an airport like SFO would have one AAUP that would cover both ILS PRM and RNAV GPS PRM runway 28L and one to cover the LDA PRM and RNAV (GPS) PRM X 28R approaches. Two AAUPs are required for SOIA operations, like SFO, because there are so many differences in the required language.

Valerie commented that back in 2007, there had been an effort made to remove the AAUP from the procedure and to publish only a single AAUP per airport. She expressed the hope that this would soon be implemented, but the endeavor is dependent on AFS producing the AAUP pages for each airport & submitting them to NFDC for NFDD action, concurrent with the part 97 procedure-associated AAUP deletions.

Tom Schneider, FAA/AFS-420, stated that work is being done on what is currently titled Draft Order 8260.Simul, which will incorporate clear guidance on development of AAUPs, and will establish procedure for transmission to the NFDD of the AAUP. Work is ongoing

Bill Hammett, Contractor, FAA/AFS-420, inquired as to where the AAUP are to be placed within the TPP and stated that IACC specification changes approved in 2007 establish that ILS PRM AAUPs and LDA PRM AAUP are to be placed in front of the procedure(s). He expressed that at the time, no one anticipated the incorporation of RNAV PRMs in these types of procedures or their attendant AAUPs. Bill inquired where and how will the AAUP creation & maintenance responsibility be established and how will the transition from regulatory to non-regulatory AAUPs be accomplished.

John Blair, FAA/AFS-420, stated that the SFO PRMs and attendant AAUPs are in process. Bill asked if the SFO AAUP was being published under the current system. John responded that yes there were being published under the current system. John added that the OpSpec will be available for review in January 2013.

ACTION: Joe Lintzenich, Contractor, FAA/AFS-410, will work with Brad Rush, FAA/AJV-3B, and Valerie Watson, FAA/AJV-3B, to coordinate publication of Approach AAUPs.

VI. Outstanding Charting Topics

A.) 05-02-179 Attention All Users Page for Simultaneous, Parallel RNAV Departures and & PRM Approaches

Kel Christianson, FAA/AFS-470, provided an update on progress made since the last ACF. He reported that within AFS, the details on who exactly is to be responsible for the creation, oversight and maintenance of the RNAV Departure AAUPs is still being discussed. Kel maintains that the entire AAUP, including both the [generalized guidance](#) and [airport-specific information](#), should be published in the TPPs.

Valerie Watson, AJV-3B, reported that when the specification change proposal was submitted to the Interagency Air Cartographic Committee (IACC), supporting publication of an RNAV Departure AAUP containing both boiler-plate and airport-specific information, the National Geospatial-Intelligence Agency (NGA) non-concurred with the proposal. NGA's position is that the generalized guidance (that applies to all departures of this type) more appropriately belongs in the front matter general guidance pages of the TPP and only the airport-specific information should be associated with the procedures in the form of an AAUP.

Valerie suggested that only airport-specific information be included in the AAUP for a given airport. She proposed that in addition to adding comprehensive guidance to the AIM, the general RNAV Departure guidance could be added to the TPP front matter pages for a limited amount of time (say 2 years) and then removed when pilots are more familiar with these types of procedures. This would mean that the original AAUPs (containing only airport-specific info) could be retained unchanged.

Jeff Waterman, NGA, commented that the boiler plate information should either appear in Front Matter of the TPPs or not in the book at all, but in the AIM and other training materials. Jeff endorsed Valerie's idea to post the boiler plate information in the TPPs for a specified period of time.

Tom Loney, Canadian Air Force, stated that it is the responsibility of the operator to insure that pilots know how to fly such procedures.

A general discussion ensued, with the consensus among pilot users being that they believe the general guidance AND the airport-specific guidance should be included in each AAUP and be available in the cockpit along with the procedure.

Ron Renk, United Airlines, stated that the separation of materials is not end-user friendly. If the materials associated with the procedure are kept with the procedure, this would aid in pilots (end-users), being able to retain and easily access the information.

Gary McMullin, Southwest Airlines, echoed the comments regarding keeping materials related to such procedures together so that a pilot has everything he needs to fly the procedure in front of him, even general guidance that not all pilots use frequently. Gary added that with the transition from paper products to products like iPads and other EFB's, it is more imperative that such items are kept together.

Brad Rush, FAA/AJV-3B, inquired of Gary as to whether the pilot community really needed everything associated with these procedures bundled in the TPPs? Gary responded with a firm "Yes", adding that these procedures are still relatively new to the pilot community and the majority of the community is as yet not familiar with the processes necessary to fly them.

Tom Schneider, FAA/AFS-420, agreed with Gary McMullin's statement that a pilot needs the information when they are accessing the procedure. The general information serves in part as

a check list for a pilot preparing to depart from a certain location. Additionally, new pilots are constantly being introduced to the procedures.

Ted Thompson, Jeppesen, commented that the AAUPs are operational material, not reference material.

Ted asked how the AAUPs are intended to be published for use by charting entities. Ted emphasizes his concern with the oversight of all AAUPs, as there appears to be no single FAA oversight at present. Understanding that the content of AAUPs is generated locally (at the airport/facility level), Ted voiced that the sourcing of AAUPs remains of key concern to Jeppesen.

Kel responded that AAUPs were in the process of being incorporated into FAA Order 8260.46. Valerie asked Tom Schneider whether the source flow of the AAUPs would be a part of the .46 guidance – from local airport/facility to AFS-470 to NFDC for publication in the NFDD? Tom responded that the guidance will state that it is the responsibility of ATC to collaborate with AFS-470 to establish an AAUP. Valerie expressed her concern that if a specific FAA office is not given written AAUP responsibility and the source flow is not carefully documented, there is no guarantee that the AAUPs will be maintained/updated once published.

Gary asked how many airports have these procedures? Kel responded that there are only 5 airports at present. He voiced that he did not anticipate widespread use – that any participating airport would be Part 139, have parallel runways and a high density traffic environment.

ACF consensus supports publication of both airport-specific and more generalized RNAV Departure guidance together as a single AAUP to be published one per airport and to be included with the Departure procedures for subject airport.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-3B, will recommend to the MPOC/IACC, per ACF consensus, that the entire RNAV Departure information be retained in the AAUP and placed in the Departures section of the TPP. She will report results at the next ACF.

ACTION: Kel Christianson, FAA/AFS-470, to continue to work through the process on establishing the responsibility for creation/oversight & source flow for AAUPs and to report back at next ACF.

B.) 07-01-192 Usable Runway Lengths for Takeoff and Landing

Rich Boll, NBAA, was not in attendance, but submitted the following statement:

With the release of the draft AC, the Declared Distance Work Group (DDWG) reviewed the original ACF CG agenda item for its relevance to the original recommendation in light of nearly five years of experience with the declared distances since the original submission. Following this review, it remained the consensus of the working group that FAA adopt a consistent methodology for reporting usable runway length for takeoff and landing based on declared distances. As result of our meetings, the DDWG submitted a list 24 comments and recommendations regarding AC, including a request that FAA require airports to publish declared distances for each operational direction even when those distances are equal to the physical length of the runway.

