

**GOVERNMENT / INDUSTRY AERONAUTICAL CHARTING FORUM
CHARTING GROUP
MEETING 13-01
INNOVATIVE SOLUTIONS INTERNATIONAL,
(A Wholly Owned Subsidiary of Pragmatics, Inc.)
April 24-25, 2013**

I. Opening Remarks

The Aeronautical Charting Forum (ACF) was hosted by Innovative Solutions International (ISI) and held at Pragmatics Inc. Corporate Headquarters in Reston, VA. Valerie Watson, AJV-3B, opened the Forum on Wednesday, April 24. Valerie acknowledged the ACF Co-chair Tom Schneider, AFS-420, who presided over the Instrument Procedures Group (IPG) portion of the Forum. Minutes of the IPG meeting were distributed on May 14. Valerie also acknowledged and expressed appreciation to Innovative Solutions International for hosting the 13-01 ACF. Welcoming and administrative comments were made by Bill Hammett on behalf of ISI and Pragmatics.

II. Discussion of Next ACF

Valerie Watson, AJV-3B, informed the Forum participants that the scheduled location for ACF 13-02 (October 29-31, 2013) will be the Air Line Pilots Association (ALPA) headquarters in Herndon, VA.

III. Review of Minutes from Last Meeting

The minutes from the 12-02 ACF meeting were distributed electronically last fall via the AeroNav ACF website: http://www.faa.gov/air_traffic/flight_info/aeronav/acf/. The minutes were accepted as submitted with no changes or corrections.

IV. Agenda Approval

The agenda for the 13-01 meeting was accepted as presented, with the addition of New Agenda Item, RD 13-01-270, Step Down Fix Chart Notes.

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

A. ICAO / IFPP Committee Report

Mike Webb, 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 since the last ACF, a meeting was held in Hong Kong to work on the drafting of the next State Letter regarding Performance Based Navigation (PBN) procedure naming conventions. The meeting included discussions related to said naming conventions, charting proposals for helicopter procedures and new charting requirements to support PBN (a PBN Requirement Box).

Mike voiced that there is some controversy around certain sections of the State Letter related to the implementation date for equipment manufacturers and for States to be in compliance. The recommendation had been for compliance to be met by 2028, but Mike reported that a number of parties in attendance feel that the date needs to be sooner. An ad-hoc working group, focused on settling a date for compliance is scheduled to convene in the fall of 2013.

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

B. Declared Distances

Rich Boll, NBAA, was not in attendance, but submitted written statements related to RD 07-01-192 – Usable Runway Lengths for Takeoff and Landing, and 09-01-215 – Reporting and Depiction of Stopways. (See **Outstanding Charting Topics** section.)

ACTION: Rich Boll, NBAA, to provide an update at the next forum.

C. Airport Surveying – GIS Program

Dr. Michael McNerney, AAS-100, [provided an update](#) on the progress made within the Airport Surveying-GIS program. Last update was provided at [ACF 11-01](#), in April of 2011. Dr. McNerney reviewed the actions taken by the Office of Airports since the last update. He reported that significant progress has been made since 2011. The following ACs were updated and released since last ACF:

- [AC 150/1500-13A](#) Airport Design
- [AC 150/5300-17C](#) Standards for Using Remote Sensing Technologies in Airport Surveys
- [AC 150/5300-18B](#) General Guide and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards

Dr. McNerney reviewed how airport data has historically been collected and the ways in which the Airports GIS Program is intended to change how that information is collected, managed, maintained and distributed in the future. He described various efficiencies generated by the new program.

Dr. McNerney stated that by September 2013, airports will submit their data electronically. Access to Airports GIS data is currently restricted to the airport, those airport consulting firms designated by the airport, and offices within the FAA. Tom Schneider, AFS-420, inquired as to whether there were future plans to allow the public to have read-only access to the data. Dr. McNerney replied yes, adding that the release point would be through the FAA Aeronautical Information Management (AIM) Office.

Ray Lewis, USN, inquired as to whether the Department of Defense (DoD) would have full access to the data. Dr. McNerney replied in the affirmative.

Dr. McNerney reported that to date, full data has been gathered on 30 to 40 airports. He added that the program is on track to having full data on 825 airports by FY2016. Ultimately, the plan includes over 19,000 airports entered into the program, of which 3,330 airports will have full GIS data. Work is being done to enter supporting information, i.e. aerial/satellite photography, and data into a cloud server environment. Dr. McNerney stated that by 2014-15, Airports GIS will become the main source for airport data.

Dr. McNerney commented on the different tools being considered to allow users to pull information out of the database and display information; however, the development of such tools (software) awaits funding.

ACTION: Dr. McNerney, AAS-100, will continue to keep the ACF apprised of the status of this initiative.

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

Brad Rush, AJV-3B, was not in attendance, but Valerie Watson, AJV-3B, provided an update on actions taken since last ACF. Valerie briefed the audience that the last RNP SAAAR procedures (two non-FAA developed approaches at Deadhorse, AK) have been revised. This issue is now considered closed.

STATUS: CLOSED

E. Discontinuation of VOR Services

JoAnn Ford, Acting Manager for AJW-41, [presented an updated briefing and overview](#) of the Very High Frequency Omnidirectional Range (VOR) Minimum Operation Network (MON) Implementation Program.

JoAnn introduced the project's Acquisition Management Systems (AMS) Project Manager, Ernesto Etienne, AJM-324.

JoAnn reviewed the overall plan of the systematic decommissioning of approximately half of the VORs within the NAS. JoAnn emphasized that there would still be VOR coverage at or above 5000 feet AGL, the remaining VORs having a service volume (SV) of 77nm. Work is being done now to assess and insure that the SV target is being met. The objective is to transition from the current VOR-based NAS to a RNAV-based NAS by 1 January 2020, at which time the VOR MON will have been fully tested and vetted.

JoAnn stated that the list of candidate VORs for shutdown is being vetted internally within the FAA. She emphasized that this process is ongoing and the list will continue to change as the FAA works through the transition process.

Greg Pray, AJV-211, expressed concern on the vetting process, stating that there are many public/private parties who will want to voice their concerns. He inquired to whom those parties should get in touch with about their concerns. JoAnn stated that Deborah Lawrence, AJM-321, is the best point of contact for such concerns.