On September 28, 2012, FAA published AC [150/5300-13A](#). The released version of this AC stopped short of adopting the DDWG's recommendation intended to address Charting Group Recommendation Document [07-01-192](#). Rather, the AC prescribes airports to report declared distances as follows:

f. Notification. The clearway and stopway lengths, if provided, and declared distances (TORA, TODA, ASDA, and LDA) will be provided by the airport owner for inclusion in the Airport Master Record (FAA Form 5010), A/FD (and in the Aeronautical Information Publication, for international airports) for each operational runway direction. Declared distances must be published for all international airports and Part 139 certificated airports, even when the distances are simply equal to the runway length in both directions. When the threshold is sited for small airplanes, report LDA as "LDA for airplanes of 12,500 lbs (5700 kg) or less maximum certificated takeoff weight."

This notification requirement is in agreement with [CertAlert 09-05](#) released in 2009. For any airport subject to the AC, declared distances will be determined and published in the AFD when they differ from the physical runway length or the runway remaining beyond a displaced threshold as result of the application of runway design criteria or the presence of a stopway or clearway.

The above notification requirements for declared distances supports the decision, based on an ACF CG & DDWG recommendation), to chart a negative "D" symbol on instrument approach charts and the Airport Diagram when an airport's declared distances are published in the FAA Airport Facility Directory. The AIM guidance on declared distances and published in March 2010 remains consistent with AC's application of declared distances.

Since its publication the first week in October, the DDWG has not had an opportunity to review the new AC or to assess its implications regarding the future activities of the working group. The working group will do so at the earliest opportunity with view to identify any additional actions required to address either ACF CG agenda items, or if the working group has exhausted all options at its disposal for addressing these items. The DDWG will make a recommendation at the 13-01 ACF CG meeting.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will report back at next ACF.

C.) 07-01-195 Charting & AFD Information Regarding Class E Surface Areas

Paul Gallant, FAA/AJV-11, was not in attendance. No updated was provided.

STATUS: OPEN

ACTION: Paul Gallant, FAA/AJV-11, will provide an update at the next ACF.

D.) 09-01-213 TERPs Change 21 Circling Approaches

Valerie Watson, FAA/AJV-3B, summarized the subject matter and history of the topic. She briefed that front matter explanatory text & tables that address the new criteria will be included in the FAA TPPs on the 15 Nov effective date cycle. A [Charting Notice](#) will also be posted on the AeroNav Products website on the same date. She further briefed that procedures with the new circling criteria applied will not appear published until the Jan or Mar 2013 chart cycle.

Brad Rush, FAA/AJV-3B, added that the application of the new criteria will be mandatory for all procedures amended after Jun 2013 and when applied to a single procedure at an airport, will be applied to all procedures at that location.

The only item left outstanding pertains to the revisions necessary to the AIM. Bruce McGray, FAA/AFS-410, has been working the AIM guidance, but has not yet finalized or submitted it for publication. It was emphasized that the AIM guidance should be in place prior to implementation to avoid confusion. Bruce agreed to do so as soon as possible.

STATUS: OPEN

ACTION: Bruce McGray, FAA/AFS-410, to expedite the revisions to the AIM to reflect both the old and the new circling criteria and explain the negative C icon on the circling line of minima. Bruce to report back at next ACF.

E.) 09-01-214 Low Visibility Operations/SMGCS (LVO/SMGCS) Taxi Charts

(Previously listed as 09-01-214 SMGCS Taxi Charts)

Bruce McGray, FAA/AFS-410, [provided an update](#) on the work that has been done since the last ACF. Bruce discussed the harmonization process between the FAA and ICAO regarding the naming of SMGCS, which within ICAO is referred to as “Low Visibility Operations (LVO)”. To help minimize confusion between the FAA and other aviation agencies, the FAA will henceforth refer to SMGCS as LVO/SMGCS.

Bruce reported San Francisco Intl (SFO) is on course for being a fully approved SMGCS operation within CY2013. Using SFO as an example, Bruce walked the audience through the process an airport goes through to establish and have a fully approved LVO/SMGCS operation.

Bruce stated that work was ongoing with regard to the standardization of charting symbology and overall chart standardization within Flight Standards and between IASA and ICAO.

Bruce provided other program updates which included:

- The NASA Langley Simulator tests. The training is complete and data is being analyzed. A white paper is being prepared for presentation next fall based on the data from the NASA Langley sim tests.
- Volpe is focusing on chart symbols.
- A prototype LVO/SMGCS chart has been drafted, namely the lead-in pages. A complete LVO/SMGCS Airport chart is in the works.
- [FAA Order 8000.94 Procedures for Establishing Airport Low Visibility Operations and Approval of Low-Visibility Operations/Surface Movement Guidance and Control System](#)

[Operations](#) was signed and published on August 21, 2012.

STATUS: OPEN

ACTION: Bruce McGray, FAA/AFS-410, will provide an update at the next ACF.

F.) 09-01-215 Reporting and Depiction of Stopways

Mr. Rich Boll, NBAA, was not in attendance, but submitted the following statement:

The Declared Distance Work Group (DDWG) brought this agenda item before the ACF CG after discovering numerous discrepancies in the charting and depiction of stopways in US Government charts and those charts published by commercial providers.

Since the introduction of this agenda item, AeroNav/NACO has modified the legend of the Terminal Procedures Publication, removing the “stopway dimensions” from the pavement extensions beyond the end of the runway. This action eliminates one source of confusion regarding whether the extension is a stopway absent corresponding published declared distances information in the AFD. This action satisfies the agenda item’s recommendation #5.

A review of the November 15th NASR database edition has found that the irregularities concerning stopways & overruns at part 139 airports (those with scheduled air carrier service with more than 9 seats) have been largely addressed. Therefore, it appears that recommendations #1 and #2 have been satisfied as well.

However, this NASR database ([See attached to review document](#)) still contains numerous examples of questionable use of the terms “stopway” and “overrun” in association with runway data. In many cases, the area in question appears to be a “blast pad” instead of a stopway or overrun. In addition, smaller General Aviation airports, especially those with turf runways are identifying stopways and overruns. The DDWG questions whether the airport operators furnishing information to FAA clearly understand the use of these terms, and especially the term stopway, which is defined in [14 CFR part 1](#).

It appears that the use of “stopway” and “overrun” in the NASR database has resulted in the inappropriate charting of these areas on airport charts published by commercial charting providers. Since these providers rely on government source data, namely the NASR and NFDD, to produce these charts, there remains a need purge these databases of instances where stopway and overrun are inappropriately used.