Ray Lewis, USN, inquired about the process for VORs that are maintained by the FAA but are not part of the NAS, such as those in the Bermuda/Caribbean area.

Paul Eure, AJE-31, responded that the VORs in the Bermuda/Caribbean area are governed by various treaties and involve the U.S. State Department. Those VORs are not included in the current discussion.

John Collins, GA Pilot, asked whether there are plans to shutdown VORs on which Class B airspace areas are predicated and if so, how that would be handled.

Paul responded that various airspace classification definitions are a topic of discussion and are included in the ongoing evaluation of which VORs are critical.

Lucy Kruse, AJV-3C, asked if there was a separate subordinate program to look at VORs reaching their end-of-life service. She expressed her concern that all factors associated with VOR NAVAID facility shutdown are being taken into account. She inquired whether the ongoing discussions included the possibility of boosting the remaining VORs with Doppler kits or whether a cost assessment has been done on demolition of the VORs identified for decommissioning.

Paul responded, stating that there are teams working these issues. Paul emphasized that given the time line for the transition of the NAS to a PBN environment, there are a lot of issues that have to be taken into account and coordinated, while maintaining current NAS air traffic flow capabilities. The details of the plan are still solidifying and in the coming months and years, these decisions will be made. Paul added that currently, the sequestration cuts are having an impact on the availability of resources available within the FAA to address the challenges raised by this transition. Paul reassured the audience that there will be opportunities for organizations both within and outside of the FAA to comment and contribute to the plan that is evolving.

JoAnn commented that LPV is being put in place of VOR approaches where VORs are discontinued. Additional costs are being looked at and evaluated.

Bill Hammett, Contract Support, AFS-420, inquired as to whether there had been any thought about lowering the floor of controlled airspace to 1,200 feet AGL in the Western U.S. and the upper peninsula of Michigan? This action would greatly reduce the amount of rulemaking to support new instrument procedure development and RNAV routes.

Bob Lamond, NBAA, commented that NBAA supports this initiative and has submitted a request for rule-making regarding the proposal.

John Collins inquired if the issue regarding VOR name retention was being discussed. Paul replied that one approach being looked at and receiving support was to allow VOR name retention for a stand-alone DME at the same location.

JoAnn commented that another thing being looked at was how Hazardous Inflight Weather Advisory Service (HIWAS) will be impacted when a VOR providing HIWAS capability is decommissioned.

Paul provided one example of how one Victor route was being impacted - Victor 3 (V3) utilizes has 19 VORs, half of which are to be decommissioned. It was decided that the airway would be totally redesigned in its entirety on a single effective date, rather than a segment at a time.

Michael Stromberg, Air Wisconsin, inquired if during this process, the FAA would look at environment efficiencies to enable the new routes to be more fuel efficient. Paul replied that during this transition, the WG will not do any environmental impact analysis. RNAV routes will be developed directly over current Victor airways to avoid the need for environmental analysis.

Valerie Watson, AJV-3B, thanked JoAnn for the excellent update on this initiative and asked that continued briefings be provided at future ACF meetings as the issue progresses.

ACTION: AJW-41 will continue to keep the ACF apprised of the status of this initiative.

F. Los Angeles Terminal Navigation Chart

Ron Haag, AJV-321, [reviewed the presentation topic](#) and briefed the audience on the actions taken since the last ACF. Ron reiterated that the Los Angeles Terminal Navigation Chart prototype was created to address various safety concerns raised by specific users of the LA pilot community.

Ron stated that since the last ACF, the military had expressed their support for the new chart. Ron added that in December, he visited Los Angeles and transferred the task of securing feedback from the LA pilot community to the Western Service Center. To date, the only issues that have been raised are those relating to the colors used to depict various airspace types. There is still a need to secure feedback, specifically from the LA helicopter pilot community.

Valerie Watson, AJV-3B, inquired as to whether there had been any discussions within the Visual Team on whether the LA Terminal Navigation chart was intended to replace the existing LA Helicopter Chart and potentially other related charts like the LA VFR Terminal Airspace Chart (TAC) or Flyway chart.

Ron replied that, at least at this point in time, the LA Terminal Navigation Chart is considered a “one off” and there is no plan to expand this chart into a series for all Class B areas or helicopter-intense regions. There is no intention to eliminate any of the existing VFR chart series, even in the Los Angeles area.

Ron further stated that, due to financial constraints, maintenance of this single chart is under review.

Both Melissa McCaffrey, AOPA, and Lance Christian, NGA, asked whether caution area notes would be published on the body of the chart?

Ron responded that yes, they would be charted as supplied by source.

Lev Prichard, APA, asked if the LA Terminal Navigation Chart product can be done as a digital product with the ability to turn on and off different layers.

Ron replied that digital publication of layered data is a long term goal for all of the VFR charts, but is not available presently.

ACTION: Ron Haag, AJV-321, to report back on progress of the LA Terminal Navigation Chart and plans for publication.

G. AAUPs (Approach) Status and RNAV GPS PRM Approaches

John Blair, AFS-410, briefed the topic. John briefed that as of 27 June 2013, [a new set of PRM approaches](#) will be published for the San Francisco International Airport (SFO) for runways 28L and 28R.

John explained that LNAV minimums will appear on the new charts from June through August 2013. After 22 August 2013, the LNAV line of minima will be removed. Vertical Navigation (VNAV) will be required after 22 August 2013. The delay in implementing the VNAV minima is per request from the airport due to construction around the airport.

Lev Prichard, APA, expressed concern at this unconventional process and commented that in situations like this (the temporary LNAV, then VNAV), the airline policy is to tell their pilots not to fly such procedures.

John replied that the policy decision behind the LNAV and VNAV issues at SFO was made at a high level and that these procedures are waived.

John then discussed the unique aircraft separation established for the procedures at SFO where aircraft on parallel approach would be staggered 1.5NM in trail. The reduced separation would only occur on the parallel ILS approaches on runways 28L and 28R and not on any of the RNAV approaches. Basis for the new separation of aircraft on these approaches can be found in [FAA Order JO 7110.308](#). SFO is the first airport to implement the new 1.5NM staggered separation approaches, but this will probably expand to other airports in the future.