The term “overrun” applies only to military airports and has no civil use. The term stopway is defined in [14 CFR part 1](#), and when designated by the airport operator, results in additional distance available for accelerate-stop distance performance calculations for some airplanes. Making this additional distance available for takeoff performance calculations may not be what the airport operator intends. Further, by listing the surface as a stopway, the airport operator assumes an obligation to maintain that area to the same standards as the runway. Some of the notes contained in the NASR regarding the stopway (e.g. stopway crumbling) suggest that this is not happening.

Therefore, the DDWG believes that recommendations #3 and #6 remain open:

3. During airport inspections, review AFD Airport Remarks for inappropriate instructions, limitations, or restrictions on the use of runway or stopway that are inconsistent with the other reported runway data, i.e. declared distances
6. Explore option of adding stopway data validation capability to FAA's Airports GIS web-based airport source data collection program. Such a data validation capability would require entry of corresponding declared distances on a runway where a stopway data has been entered.

The DDWG finds that stopways and overruns remain identified in the NASR database on runways and that commercial chart providers are using this information for charting purposes. As result, these producers may unknowingly publish erroneous data on their products.

Therefore, the DDWG recommends at the next scheduled airport inspection, FAA take the necessary action to remove the use of the term "overrun" at civilian airports and that any designated stopways meet the requirements of the Airport design AC and 14 CFR part 1 or remove the stopway designation from source (e.g. the NASR database).

Further, as stated in recommendation #6, the DDWG request that FAA institute data validation capabilities to the FAA's Airport GIS database to ensure that when a stopway is designated that all necessary information is furnished to generate declared distances for that runway and that the airport operator understands their obligation under 14 CFR part 1 to properly maintain that stopway for use takeoff performance calculations (i.e. accelerate-stop distance calculations) for applicable airplanes.

The DDWG recommends that this agenda item remain open until these recommendations are addressed.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will report back at next ACF.

G.)10-02-233 Removal of (ATC) Crossing Restrictions from STARS

Valerie Watson, FAA/AJV-3B, summarized the issue and reviewed from last ACF that there no ATC crossing altitudes on STARS and briefed that there are still 28 Departures with ATC crossing altitudes.

Brad Rush, FAA/AJV-3B, briefed the schedule for the removal of the ATC crossing altitudes on the remaining Departure procedures. The ATC altitudes are steadily being removed as Departures are amended and they should be all deleted within the next year or so.

Still of concern to NBAA was Lost Communications (Lost Comm) information.

Gary McMullin, Southwest Airlines, [made a presentation](#) to the ACF, providing a review of the history of the original ACF issue and the actions taken. Gary, though satisfied with the removal of "(ATC)" crossing altitudes, expressed his problem with the concept of "block altitudes". The

8260.46 specifies that when an “at or below” altitude is specified at a fix, that a minimum “at or above” altitude also be published – this results in either a mandatory altitude or a block altitude. Gary states that Southwest and other industry partners find block altitudes problematic.

Gary brought up a side issue associated with the (ATC) altitudes regarding “ownership of aircraft”, namely whether the pilot or the controller has ownership and therefore responsibility for the aircraft. With the removal of ATC altitudes, the ownership of the aircraft reverts back to the controller as the controller is giving information the different from the written/published procedure. This point was expanded upon with a discussion of “Block Altitudes”

Gary, in his presentation of block altitudes on SIDS and STARS, made several specific discussion points:

- Block altitudes on SIDS present climb rate and aircraft performance issues. When a block altitude is on a Chart, a pilot has to calculate whether his/her aircraft can meet that block altitude. This adds more demand on a pilot during the departure phase of flight, especially in and around airports with terrain and high volumes of aircraft traffic.
- Block altitudes in current instrumentation do not have a climb path indicator. Many FMS’ will try to fly through the center of the window.

Jim Arrighi, FAA/AJV-141, agreed in principle with Gary’s position. Jim provided a report on progress made on addressing NBAA’s Lost Communication concerns. Jim stated he has had several meetings recently and that there seems to be strong agreement not to chart a minimum crossing altitude, but rather to look at segment MEAs on SIDs. Minimum segment altitudes could provide the minimum altitudes needed during lost communications, but would not cause the confusion experienced when block altitudes are published.

Rick Dunham, FAA/AFS-420, raised the concerns regarding the use of a single climb gradient. For instance, what if ATC wants “At or Above Altitudes” at certain points?

Jim stated that planned block altitudes were acceptable if required by ATC. Gary agreed that in some cases, block altitudes may be warranted.

Bill Hammett, Contractor, FAA/AFS-420, asked why, if the block altitudes were able to be handled if they were planned to support ATC operational needs, were they not always acceptable.

Ron Renk, United Airlines, commented that pilots consider block altitudes “safe altitudes” and that they could fly anywhere between the two block altitudes and think “I am safe”. This is true and will guarantee obstacle protection.

At this point the discussion shifted to what block altitudes are intended for versus actual use and derived meaning with the user (pilot) community, in conjunction with lost communication procedures.

Lev Prichard, APA - American Airlines, commented that there is more at stake here than just lost communications, but information the pilot needs when something goes wrong. A pilot needs to know “what is a safe altitude to fly when things go wrong?”. MEAs are easy to use. However, when flying fix to fix with the safe altitude given only at the fix, the pilot has to calculate the climb grade between fixes/waypoints to maintain safety. He mentioned that it is often SOP to brief a safe altitude for each departure.

Gary proposed the removal of the mandate for publishing block altitudes, but to not rule out the use of block altitudes.

Rick stated that the FAA is not in a position to customize procedures and charts to the needs of one section of industry. The FAA has to serve a broader audience and must provide obstacle clearance protection, meet ATC requirements and serve all NAS user needs.

Jim reiterated that the issue around the handling of lost comm on SIDs is an on-going collaborative effort and that different opinions exist as to how it should be handled.

Valerie commented that the only way for lost comm to be resolved is by addressing the procedures themselves by either adding the required altitudes (MEAs or minimum obstacle clearance crossing altitudes) or publishing specific lost comm procedures. For this reason, she stated that this expansion of the original issue is not a Charting Group item and needs to be moved to the IPG portion of the Forum.

Lev requested a clarification on how the rules in the criteria impact charting, namely, are things written (criteria) so that things are charted? If so and if an item is specified to be charted, he asked how that relates to this (Charting Group) audience.

Valerie responded that yes, sometimes items are written into criteria partly so that they will be charted. She explained that AeroNav Products is required to chart what is published on the source documents, which in turn are created in adherence with criteria. She further clarified that all published altitudes on a Departure or Arrival Procedure source document must be depicted on the chart. The only way to remove those altitudes from the chart is to remove them from the procedure source document.

Tom Schneider, FAA/AFS-420, stated Flight Standards would discuss and consider removing the "at or above" altitude requirement whenever an "at or below altitude" restriction was requested by ATC.

STATUS: OPEN

ACTION: Brad Rush, FAA/AJV-3B, to report on status of 28 remaining Departures with ATC crossing altitudes.

ACTION: Tom Schneider, FAA/AFS-420, to report Flight Standards action on block altitude charting.

H.) 11-01-236 Depiction of Wind Turbines on VFR Charts

Ron Haag, FAA/AJV-321, provided a briefing on the actions taken since the last ACF. A Requirements Document (RD) was submitted and approved by the IACC in support of adoption of the ICAO-compliant Wind Turbine symbolization. Ron showed [graphic examples](#) of how the new symbolization will appear on the charts and pointed out that the new depiction lessens chart clutter, eliminates the need for identifying text and clarifies the outer parameters of turbine farms. The first set of updated VFR charts to utilize the new depiction will be released on 7 March 2013. All subsequent VFR charts will utilize the new ICAO-compliant symbol.

Bob Lamond, NBAA, mentioned a new airborne wind turbine which is tethered in place by steel cables. Lamond provided additional information on the new model of wind turbine and added that the company plans to start installing them in Texas in the near future. This may well be something that the FAA will need to investigate.

STATUS: CLOSED

I.) 11-01-238 Aerobatic Area Symbols on VFR Sectional Charts

Rick Fecht, FAA/AJV-321, provided an update on actions taken since last ACF. Rick stated that Visual had been in touch with the 3 Service Areas to solicit their input regarding the verification and update of existing areas in the Special Notices section of the AFD. Rick reported that all three Areas had submitted input, but that input has yet to be evaluated. Once the actual number of areas has been determined, the Visual Charting unit will investigate the possibility of charting. Rick will follow up.

STATUS: OPEN

ACTION: Rick Fecht, FAA/AJV-321, will provide an update at the next forum.

J.) 11-01-242 Lead Bearing/Lead DME

Brad Rush, FAA/AJV-3B, briefed the item. Brad stated that the matter had been discussed at the US IFPP and that there was no recommendation to date. Lead radials already exist and can be charted. Though a charting standard for showing a "lead DME" does not exist, there is a standard for showing DME make-up of a fix. If a fix is documented by source, it can be charted.

Valerie Watson, FAA/AJV-3B, reported that she had discussed the matter with NGA. NGA has a few Departures with lead DMEs charted, but only overseas. She mentioned that it had been discussed within the MPOC that NGA has the option to present a specification change proposal if they see fit.

The example of the [DREAM THREE DEPARTURE at Nellis AFB](#) was referred to and discussed.

Jeff Gorman, FAA/AFS-460, commented that the military has been utilizing Lead Bearing/Lead DME for years. Lance Christian, NGA/MSRF, added that the military continues to use and publish procedures utilizing Lead Bearing and Lead DMEs.

Brad, while reviewing the DREAM THREE DEPARTURE noted that a double asterisk was used to note the points where a Lead Bearing/Lead DME was being utilized in the procedure. Currently, the Military is using a DME Boat with the point in space given a 5-letter pronounceable name with two asterisks next to the name.

Lance Christian, NGA/MSRF, added that there is criteria for development of such procedures but nothing in place regarding charting.

Valerie repeated that as there were as yet no civil procedures utilizing the lead DME convention, she recommends that NGA propose a charting standard.

Jeff Waterman, NGA/PV, commented that Lead Bearing/Lead DME only pertain to conventional procedures. Pilots lead the turn in practice. The lead point, whether a named fix or a DME fix, is part of the procedure and therefore should be charted when specified on the source document. He stated that depiction of the make-up should suffice.

Valerie inquired of the FAA Instrument Procedures Group if they anticipated using Lead Bearing/Lead DME in the development of any future FAA Instrument procedures. Tom Schneider replied that the FAA does have the criteria to be able to do so, but there is no way to foretell if the criteria will ever be used.

Valerie suggested that since the FAA currently does not utilize the Lead Bearing specifically in the development of Departures, that the matter be closed. If DoD believes there should be a charting standard, she recommends Lance Christian, NGA, should propose an IACC standard.

STATUS: CLOSED

K.) 11-02-245 Automated UNICOM on IAPs and Sectionals

Valerie Watson, FAA/AJV-3B, provided an update on actions taken since last ACF. Valerie briefed that she had sent out an e-mail to the pilot community soliciting comments regarding the need to discriminate Automated Unicom from standard, Non-Automated Unicom on charts. The pilot community expressed strong support for distinguishing Automated and Non-Automated systems on charts.

Based on the pilot community response, Valerie will draft an RD for submission to the MPOC/IACC with Automated Unicoms identified as AUNICOM.

STATUS: CLOSED

L.) 11-02-246 Publication of Special Notices in the AFD

Ted Thompson, Jeppesen, provided an update of actions taken since last ACF. Ted commented that at the last ACF the discussion was centered on tracking changes made to the Special Notices source documents.

Valerie Watson, FAA/AJV-3B, stated that the Aeronautical Information Services Work Group (AISWG) had met and the group discussed the challenges associated with tracking and identifying changes made to the Special Notices pages. The AISWG concluded that though the FAA is not able to highlight every change made to a Special Notice page, brief text will be added to the source to describe generally what has been revised.

Kyle McKee, FAA/AJV-142, commented on the user concern related to Visual Flight Procedures that appear in the AFD. During the last ACF, Kyle was asked to investigate whether VFR Departure and Arrival procedures could be incorporated into FAA Order 7100.79, Charted Visual Flight procedures. Kyle stated that he has been working to expand the language of the Order to include the charting of Visual Departures and Arrivals. The change would formalize both the procedure themselves and the procedure submission process and may enable the procedures to be included in the TPPs as well as the AFDs.

Valerie inquired as to the timeline for the modifications to the Order and whether there has been any feedback on publication of the VFR Departures and Arrivals in the TPPs. Kyle replied

that he is currently working on the generation of a new form that is tailored for Visual Procedures which is being coordinated the with Terminal Service Unit, but was not able to provide any more detail. He will update the group at the next meeting.

Tom Schneider, FAA/AFS-420, asked if there was inclusion of any future RNAV needs regarding the use of waypoints within a Visual Flight Procedure. Kyle replied that work was being done to include waypoints within the Visual Flight Procedure arena.

Ted commented that off-procedure (or “floating”) visual waypoints have proliferated. This has presented challenges for the charting industry, and most particularly the coding industry, as far as what waypoints should be included or excluded in coded databases. Current database and display systems allow pilots the option to turn on and off waypoints, but at present it is impossible to discern which points are of use and which are not. Ted expressed that the parsing of non-procedural waypoints poses a huge problem and would like to see more categorization of these points as far as use.

Jim Arrighi, FAA/AJV-141, stated that ATC was interested in being able to make use of those floating waypoints and concurred with Ted’s comments that because there is no way to categorize the points, they are currently not able to be utilized by ATC.

Valerie Watson, FAA/AJV-3B, inquired as to whether there was a need to look at the naming convention of floating waypoints as a possible means to addressing part of the problem.

Bob Lamond, NBAA, commented that the issue regarding the databasing and use of floating waypoints was a big issue and one that needs to be addressed.

It was agreed upon by those in attendance that the identification, databasing and use of floating waypoints was an issue that needs to be addressed, but is an issue separate from the original topic of the RD. There was a consensus to agree to close this RD.