John then focused on what this means for the pilot. John briefed that the pilot would learn that new parallel runway ILS approach operations with staggered arrivals were in operation through the ATIS. The procedures account for wake turbulence and extend out 14NM from the end of the runway, along the glideslope. Pilots will notice the difference in separation. This is another tool available for ATC at SFO to manage traffic flow into the airport. To aid in alerting pilots of the unique qualities of the new approach, a note will appear on the charts per FAA Order 8260.19, "Maintain last assigned altitude until established on glideslope." This note is specific to this type of approach only.

The topic changed to the associated AAUP pages for PRM Approaches. A single, non-regulatory one-per-airport AAUP page will be published for Atlanta (ATL), San Francisco (SFO), St. Louis (STL) and Detroit (DTW) for the 27 June 2013 effective date cycle, replacing the regulatory one-per-procedure AAUPs now in publication.

Valerie Watson, AJV-3B, emphasized that the new AAUP pages are not regulatory, are not linked to a particular procedure and can thus be more quickly and efficiently revised. A note on each affected procedure in the briefing area will alert the pilot to consult the AAUP page.

STATUS: CLOSED

H. QR (Quick Response) Codes on FAA Charts/Supplements

Lucy Kruse, AJV-3C, introduced Langston Majette, AJV-321, who briefed the group on AeroNav Products' plan to place QR codes on their charts and supplements. Lucy commented that Langston had submitted the idea originally through the Department of Transportation's Idea Hub and that AeroNav Products management encouraged Langston to explore the idea further.

Preliminary approval was given by the Interagency Air Cartographic Committee (IACC) for use of a single QR code. AeroNav Products Management has determined that it would be preferable to assign one static QR code per product suite [VFR Charts, Supplements (AFD, Alaska & Pacific Supplements), IFR Enroute Charts and Terminal IFR Charts]. This will require IACC approval.

[Langston presented samples of the QR codes](#) as they are proposed to appear on the cover or title panel of each AeroNav Product. He described the links to which each QR code would direct users. This will provide ready access to Safety Alerts & Chart Notices, NOTAMs, Alaska Weather Camera data, etc. Work is being done to ready the static web pages and to finalize the proposed links for each product.

It was asked why the proposal was not to simply use a single code on all products, as there is significant repetition between the listings of links and one cannot predict what a particular user/pilot might be interested in. Langston responded that a single code was discussed, but even though there IS a lot of overlap of the links, AeroNav Management prefers the publication of 4 distinct codes.

Bob Lamond, NBAA, expressed his support for the idea and suggested organization of the information on the dedicated web pages into two groups: immediate flight planning information and secondary supplementary materials.

Lev Prichard, APA, commented that he also thought it was a good idea. Lev added that mobile users (pilots) are currently utilizing third party applications to access additional flight information.

Lucy commented that the FAA, unlike commercial third party vendors, has agency-imposed constraints in terms the particulars of FAA web site content.

Langston added that the web pages would be optimized for use on portable electronic devices. The web pages will be primarily text-only to lessen bandwidth requirements.

Attendees expressed support for the publication of QR codes on AeroNav Products and the endeavor will move forward.

ACTION: Langston Majette, AJV-321, will continue to keep the ACF apprised of the status of this initiative.

VI. Outstanding Charting Topics

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

Kel Christianson, AFS-470, provided an update on progress made since the last ACF. Kel stated that the work to accomplish publication of a single, non-regulatory approach AAUP per airport had been accomplished. He stated that formal documentation of the process for Approach AAUP publication via NFDD & maintenance responsibility is progressing. He further stated that AFS-470 will be obligated by FAA Order with the maintenance of Approach AAUPs.

Valerie Watson, AJV-3B, stated that NGA has withdrawn its objection and that the IACC has agreed to the publication of RNAV Departure AAUPs in the Terminal Procedures Publications. Work continues within Flight Standards to finalize the creation, maintenance and publication process for the Departure AAUPs.

John Moore, Jeppesen, asked if the any changes made to AAUP information that occurs between chart cycles would be advertised via NOTAM. Valerie responded yes.

STATUS: OPEN

ACTION: Kel Christianson, AFS-470, to report on progress related to creation, maintenance and publication of Departure AAUPs.

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

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

FAA's Airports Safety & Standards (AAS-100) released a revised & updated "A" edition of AC 150/5300-13, Airport Design. This AC addresses FAA's response to the DDWG's effort to report usable runway lengths for takeoff and landing at US airports using the declared distances format.

While The DDWG recommended the reporting of declared distances for all hard surfaced runways, AAS-100 elected to limit the reporting requirement in the AC to those airports where declared distances are used to meet runway design standards resulting in one or more of the declared distances is less than the runway length. FAA further requires reporting of declared distances for all international airports, as defined by the US Aeronautical Information Publication (AIP), and all part 139 certificated airports (ref: AC 150/5300-13A para. 323f).

The above requirement falls short of the DDWG's stated objective and the recommendation of the ACF-CG agenda item. However, the work accomplished by the DDWG with respect to charting (e.g. the Inverse "D" symbol on FAA instrument approach charts & airport diagrams) and the revised Aeronautical Information Manual guidance on declared distances fully supports guidance for reporting declared distances established in the AC. No additional changes to the AIM or to charting are required.

The first two recommendations of [RD 07-01-192](#) have been addressed to the extent possible. The remaining recommendation of agenda item #192 deals with reporting NOTAMs describing temporary changes to runway length using declared distances. In 2011, AAS-100 released an update to AC 150/5370-2F, Operational Safety on Airports during construction that included increased focus on computing and reporting revised declared distances resulting from temporary, partial runway closures. In addition, the FAA NOTAM Policy Office is currently updating FAA Order 7930.2, Notice to Airman to include reporting changes to usable runway lengths and changes to declared distances. The NOTAM office, through AAS-100, has furnished a draft of these changes to the DDWG. The proposed changes address recommendation #3 in agenda item #192. Anticipated date for this revised Order is August or September 2013.

DDWG determination:

1. Action taken by FAA described in AC 150/5300-13A paragraph 323f addresses recommendations #1 and #2 to the extent practicable. No further DDWG action anticipated on these two recommendations and considers these two recommendations closed.
2. Action requested in recommendation #3 will remain open pending publication of the update to FAA Order 7930.2, which is anticipated third quarter of 2013. Anticipate recommending closure of agenda item #192 concurrent with release of the revised Order.

STATUS: OPEN

ACTION: Rich Boll, NBAA, to report on progress at next ACF.

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

Paul Gallant, AJV-11, was not in attendance, but he sent Valerie Watson, AJV-3B, an email update on the status of the topic. Paul stated that because of resource issues within his office, updates to the AIM and FAA Order JO 7400.2 have been put on hold due to other priorities.

STATUS: OPEN

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

D. 09-01-213 TERPS Change 21 Circling Approaches

Valerie Watson, AJV-3B, reviewed the topic and actions taken since last ACF. Valerie briefed that the first procedures that incorporate the new circling approach criteria will be published for the 2 May 2013 effective date. As of 27 June 2013, every amended procedure will have the new circling criteria applied.

Valerie announced on behalf of the AeroNav Products Terminal Team (Terminal) a change in application of the criteria. It was announced at the last ACF that when a single procedure was amended, the new circling criteria would be applied to all procedures at that airport for the same effective date. Due to workload/resource constraints, Terminal is not able to maintain this commitment. Single procedures will be amended and will have the new circling criteria applied, but **ALL** procedures at that airport will not be worked concurrently for the change. Valerie added that it will be clear to users which procedures have the new criteria applied, as they will be annotated with the negative C icon on the circling line of minima.

Tom Schneider, AFS-420, asked whether all the procedures *on a given runway* would have the new circling criteria applied concurrently. Tom illustrated an example of potential pilot confusion, stating that that a pilot looking at an ILS Y and an ILS Z approach for the same runway, would notice a difference in circling minima if the procedures were not revised concurrently.

Valerie stated that she was unsure if Terminal planned to concurrently work all procedures to a given runway or not, but that she would inquire and report. [NOTE: After the meeting, Greg Yamamoto, AJV-35, reported to Valerie that Terminal does NOT intend to apply the new circling criteria a runway at a time, but will only apply it as individual procedures are revised for other reasons.]

Lev Prichard, APA, commented that there are currently different circling minima published at a single airport and cited the San Marcos, TX (HYI) ILS or LOC Rwy 13 & RNAV (GPS) Rwy 13 procedures as an examples. He stated that this is common and pilots CAN handle it.

Bruce McGray, AFS-410, announced that the Aeronautical Information Manual (AIM) guidance has NOT yet been published, that the cut-off for the August AIM has already passed and the earliest date that he could insure publication in the AIM would be February 2014. Valerie reiterated that the first procedures with this criteria applied will be published May 2, and stated that it was expected that the AIM material would be published by this time. Bruce will attempt to expedite the publication of the guidance and try to see that it is included in the August edition of the AIM.

Valerie stated that Terminal has published a Chart Notice to explain use of the new circling icon. In light of the fact that no AIM guidance has been published, it was recommended that a more robust Notice with more detail be published. Allison Maliszewski, AJV-353, accepted responsibility for republishing the Chart Notice with expanded guidance, including the circling radii tables currently published in the front matter of the TPPs.

Discussion continued regarding the lack of pilot education regarding the new criteria. Lev commented that without AIM guidance, the only place pilots can look for detailed information is the front matter of the TPP. It is his belief that there is insufficient information in the public domain to explain the changes to circling minima. He stated that the FAA TPP front matter does not appear through third party chart providers for electronic charts and said that it is not easy to get the material online to secure for use on a tablet computer.

Ted Thompson, Jeppesen, commented that changes in the circling minimums will undoubtedly confuse the pilot community. He expanded his remark to add that he believes pilots are struggling to keep up with the different approach minimums associated with the proliferation of different types of approaches being published. Ted stated that Jeppesen will be also use a negative C icon on approaches where the new criteria have been applied and that Jeppesen has published explanatory information regarding the subject.

STATUS: OPEN

ACTION: Bruce McGray, AFS-410, to expedite publication of AIM guidance and to report back at next ACF.

ACTION: Allison Maliszewski, AJV-353, and Valerie Watson, AJV-3B, to see that an expanded Chart Notice is developed & posted prior to May 2.

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

Bruce McGray, AFS-410, [provided an update on actions taken](#) since last ACF. Bruce provided a summary of the three and half year progress on research relating to how pilots look at various elements associated with LVO/SMGCS operations, in terms of behavior and system interactions. The data gathered from the research, which used 12 flight crews, has been reviewed by Aeronautical Information Management (AIM) and is being studied further.

Bruce discussed actions taken regarding the homogenization of the LVO/SMGCS operations within the international aviation community through ICAO discussions. An initial ICAO Operations LVO Sub Group meeting took place in April.

Bruce commented on the lack of standardization of chart symbols on the current nongovernment - produced SMGCS charts. This lack of harmonization is due to many factors, but it is a primary goal of the SMGCS Working Group to standardize these symbols within the U.S. and then to extend these standards internationally through ICAO.

Bruce announced that human factors testing of chart symbology is planned. He made an appeal to pilots (CAT III ILS qualified) to take part in a new Volpe study (online survey) regarding SMGCS charts and proposed SMGCS chart symbology.

STATUS: OPEN

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

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

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

The release of [AC150/5300-13A](#) satisfies the first and second recommendations of [RD 07-01-215](#). The AC requires that all declared distances be verified and approved by the FAA. The new guidance ensures that stopways and clearways established by an airport result in publishing of declared distances for the runway. The DDWG considers these two recommendations closed.

Recommendation #5 was satisfied through action taken by AeroNav products to remove the presentation of stopways on the airport diagram and airport sketch. This recommendation is also closed.

With regard to recommendations # 3 and #6, a late 2012 review of the NASR database by the DDWG revealed continued instances of hard-surfaced runways reporting stopways without accompanying declared distances, though none appear to be at part 139 airports. In addition, numerous airports with grass/turf runways and runways at private airports contain entries showing a stopway. The NASR database contains a few examples of civil runways with a designated "overrun", which is military term and not a civilian designation. This review indicates that a concern remains regarding the designation of a stopway contrary to the definition in 14

CFR part 1 and in conformity with requirement for a stopway published in AC 150/5300-13A. It is hoped that the introduction of FAA's new airports database system will address these issues by applying data validation checks that prevent inappropriate designation of a clearway or stopway and prevent designation without accompanying runway declared distances.