Valerie commented that the AFD team is working on a new IACC Specification that will support the Alaska Supplement, Pacific Supplement and the AFDs. The new specification will aid in improving the organization of the Special Notices sections of all these FAA products.

STAUS: CLOSED

M.)12-01-248 NEXTGEN Procedure for the Naming of Aeronautical Navigation Aids

Brad Rush, FAA/AJV-3B, reviewed the topic. The original concern submitted by Cleveland Center, addressed the naming of specific waypoints as they are established over the site of a decommissioned VOR. It was suggested that as [VORs are decommissioned, the waypoints established in their place](#) should be named in a unique fashion so that ATC could retain the geographic reference of the original NAVAID. Several naming conventions were proposed – for example, when Cleveland (CLE) VORTAC is decommissioned, a waypoint “KQCLE” or “CLE99” could be established at that location, retaining the original NAVAID location identifier in the designator. Currently established FAA and ICAO naming conventions do NOT support this and would need to be revised if this proposal were to go forward.

Kyle McKee, FAA/AJV-14, commented that there was a strong desire by controllers in keeping the name that had been previously associated with a decommissioned NAVAID. He believes that assigning the random 5-letter pronounceable waypoint names dictated by convention would not provide controllers with the geographic references they are accustomed to and would necessitate widespread training difficulties as the VOR decommissionings in the NAS progress.

Valerie and Brad both emphasized that the FAA is required to adhere to current guidance, regulations and international agreements (ICAO). To make any changes of this kind, published naming conventions would need to be revised.

Brad noted that additional concerns exist regarding the NexGen initiative for the establishment of stand-alone DMEs. At present, there is no guidance as to how they will be databased or depicted on charts. Currently, DMEs do not have a unique name and identifier, but use the name and identifier of the VOR facility they are associated with. Guidance needs to be drafted to address the stand-alone DME and it is likely that when the VOR portion of a VOR/DME or VORTAC is decommissioned, the DME will take on the name & identifier of that facility.

Tom Schneider, FAA/AFS-420, commented that per FAA Orders 8260.19 and 7400.2, the establishment of a waypoint over an existing NAVAID is not permitted, so the proposal that waypoints be established over currently existing (but soon to be decommissioned) NAVAIDs cannot be done in adherence with today's standards.

Steve Serur, ALPA, spoke to the problem of both ATC and pilots having to relearn the airspace in an area where decommissionings occur. Steve emphasized that many senior controllers know and have a 3D image of their assigned airspace in their minds that is so well-ingrained that they are able to troubleshoot airspace-related matters very quickly. He believes that if the names of significant points were changed, that experience would be lost and would create a loss of controller efficiency. Steve inquired as to whether there was an option to revise the current naming conventions/rules.

Brad responded that ATC has responsibility for the rule and that from a charting perspective, the names that are published by the FAA sanctioned sources are those that will appear on the charts and in the databases.

Mark Cato, ALPA, voiced that in his opinion, pilots remember things as and when they learned them and are resistant to change. He gave the example that on one of his regular approaches, ATC would often refer to a visual reference known as the Hecht's store. Even though the Hecht's was replaced by Macy's years ago, pilots who know the area still refer to same visual point as the Hecht's store.

John Gale, NBAA, commented that throughout the world, there are thousands of waypoints being added and that business aviation pilots simply learn as they go. In his view, both pilots and controllers simply have to adapt and learn accordingly.

Valerie stated that the renaming of waypoints based on what used to be on the ground at that location makes little sense beyond the temporary convenience of controllers and pilots accustomed to operations in a specific area. She asked if, over time, the new naming convention would not cause confusion to pilots and controllers NOT familiar with the area. A pilot new to the area would see a waypoint with an odd, non-conventional name and wonder "What is that? Isn't it simply a waypoint?". He would have no idea that he should refer to "CLE99" as "Cleveland", and would neither realize nor care that Cleveland VORTAC was once located at that position.

Bill Hammett, Contractor, FAA/AFS-420, stated that FAA Order 7400.2 is the responsibility of the Airspace, Regulations, and ATC Procedures Group, AJV-11. He suggested that the specifics of this RD should be consolidated and sent to AJV-11 for a position. Bill added that it is imperative that AJV-11 participate in the ACF. There are at least two open issues relating to controlled airspace on the AFC-IPG agenda and several open issues and briefing items on the Charting Group agenda where an airspace specialist's participation would be beneficial. Bill recommended that since Mission Support Services is a co-sponsor of the ACF, and AJV-3 is a

Co-Chair of the ACF that the Chair have AJV-3 approach AJV-1 and request AJV-11 participation. If this fails, then support from the VP, AJV-0, should be requested.

Tom commented that upon receiving direction from ATC, his office can work to revise the policy regarding the establishment of a waypoint over an existing NAVAID, but until that occurs, things will have to remain as they are.

Kyle added that Cleveland Center would offer their facility as a test facility for investigation into the various options to be assessed.

STAUS: OPEN

ACTION: Brad Rush, FAA/AJV-3B, will collect the comments from the ACF and include them in a letter from AJV-3 to AJV-1 regarding the issues raised during discussion of this item. No action can be taken as things stand within the charting group of the ACF until AJV-1 responds and there revisions in policy to support both the establishment of a waypoint over an existing NAVAID and any new waypoint naming conventions. The letter will also request that a representative of AVJ-11 attend the next ACF, both the IPG and CG portions, to address the concerns related to their line of business. Brad will report back at next ACF on an AJV-1 response.

N.) 12-01-249 Consolidated ILS CAT II and CAT III Depictions

Valerie Watson, FAA/AJV-3B, reviewed the proposal to consolidate ILS CAT II and CAT III procedures on a single FAA Instrument Approach Plate. Valerie reported that the IACC/MPOC approved the Requirement Document and that the Terminal Charting offices will begin implementation in January 2013.

Valerie added that the similar consolidation of SA CAT I and SA CAT II procedures was agreed to by Flight Standards. She will submit a specification revision proposal to the IACC/MPOC to support this and anticipates approval by next ACF.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-3B, will provide an update on progress made on the SA CAT I and SA CAT II consolidation at next ACF.

O.) 12-01-252 Warning Note on Vertical Descent Angle (VDA) Procedures

(See associated item from the [ACF-IPG RD 12-01-301](#), where the procedural solutions are discussed and the presentation by Bill Geiser, AJW-334, is included.)

Bill Geiser, FAA/AJV-334, gave a [PowerPoint presentation](#), highlighting the risks associated with flying the published VDA on the Birmingham, AL RNAV (GPS) RWY 36 approach where a house on a ridge top penetrates the 34:1 visual slope.

Valerie Watson, FAA/AJV-3B, led the discussion to one in which solutions from a charting perspective were addressed, focusing on ways to guard against pilots using the VDA below the MDA. It was discussed that even though the VDA does not offer obstacle protection below the DA/MDA, pilots commonly assume it does.

Lev Prichard, APA-American Airlines, voiced that the “stipple” symbol on FAA RNAV approach charts, indicating a clear 34:1 slope, is far too subtle and that pilots don’t understand what it (or its absence) means. (During this discussion, it was also voiced that the stipple symbology should also be applied to non-RNAV approach charts.)

Valerie stated that in her opinion, misuse of the VDA beyond the MDA is a pilot education issue. She suggested adding the text “to MDA” after the charted VDA angle in the profile to clarify its use. Alternately, she suggested a profile note stating “VDA NA BLO DA/MDA” be added to all procedures with a published VDA.

A general discussion followed, with several members of the audience voicing that it would be counter-productive to delete the VDAs on all approaches where the 34:1 is not clear (there are approximately 3300), thus taking away the pilot’s ability to fly a constant or stabilized descent and bringing back a return of the “dive and drive” method of descent. It was also pointed out that, even if the VDAs are removed from the 8260 source documents, many onboard systems will generate an angle based on the data, meaning a VDA will be in the FMS anyway and there is the danger that pilots will misuse it.

Gary McMullin, Southwest, asked if there was a possibility of revising the procedure at Birmingham, AL with a waiver to allow a steeper descent angle?

Brad Rush, FAA/AJV-3B, pointed out the danger of revising a procedure for steep angle descent, focusing on how such a change could restrict or eliminate various categories of aircraft. It was agreed that at times this solution may be viable, but it could not be applied to all cases.

Bill’s recommendation, that when Flight Inspection deems prudent, the VDA will not be published (on the source document and thus on the chart – databasing remains unresolved), received general acceptance.

STATUS: CLOSED

EDITOR’S NOTE: Associated item from the Instrument Procedures Group (IPG) will remain Open – Ref: ACF – IPG Agenda Item *12-01-301 Publishing a Vertical Descent Angle (VDA) with 34:1 Surface Penetrations in the Visual Segment.*

P.) 12-01-253 ILS Category III a/b/c Minima

Brad Rush, FAA/AJV-3B, provided an update. He reported that, as opposed to the current CAT III a/b/c minima, in the future only a single line of CAT III minima with the lowest RVR, will be shown on ILS CAT III procedures. He added that the CAT III procedures will not be updated for this change all at once or via P-NOTAM, but would be revised as the procedures are amended for other reasons.

Valerie Watson, FAA/AJV-3B, commented that a Specification change has gone through the MPOC/IACC approval process.

Ted Thompson, Jeppesen, inquired as to whether the changes were in conflict with ICAO standards.

Bruce McGray, FAA/AFS-410, responded that there had been discussion between the FAA and ICAO regarding the changes being made at the FAA regarding ILS Category III a/b/c Minima and ICAO had no objections to the FAA’s changes. Bruce went on to state that each

member state at ICAO may have their own variation of how they provide such information on their ILS Cat III approach plates, but he was not clear as to whether this is an ICAO standard that the US will need to file a difference to.

Ted inquired as to who would be the main point of contact regarding any further inquiries regarding the matter. Brad volunteered to serve as the main point of contact.

STATUS: CLOSED

VII. New Charting Topics

A.) 12-02-254 Class D Airspace Depiction on VFR Charts

Ron Haag, FAA/AJV-321, presented the new issue on behalf of the submitter, Mr. Robert Katz, who was not able to attend the ACF. Mr. Katz asserts that the FAA's VFR Sectional and Terminal Area Charts do not clearly depict vertically overlapping Class B and Class D airspace areas, and that there are confusing charting inconsistencies and undo chart clutter caused by current modes of depiction of these areas. Mr. Katz believes that the current depictions of these overlapping airspace areas are such that the confusion and uncertainty caused could result in airspace incursions/violations. Mr. Katz has recommended revisions in charting standards that he believes will improve the charts and help make these complex airspace areas more easily and correctly interpreted.

Ron then [responded on behalf of the Visual Charting group](#). Ron stated that Visual Charting is obligated to depict, independently, the boundaries of the Class B and Class D airspace areas exactly as they are published in the [Federal Register \(FR\)](#) and listed in the [FAA Order JO 7400.9W](#). The outer parameters of each area, as well as the floor & ceiling of each must be depicted. Where more than one area occupy the same space, an overlap exists, but even in these complex areas, AeroNav Products, from a legal perspective, must chart the area parameters from source and not create overlap boundaries not in the legal descriptions. The areas and corresponding text are shown in different colors to aid in discriminating one from another. Ron explained that there will be a day in the not-too-distant future when chart attributes will be able to be viewed in layers. A user could view all of the Class B areas. A user could view all of the Class D areas. For this reason and from a legal liability perspective, all Class airspace areas must be shown independently of each other and when viewed together (as on current paper charts), it is the responsibility of the user to read the chart and make sense of the overlap. Ron commented that Sectional Charts and Terminal Area Charts (TAC) utilize two different scales; Sectional Chart Scale 1:500,000 and TAC 1:250,000. The overlapping airspace areas are understandably more clearly depicted on the larger scale TAC charts. He pointed out that every Class B metropolitan area has a TAC chart that can be consulted.

It was Ron's position that the recommendations brought forward by Mr. Katz would add extra lines and additional altitude values that would actually further clutter the depiction of the airspace.

Melisa McCaffrey, AOPA, expressed that some of the principles applied to the Los Angeles Terminal Navigation Chart (presented earlier as a prototype chart), in terms of colors, etc., might help improve how Class airspace information is depicted (Reference: [Presentation – Los Angeles Terminal Navigation Chart](#)). Melisa agreed with the FAA assessment that the

submitter's suggestions would only further complicate matters and add more clutter to the VFR Charts.

John Gale, NBAA, expressed that he agreed with AOPAs comments. He also believes that adoption of the LA Terminal Navigation charting design could help clarify complicated metropolitan airspace areas.

John emphasized that visual charts are a 2-dimensional tool to aid in a pilot's ability to picture 3-dimensional airspace in his mind and as such, are limited.

Valerie Watson, FAA/AJV-3B, commented that a part of the confusion on the chart is rooted in the design of the airspace areas, over which the charting offices have no say.

Brad Rush, FAA/AJV-3B, asked Ron whether there is or has been any dialogue between Visual and those involved with Airspace Design, specifically, Class B Airspace design? Ron answered that there has been no dialogue between Visual and the Airspace Designers. The charting group depicts the legal airspace areas as published by source.

Chris Criswell, FAA/AJV-22, said that he would take the information and feedback from this discussion back to the Airspace Regulations and ATC Procedures Group, FAA/AJV-11, so that the designers of the airspace are aware of the confusion that these vertically overlapping areas cause. Chris reaffirmed Ron's comments on the lack of a process between the Airspace Designers and charting. Chris re-emphasized that Airspace (design) determines chart depiction, charts merely reflect the published areas in the best way they can.