Recommendation item #4 concerning partial runway closure NOTAMs will be addressed with the release of the revised FAA Order 7930.2 (see discussion for ACF RD 07-01-197).

DDWG determination:

1. Recommendation items #1, #2, & #5 have been satisfactorily addressed and these items are considered closed.
2. Recommendation items #3 & #6 remain open pending development of systems that prevent the inappropriate designation of a stopway or clearway and include verification processes that prevent these designations without accompanying runway declared distances. The DDWG considers these two items open.
3. Recommendation item #4 is tied to release of FAA Order 7930.2. The recommendation, therefore, remains open pending publication.

STATUS: OPEN

ACTION: Rich Boll, NBAA, to report on progress at next ACF.

G. 10-02-233 Removal of (ATC) Crossing Restrictions from SIDs and STARs

Brad Rush, AJV-3B, was absent and Valerie Watson, AJV-3B, provided an update in his absence. Valerie reported that at the last ACF that there were 28 Standard Instrument Departures (SIDs) with (ATC) Crossing Restrictions. There are now 17 SIDs remaining to be corrected.

Jim Arrighi, AJV-141, proposed the removal of the (ATC) restrictions from the ATC Handbook and announced that the AIM references to these crossing restrictions would be removed from the February 2014 version of the AIM.

Valerie expressed surprise that the AIM was already slated for revision and voiced that in her opinion, the guidance should not be removed until all of the procedures have been revised. She stated that as long as there are "(ATC)" altitudes on charts, guidance should be provided to pilots and controllers. Valerie will inquire of Terminal when the remaining SIDs will be worked.

Valerie then asked if the lost communications concerns, originally raised by Rich Boll, NBAA, have been accommodated or is the FAA obligated to provide at-or-above obstacle clearance altitudes.

Bill Hammett, Contractor Support, AFS-420, stated that FAA Order 8260.46, Departure Procedure (DP) Program, was changed and that the procedure design requirements insure that terrain and obstacle clearance is provided.

Lev Prichard, APA, commented that a pilot should be flying higher than the MEA or assigned altitude during lost communications procedures.

Gary McMullin, Southwest Airlines, commented that a pilot should comply with the climb gradient on a DP. Gary then inquired as to whether ground and obstruction protection was built in to DPs?

Tom Schneider, AFS-420, replied with a definitive yes.

STATUS: OPEN

ACTION: Brad Rush, AJV-3B, to report on progress made on removal of (ATC) Crossing Restrictions from the remaining 17 SIDs.

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

Rick Fecht, AJV-321, reviewed the item. Rick stated that Visual Charting sent out update packages to the three ATO Service Areas, requesting that the current aerobatic & training areas be verified/amended/deleted as necessary. Those packages have been returned back to the VFR Mapping Team and there were very few changes to information related to training areas. There were some changes regarding to information related to aerobatic areas:

- 69 current aerobatic areas – 66 are defined by a specific point; 3 defined by parameters.
- Aerobatic areas may exist for 10 days to 2 years.
- Aerobatic areas may be established through FSDO by waiver
- Many aerobatic areas exist that are NOT waived, worked through the FSDO, or published.
- None of the aerobatic areas are maintained in a database

Rick commented that at present there are no specifications that support the charting of aerobatic areas on any FAA products. Currently, aerobatic areas that are submitted by the FSDOs, appear as text entries in the Airport/Facility Directories (AFDs). Maintenance and currency of these entries is dependent on unsolicited input from FSDO or Service Area personnel.

Rick brought up the following aspects related to aerobatic areas that are unknown:

- the dimensions aerobatic of the airspace
- times the airspace area is used
- level of activity

Rick pointed out that until the charting group has a solid source for this information and a designation of what is deemed necessary for charting, Visual Charting is at a loss.

John Moore, Jeppesen, commented that this issue is about criteria – criteria for publication as a Notice in the AFD and criteria for charting on a VFR chart. He asked if there had been thought given to establishing specific charting criteria for aerobatic areas.

Gary McMullin, Southwest Airlines, commented on the way such airspace is utilized: the pilot(s) phone in to the FSDO to have the airspace “turned on” and upon returning to the airports, have the airspace “turned off”. There is no real way to chart or monitor such areas as it is unknown what specific area is in use at what times.

Hal Becker, AOPA, stated that under Part 91, a pilot is not required to do anything to practice aerobatics in airspace that is at a sufficient distance from a Federal Airway.

Valerie Watson, AJV-3B, in capturing the discussion of the group, stated that the Charting Offices do not have enough information to warrant placing aerobatic areas on the chart, given the nature of the way the airspace is turned on and off and that the definitions of the areas are so vague. She pointed out that the source for aeronautical data in the NAS is the Aeronautical Information Management (AIM) office. If

the AIM office can establish criteria (in concert with FSDO reps) for the charting of such areas, and take on the responsibility for publishing those areas designated for charting, AeroNav Products could pursue depiction on Sectionals, TACs & WACs, but until that time, there is not sufficient information.

Greg Pray, AJV-211, agreed to work to establish publication criteria and toward capturing these areas in the NASR database.

STATUS: OPEN

ACTION: Greg Pray, AJV-211, will look at the parachute jump area criteria to see if similar criteria can be used in establishing criteria for aerobatic and training areas. He will investigate entering these areas into the NASR database.

ACTION: Melissa McCaffrey, AOPA, will follow-up with the original proponent of this issue, Mr. Finagin, to obtain more specific information on what he wants, especially with regard to the unknown (unwaivered) aerobatic areas when charting is called for.

I. 12-01-248 NEXTGEN Procedure for the Naming of Aeronautical Navigations Aids

Valerie Watson, AJV-3B, summarized the subject matter and history of the topic. Valerie provided an update on behalf of Brad Rush, AJV-3B, stating that a letter was sent to AJV-1, Dennis Roberts, requesting a position regarding the establishment of new naming conventions for waypoints which overlie a position formerly occupied by a NAVAID. Mr. Roberts has designated Gary Norek, AJV-11, to provide a response. No response has been received to date.

STATUS: OPEN

ACTION: Brad Rush, AJV-3B, to provide an update on response from AJV-1 at next ACF.