There was a consensus from the group that the matter brought forward by Mr. Katz was not a charting issue but a matter to do with airspace design.

STATUS: CLOSED

ACTION: Ron Haag, FAA/AJV-321, will communicate with the Airspace Regulations and ATC Procedures Group, FAA/AJV-11, and relate the concerns brought up by this RD.

B.) 12-02-255 Discontinuation of Loose-Leaf Terminal Procedures Publication

Ken Wilkes, FAA/AJV-352, briefed the subject. It is proposed that AeroNav Products discontinue production of the loose-leaf version of the TPPs. Ken reported that sales of the loose-leaf format are in decline. The September 2012 run of the loose-leaf edition totaled 20,000, for November it was 19,000, accounting for only 10% of the total TPP production. Ken commented that the loose-leaf edition, due to the drilling of the holes at the top of the publication, cuts into some of the information printed. Additionally, many of those are buying the loose-leaf edition are also buying bound editions as well.

Ted Thompson, Jeppesen, commented that Jeppesen had investigated doing a bound edition and the bound product never gained any traction with their customers. Jeppesen has remained with their loose-leaf product.

Valerie Watson, FAA/AJV-3B, suggested that the idea of discontinuation of the loose-leaf TPP should be handled through the AeroNav Products Business Office, who could reach out to current users of the loose-leaf TPPs for their response to the discontinuation. Valerie emphasized that the ACF group didn't represent the users of these publications and that the decision could not be made by those without a vested interest.

Jeff Waterman, NGA/PV, commented that DoD does not use the loose leaf version of the TPPs.

Melisa McCaffrey, AOPA, offered to conduct a survey of AOPA members to see what their response would be to the idea.

ACTION: Ken Wilkes, FAA/AJV-352, will report to Terminal management that the ACF recommends that the AeroNav Products Business Development Group reach out to users, develop a business case for discontinuation of loose-leaf TPPs and advise Terminal.

STATUS: CLOSED

C.) 12-02-256 Removal of Front Legend Matter from Hardcopy TPPs

Ron Canter, FAA/AJV-353, briefed the topic. Ron stated that the [first 16 pages](#) of all the 24 volumes of the TPPs published by the FAA contain the same information. These 16 pages are republished every 56 days in each of the 24 volumes. Ron showed the “front matter” to the group via a slideshow, demonstrating that it consists of a plethora of guidance, symbols, general information, etc. Ron’s proposal is that this information be removed from the hardcopy TPPs and only be available online and in the d-TPP. He points out that in addition to cost savings, the information, if only digital, could be updated more frequently and could be expanded to include more explanatory information that might be useful to pilots using the TPPs.

Ron proposed that a link to the digital version of the front matter would be added to the inside front cover of each hardcopy TPP, making it easy for a user to access the information.

Brad Rush, FAA/AJV-3B, commented that in running the numbers, 24 TPPs x 16 pages equates to 400 pages per cycle. Over the course of a year, with 500,000 sets published per year, a total of one million pages could be eliminated. Brad reiterated that the front matter is available online.

John Gale, NBAA, inquired as to the implications of having the front matter available only online. John commented that in the Business Aviation community (Part 91, 91 Subpart K and 135), it is standard procedure for a pilot/crew to have to fly to five airports within a given day. Often, the airports may be new to the pilot/crew and the plates may contain unfamiliar material or symbols that require clarification via the front matter information. He states that having the front matter readily available is invaluable during both pre- and in-flight.

Lev Prichard, APA-American Airlines, also echoed NBAA’s comment, adding that for many flight crews (Part 121), the bulk of the planning is done enroute to the destination.

Tom Schneider, FAA/AFS-420, suggested that a separate booklet be made containing the Front Matter materials. The booklet could be included with purchase of a complete set of TPPs or with the purchase of one TPP volume. The Booklet could be sold separately for anyone wanting just the front matter materials and would only need to be reissued when revised.

Chris Criswell, FAA/AJV-22, inquired as to whether the information contained in the front matter of the TPP was also in the Chart Users Guide. Valerie Watson, FAA/AJV-3B, commented that yes, the same material is in the Chart Users Guide, however, the Guide is not as cockpit friendly in terms of the size (8 ½” X 11”) and organizes the information in a different

way. The Chart Users Guide is more of reference tool to for use on the ground, not in an in-flight, cockpit environment.

Pierre Laroche, Transport Canada, stated that NAVCANADA does not publish this sort of information with their TPPs and publishes a separate book. NAVCANADA only publishes new editions of this informational supplement when revised.

Jeff Waterman, NGA/PV, commented that the DoD also publishes a separate Flight Information Supplement.

The consensus from the group was that there was support in removing the 16 pages of front matter from the hardcopy TPP, provided it is available elsewhere, as in a TPP supplement, in hardcopy and that not be additional cost incurred by the customer.

STAUS: OPEN

ACTION: Ron Canter, FAA/AJV-353, will take the input and recommendation to generate a separate TPP Front Legend Matter Book/Supplement and, with the help of the AeroNav Business Development Group, see if this is feasible. Ron will provide an update at the next ACF.

D.) 12-02-257 Simplification and Standardization of the Airport Sketch Final Approach Course on TPPs

Ken Wilkes, FAA/AJV-352, introduced the issue and briefed on the proposal for simplifying the Final Approach Course (FAC) information contained within the Airport Sketch on FAA-produced Instrument Approach Charts. Ken [reviewed current FAA charting practices](#) and showed that, depending on the procedure, one of six different depictions are shown. He stated that this is perhaps unnecessarily complicated and proposed that the FAC be shown, annotated only with the course bearing and without distance information. He demonstrated that all of the information proposed to be removed is shown elsewhere on the procedure plate (i.e., in the planview or profile). He also pointed out that Jeppesen does not even chart an airport sketch or the attendant FAC information, so apparently users do not need it in this form.

Bruce McGray, FAA/AFS-410, speaking as a pilot, stated that, in his opinion, all of the information currently depicted on the FAC in the sketch is critical, citing how he utilizes the information to easily determine the Missed Approach Point (MAP) when on Final.

Valerie Watson, FAA/AJV-3B, reiterated that all of the FAC information is available elsewhere on the plate and a pilot need not rely on the airport sketch for this critical information.

This sparked a broader discussion on how the information and the depiction of the FAC is interpreted and used by pilots.

Bill Hammett, Contractor, FAA/AFS-420, emphasized that the distance information in the airport sketch associated with the FAC is the distance to the runway threshold and that this distance is not always from the Final Approach Fix (FAF) to the MAP. The MAP may be located prior to the threshold; therefore, if the distance to the threshold is used, the pilot may initiate a missed approach late and compromise obstacle clearance. Bill stated that the main purpose of the sketch is to act as a visual reference for when the pilot breaks out of the clouds and sees the airport.

Valerie Watson, FAA/AJV-3B, inquired of the audience as to what they saw the intent of the airport sketch to be. Valerie repeated that Jeppesen does not have an airport sketch on their charts and its absence does not appear to cause users confusion.