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

Valerie Watson, AJV-3B, summarized the topic and stated that the ILS consolidated charts (both standard CAT II & III and SA CAT I & II) will appear in the FAA TPPs for the 2 May 2013 effective date cycle.

STATUS: CLOSED

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

Valerie Watson, AJV-3B, reviewed the history of submission. Since the last ACF, AeroNav Products reviewed the previous ACF suggestion of producing a separate TPP publication containing guidance & legend matter. The AeroNav Products Business Office has determined that this course is not cost effective. The TPP guidance & legend matter will remain as it is currently published.

STATUS: CLOSED

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

Valerie Watson, AJV-3B, reviewed the item. Valerie stated that since last ACF, the National Geospatial-Intelligence Agency (NGA) has stated that they are not in support of the proposed simplification of the Final Approach Course (FAC) in the airport sketch. Because a shared FAA/DoD specification oversees the sketch, changes cannot be made without NGA (DoD) support. No change will be made to the FAC depiction.

STATUS: CLOSED

M. 12-02-258 Localizer Feather Depiction on Parallel Runways

Tom Schneider, AFS-420, summarized the history of the issue and stated that FAA Order 8260.19, Change 3, removed the requirement for charting a localizer symbol on a parallel runway. As procedures are amended, the parallel localizer feather will be removed from the charts.

Ted Thompson, Jeppesen, stated that he does not anticipate Jeppesen making any changes to their charts. Jeppesen charting specifications state that the parallel feather is always shown, whether specified on the 8260-series source document or not.

STATUS: CLOSED

VII. New Charting Topics

A. 09-02-222 Charting of VGSI

Upon request from Brad Rush, AJV-3, [RD 09-02-222](#) was reintroduced for consideration by the ACF Charting Group. Valerie Watson, AJV-3B, briefed the item in Brad's absence and voiced his request that the FAA Order 8260.19 guidance be more specific in stating that in cases when the non-coincident profile note is specified for charting, that the *numerical values* for the VGSI angle and TCH NOT BE SHOWN on the 8260-series source document. The intent is for the numerical information to be taken from the NASR database. Annotation of this chart note has caused confusion for procedure designers and requires clarification.

Robert Goodson, NGA, asked whether revision to the VGSI information is published in the daily NFDD. Valerie responded yes.

Tom Schneider, AFS-420, stated that he would add clarifying language to FAA Order 8260.19.

STATUS: OPEN

ACTION: Tom Schneider, AFS-420, to modify FAA Order 8260.19 and report back at next ACF.

B. 13-01-259 Airspace Changes Effective Prior to Chart Revision

Rich Boll, NBAA, was not able to attend the ACF and Bob Lamond, NBAA, briefed the topic in his absence. Bob stated that there is a disconnect between the timing of changes in Class D & E airspace areas and the publication dates of the VFR charts on which those changes are published. Airspace changes which occur between Visual Chart publication dates are published in the Chart Bulletin section of the Airport/Facility Directories (AFDs) until such time as they can be incorporated onto the charts. These text descriptions of the parameters of airspace areas (point-to-point listings of latitudes & longitudes) are extremely hard to visualize and do not communicate the changes well to users.

It is requested that the FAA generate a graphic depiction of newly-revised airspace areas that can be posted to a public website on the effective date of the change. This graphic could also be incorporated into the Chart Bulletin section of the AFD where the airspace revision is published in text form.

Rich Fecht, AJV-321, agreed that NBAA's proposal would significantly aid users in understanding interim airspace changes, but voiced that the Visual Charting Team is unable, at this time, to pursue charting enhancements due to current financial constraints. He stated that he would support full vetting of this proposal within his Team if and when funding allows.

Melissa McCaffrey, AOPA, brought to the audience's attention that the same issue exists when Special Use Airspace (SUA) areas are revised between the dates of the subject VFR chart's publication cycle. Melissa stated that Military Operation Areas (MOAs) and Restricted Airspace areas have been published in the past on interim dates and users may sometimes wait for months until the graphic depictions appear on a VFR Sectional chart.

Paul Gallant, AJV-11, responded to AOPA's comments, stating that a letter of inquiry was sent to Lynn Ray, AJV-0, Vice President of Mission Support, on this subject. Paul stated that all airspace actions are made effective on the enroute (56-day AIRAC) cycle dates. These dates cannot possibly always coincide with the subject VFR Chart cycle, as VFR Sectional charts are only published every 6 months. He also pointed out that often these areas plot on 2 separate VFR charts, which usually do not have the same publication dates.

Bob commented that these airspace actions are years in the making and suggested that some sort of "heads up" be given to pilots prior to publication. He suggested perhaps charting the areas prior to their revision dates with an explanatory note containing the effective date.

Paul responded to Bob's suggestion stating that a similar proposal was looked at in the past and was not implemented.

Valerie Watson, AJV-3B, stated that charting items prior to effective date is something AeroNav Products has never done and would require significant coordination, dialog with Legal and that, in her estimation, would probably not be approved.

Ted Thompson, Jeppesen, commented that Jeppesen had attempted something similar to what Bob suggested and encountered numerous problems. Ted is not in favor or pursuing this avenue.

Paul stated that his office currently posts graphic revisions to SUAs on a public website. Valerie suggested that when such SUAs are revised, the AFD Chart Bulletin entry include a link to this site. This would provide easy access to a graphic depiction of at least SUA changes to users. Bob Carlson, AJV-322, stated that he will investigate publishing the URL to graphic SUA changes in the AFD Chart Bulletin. Valerie noted that this action does not address the interim Class airspace revisions.

Melissa commented that the problem with the current methodology is that interim Class airspace revisions are disseminated to pilots textually and pilots cannot visualize the change, nor do most plot the new airspace on their charts. Melissa added that often pilots will phone AOPA to ask the Association to plot the airspace and generate a graphic.

STATUS: OPEN

ACTION: Rich Fecht, AJV-321, will research the feasibility of providing interim Class airspace graphic portrayals and will report at next ACF.

ACTION: Bob Carlson, AJV-322, will investigate adding the Airspace & Rules URL for graphic SUA revisions to the Chart Bulletin section of the AFD and will report at next ACF.