Doug Edsall, USAASA, agreed that the information that appears in the airport sketch is contained elsewhere with on the procedure plate, most notably in the approach profile window and stated that this is sufficient.

Geoff Waterman, NGA/PV, stated that the FAC line used in the sketch is an aid in orientating the pilot to the airport and to the specific runway that the pilot is approaching. In his opinion, the sketch is intended to provide the pilot with situational awareness of the airport environment and not for procedural guidance.

Bruce re-emphasized that in his opinion, the information contained in the final approach sketch, especially the final approach course information, was critical for a pilot on final approach. Bruce emphasized that in single pilot situations during severe weather conditions or in congested airspace, he believes having the information in the airport sketch is a significant aid to the pilot. This opinion did not receive support from the majority of the audience.

Lance Christian, NGA/MSRF, stated that within the military community, pilots utilize the airport sketch upon breaking out of the clouds as a means of verifying their orientation of the aircraft in relation to the runway.

Ted Thompson, Jeppesen, was directly asked if Jeppesen has received requests from their subscribers to add an airport sketch to their charts. Ted responded with a firm “No.”

Bruce commented that, in his opinion, Jeppesen’s procedure plates supply more information than the FAA plates. Bruce repeated his previous position, but conceded that his personal technique in which he utilizes the airport sketch may not be consistent with its intended use.

Valerie summed up the discussion in saying that it appeared that there was a consensus from the group that there is a value in retaining the orientation of the aircraft in relation to the final approach path and the airport and stated that removal of the course line reference was never intended.

There was a question raised within the audience as to how long the FAA had been providing the airport sketch and why it was included in the chart. Brad and Valerie commented that the sketch and the current information related to the final approach path have been on the charts for over 30 years.

John Moore, Jeppesen, commented that this RD was really a cartographic issue and that before any final decision is made regarding the removal of any information currently contained in the airport sketch, the pilot community should be given a chance to provide feedback.

STAUS: OPEN

ACTION: Representatives from ALPA, NBAA, DoD and NGA to survey their pilot communities on the following items regarding airport sketches on FAA Approach Charts:

- Is the airport sketch of value?
- How do pilots utilize the airport sketch?
- What information is “critical” for inclusion in the sketch?

All groups are to provide an update and, if available, survey results at next ACF.

ACTION: Bruce McGray, FAA/AFS-410, will obtain a written response from FAA Human Factors Group at next ACF.

E.) 12-02-258 Localizer Feather Depiction on Parallel Runways

Mr. Joe Lintzenich, Contractor, FAA/AFS-410, briefed the issue and [presented depictions of the current FAA charting practices depicting a Localizer Feather](#) not only to the primary runway, but also to parallel runways. Joe proposes the elimination of localizer feathers to secondary parallel runways also authorized in simultaneous operations. He points out that as the briefing strip note clarifies that simultaneous authorization is granted, the secondary feather is redundant information and only provides chart clutter.

ALPA commented that they do like the use of the primary feather for ILS approaches, but that there was no need to depict a feather for the runway not directly specific to the procedure.

Current use of the feather in the U.S. is only for ILS/LOC procedures and not for RNAV procedures.

Mike Webb, FAA/AFS-420, stated that this is an item being discussed within ICAO. Mike added that the feather indicates the presence of an ILS and calls attention to the unique nature of ILS approaches where the ground-based instruments indicate position on either side of the course line. Currently on other approaches with angular guidance that are non-ILS, no distinguishing depiction/symbology is currently shown.

John Moore, Jeppesen, inquired as to why the smaller feather was depicted on the charts on runways other than the primary one used in the approach.

Valerie Watson, FAA/AJV-3B, responded that the parallel feather is depicted on an approach plate when it is specified for charting in the Additional Flight Data section of the 8260 source document. The 8260 is in turn filled out as per FAA Order 8260.19.

Tom Schneider, FAA/AFS-420, stated that he was not aware of the specific reasoning originally behind the requirement in the 8260.19.

John Gale, NBAA, commented that the Feather does provide situational awareness and that there is another ILS in the neighborhood.

Bob Lamond, NBAA, stated that the smaller feather was just chart clutter and served no specific use.

Ted Thompson, Jeppesen, commented that Jeppesen depicts localizer symbols (feathers) on adjoining or same direction runways for LOC-based procedures. Jeppesen provides this to indicate the availability of the NAVAID and that there are similar NAVAIDs in close proximity to the approach, alerting the pilot to the potential of crossing-tuning radios.

Kyle McKee, FAA/AJV-142, stated that it was his understanding that the size of the primary feather indicated the service volume of the localizer.

Valerie explained that on FAA charts, this was not the case and that the feather is simply a symbolic representation of a localizer. She further explained that the feather is extended at least as far out as the last fix using the localizer as part of its makeup.

Tom commented that similarly on Jeppesen charts, the length of the feather bears no relation to the service volume of the localizer.

Valerie inquired of the audience if there was a need for the second, smaller feather, for runways parallel to the procedure being flown?

The consensus from the group was that the second feather served little or no purpose and could safely be eliminated from the charts.

STATUS: OPEN

ACTION: Tom Schneider, FAA/AFS-420, will initiate revision to FAA Order 8260.19 and will update at next ACF.

ACTION: Ted Thompson, Jeppesen, will poll Jeppesen Chart users and report back at next ACF.

VIII. Closing Remarks

Valerie Watson, FAA/AJV-3B, thanked everyone for their participation and voiced special appreciation to Steve Serur and ALPA for hosting the ACF.

Notices of the official minutes will be announced via email and provided via the Internet. The two website addresses (CG and IPG) are provided below:

- Charting Group - http://www.faa.gov/air_traffic/flight_info/aeronav/acf/
- Instrument Procedures Group - http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs420/acfipg/

Please note the attached Office of Primary Responsibility (OPR) listing for action items. It is requested that all OPRs be prepared to provide verbal input at the next Forum or provide the Chair, Valerie Watson (with an information copy to Alex Rushton), a written status update no later than April 9, 2013.

Note: These status reports will be used to compile the minutes of the meeting and will be the “for the record” statement of your presentation.

Appreciation to Alex Rushton, Contractor, FAA/AJV-3B for capturing the Minutes and to Jennifer Hendi, FAA/AJV-3B, for graphics assistance.

A special thanks to Ted Thompson, Jeppesen, for providing his meeting notes for use in these ACF minutes.

IX. Next Meeting

ACF 13-01 is scheduled to be held on April 23-25, 2013, hosted by Innovative Solutions International (ISI) at Pragmatics, Inc. in Reston, VA.

ACF 13-02 is tentatively scheduled to be held on October 29-31, 2013, hosted by ALPA in Herndon, VA.

Please check the [Aeronautical Charting Forum web site](#) for the most recent information on future meeting dates and locations.

X. Attachments

- a. 12-02 Attendee Roster
- b. 12-02 Office of Primary Responsibility (OPR)