C. 13-01-260 Inclusion of Metering Frequency, 133.57, to MSP Airport Diagram – FAA AL 264

Valerie Watson, AJV-3B, briefed the topic on behalf of the submitter and voiced that the proponent requests that the FAA publish the MSP Ground Metering frequency on the airport diagram. She shared that the NASR database currently contains similar frequencies for 4 airports: MSP, ORD, STL & CLE. Valerie inquired of the Terminal ATC representatives present how these frequencies are utilized and if they believe charting is necessary.

Mark Washam, Contract Support, AJT-2A3, voiced that ground metering is only used to line up aircraft on the ground for takeoff when an airport is extremely busy. Ground metering is not always in use.

Mike Poisson, AJT-2A3, agreed and voiced that, to his knowledge, because ground metering is not always in effect, when it is in use, its availability and frequency are announced via ATIS.

Valerie asked whether this was always the case, voicing that if the frequency is announced via ATIS, there is no reason to chart it.

Mike committed to researching use & dissemination of ground metering frequencies.

STATUS: OPEN

ACTION: Michael Poisson, AJT-2A3, will verify the standard practices for informing pilots of when the metering frequency is in use.

D. 13-01-261 Alaska Ground Based Transceivers (GBT) Locations

Valerie Watson, AJV-3B, briefed the topic on behalf of the submitter, who requests that a listing of Ground-Based Transceivers (GBTs), including name, location identifier & position (latitude & longitude) be published in the Supplement Alaska and depicted "on charts". Valerie asked the group how this information might be used or what would a pilot do differently armed with this information. A lengthy discussion followed.

Lev Prichard, APA, commented that having such information would only be of use in pre-flight planning as a means to evaluate where along a planned route a pilot may or may not be able to receive the enhanced data features offered through the GBT system.

Kevin Bridges, AIR-130, stated that the ADS-B coverage was assured at or above 5,000 feet MSL and that GBT reception is altitude-dependent. Having charted locations of GBTs would not necessarily tell a pilot whether or not he/she will be within reception range.

Lev commented that he had seen basic ADS-B coverage charts within the FAA AIM and Jeppesen manual. Lev stated that the information may be of interest pre-flight, but he does not see any reason to depict such information on a Sectional charts. He suggested that a graphic coverage chart in the AFDs might be of use.

Jim Arrighi, AJV-141, stated that ATC needs the location of GBTs in order to be aware of areas of reduced surveillance coverage.

It was pointed out that the FAA does provide some ADS-B and GBT location information through the FAA web site at <http://www.faa.gov/nextgen/flashmap>. The web site does not provide service volume or any detailed coverage information for individual GBTs.

Melissa McCaffrey, AOPA, volunteered to contact the proponent and speak with AOPA membership to determine if GA has a need to know GBT locations.

STATUS: OPEN

ACTION: Melissa McCaffrey, AOPA, to research GA's need for GBT locations. She will report at the next ACF.

E. 13-01-262 Airport Facility Directory (AFD) Depiction of Traffic Pattern Altitudes

Valerie Watson, AJV-3B, briefed the topic on behalf of the submitter. Valerie stated that currently the FAA is not consistent in reporting traffic pattern altitudes (TPA) in the AFDs. In the past, the FAA only reported TPAs when they were other than 1000 feet above ground level (AGL). Now, there are a large number of 1000 ft AGL traffic pattern altitudes reported, especially in certain parts of the country. If even the standard is reported, what does this mean for airports without a published TPA? Valerie reported that the AFD data is pulled directly from NASR. If there is a value in the NASR TPA field, it will be published in the AFD. In her view, a decision needs to be made at the data level (NASR) whether ALL TPAs will be databased & published, or if they will only be published by exception to the 1000 ft AGL standard. She asked the group for input.

John Moore commented that the TPA altitude of 1000 ft AGL is only a recommendation, not a specified standard. Valerie restated her question – should the FAA publish all TPAs or only those in exception to the recommended 1000 ft AGL?

Lev Prichard, APA, suggested that only those airports that have TPAs other than that recommended in the AIM be published. Lev emphasized that the FAA AIM guidance on TPAs is what pilots have to refer to in knowing what is considered the standard TPA of 1000 AGL at an airport. There was general agreement to this position.

Curtis Davis, AJV-21, stated he was unaware of current NASR practice, but would research and report back.

It was the general recommendation of the group that NASR only database TPAs that differ from the recommended 1000 ft AGL. Pilots, when no TPA is published, will revert to that recommended.

STATUS: OPEN

ACTION: Curtis Davis, AJV-21, will research to determine if NASR is putting in the recommend TPA of 1000 feet AGL for all airport entries and will report back on the findings at the next ACF.

F. 13-01-263 Airport Facility Directory (AFD) Airport Manager Contact Information

Valerie Watson, AJV-3B, briefed the topic on behalf of the submitter. The proponent requests that the FAA publish airport manager contact information in the AFDs. Valerie commented that the NASR database contains airport manager contact information, including phone numbers and that AOPA currently publishes this information in their airport directory.

There was general consensus among the pilot representatives in support of this request. It was agreed that airport manager contact information is useful to the pilot.

Bob Carlson, AJV-322, commented that there were some concerns regarding the accuracy of the NASR contact information and that there would be additional costs associated with adding the requested information. He will inquire of his management if the endeavor can be supported.

STATUS: OPEN

ACTION: Bob Carlson, AJV-322, will report ACF consensus for this initiative and will investigate with AeroNav Products management whether it can be supported at this time. Bob will report at next ACF.

G. 13-01-264 Flight Path Angle (FPA) on STAR Charts with Published Vertical Profiles

Darren Harris, PSA Airlines, [briefed the topic](#). Darren's recommendation is that the FAA calculate and publish a "recommended" flight path angle (FPA) for Arrivals that will allow aircraft to meet all published altitudes in order to fly an optimized profile descent. Optimal Profile Descent Procedures are currently published with the necessary altitudes, but no FPA is published. He stated that the majority of regional jet aircraft flown within the United States do not have coupled VNAV capability and are not able to take advantage of the fuel and workload savings these procedures have to offer.

Darren briefed that some Flight Management Systems (FMS) calculate a FPA – the default angle being 3.00 degrees, which can then be changed by the crew. This is not ideal, as level offs and vertical speed changes are required which significantly increase the workload to the operator. Many pilots resort to "dive and drive" tactics to insure that they comply with published altitudes during the descent.

Darren showed flight data from simulation work done by pilots at PSA flying the FRDMM One Arrival (RNAV) and TRUPS One Arrival (RNAV) into Ronald Reagan Washington National Airport (KDCA). The data showed that using the default 3 degree angle of descent, the workload of the pilot was significant as the pilot had to contend with vertical speed changes from 1100 feet per minute (fpm) to 2000 fpm along the arrival. There were three locations where the FMS advised the crew to level off. The pilot was required to adjust the throttle throughout the procedure.

Darren then showed the data for both arrival procedures when the flight path angle was re-calculated and flown at 2.2 degrees. The workload for the pilot was reduced, throttle changes were minimized, there were no level offs and vertical speed changes were limited to only 1400 fpm to 1800 fpm along the arrival.

Darren reiterated that currently the regional jet community calculates these angles and requests that the FAA calculate and publish useable flight path angles for these procedures

Ted Thompson, Jeppesen, asked whether FPAs should be calculated for RNAV arrivals only, or for conventional procedures also.

Darren replied that he would like to see it done for all arrival procedures.

Valerie Watson, AJV-3B, stated that the charting offices cannot calculate this angle, but could certainly chart it if provided on the 7100-series procedure source document. She asked if the FPA should be depicted as "recommended". Darren replied that yes, this is a recommended angle of flight; it is 'advisory' only and would not be coded.

Gary McMullin, Southwest Airlines, expressed his support for the FPA to be calculated and published by the FAA. Gary suggested that if the FPA was published, that it be as an "advisory" angle.

Catherine Majauskas, AFS-470, stated that the Performance Based Aviation Rulemaking Committee (PARC) is currently discussing the broader subject of "Vertical Navigation on Arrivals" to which this subject could be incorporated. She offered to take this recommendation to the PARC, where it can be discussed within that group. She will report at the next ACF on decisions/recommendations made.

STATUS: OPEN

ACTION: Kel Christianson/Catherine Majauskas, AFS-470, to report back at next ACF regarding progress made within the PARC regarding this issue.

H. 13-01-265 Incompatibility Issues Between the Enhanced Vision Systems (EVS) and Night Vision Goggles (NVGs) with Light Emitting Diodes (LEDs)

Jon Brackin, AFS-240, briefed the topic. (This topic was discussed previously at the ACF, but was closed as a charting issue due to the lack of obstacle and airport LED source.) Jon [presented a detailed briefing](#) on the proliferation of LED lighting since passage of the [Energy Independence and Security Act of 2007](#), in January 2007. In short, the result is that towers and other obstructions, as well as airport lighting at a number of airports, are now lit with LEDs and cannot be seen with utilization of certain vision enhancement systems/equipment.

Jon announced that AFS-240 has been working to begin documenting the location of towers and the type lighting being used to illuminate them.

Jon commented that the U.S. Army (out of the Army's Aviation Center in Fort Rucker, AL) conducts an obstacle flight check, approximately once a week, to document the location of towers and obstacles that are illuminated by LEDs.

Valerie Watson, AJV-3B, asked Jay Jackson, AJV-222, representing the Terrain and Obstacles Data Team (TOD Team), whether the TOD team was collecting data (LED, incandescent, etc.) for the obstacles they publish and maintain. Jay responded that at this time, there is no place in the obstacle database for this information.

Jon stated that he would like to see all towers and wind turbines that are using LEDs that are 200ft or more AGL be charted on VFR Charts.

Rick Fecht, AJV-321, commented that on FAA VFR Charts, obstacles over 200 ft AGL with high intensity and/or dual lighting are charted as "lighted", but at this time there is no source indicating which are lighted with LEDs.

Valerie summarized the subject and stated that the group realizes the importance of the issue, but because there is no source for LED lighting at present, the charting offices cannot accommodate the publication of LED-lit obstacles or airports.

John Brackin stated that when a source for LED lighting is ultimately established, he will return to the group with specific charting recommendations.

STATUS: CLOSED

I. 13-01-266 Standard Depiction of Altitude Restrictions on Bottom, Top and Maintain Altitudes on Standard Arrival (STAR) and Standard Instrument Departures (SIDs)

Jim Arrighi, AJV-141, briefed the topic. Jim [reviewed the history of previous discussions](#) held within the ACF Charting Group regarding climb via and descend via (Reference to RD 05-01-174 Top Altitude Note – available at http://www.faa.gov/air_traffic/flight_info/aeronav/acf/media/RDs/05-01-174_Top_Altitude_Note_on_SIDs.pdf) and stated that this issue has yet to be sufficiently resolved.

Jim described the increasing number of Departures and Arrivals with crossing altitude restrictions and speeds and noted that though these procedures were designed to provide an optimum vertical profile, pilots continue to face challenges complying with the restrictions. He suggests that the lack of indication that a given procedure utilizes a stepped climb or profile descent is a contributor.

Jim cited several specific locations where there are concerns, and discussed problems with the BAYLR ONE at Denver, the JUTES TWO at La Guardia and the EAGUL FIVE at Phoenix.

Valerie Watson, AJV-3B, asked Jim if he felt that this was an issue of how the procedure was developed or how the procedure is depicted.

Jim replied that it was an issue of how the procedure is depicted. He believes that depicting stepped climb/descent and maintain altitude information clearly on the chart would significantly improve understanding. He proposes clear depiction of a “bottom altitude” for STARs and a “top altitude” for Departures.

Paul Eure, AJE-31, commented that the problem is further complicated by the fact that many Departures have multiple transitions and many STARs have multiple runway arrivals. He suggested that a single bottom or top altitude may not be sufficient.

Tom Schneider, AFS-420, agreed with Paul and asked if, on a Departure, would there be a single top altitude for the entire procedure or one top altitude per transition. Jim replied that he envisions a single top altitude for the entire procedure. Tom then asked if the top altitude would apply to the end of the SID prior to the transitions. Jim said that no, enroute transitions would have a top altitude.

Bill Hammett, Contract Support, AFS-420, asked if this would impact naming conventions of SIDs. Jim replied that naming conventions are a separate issue.

Valerie commented that if the top/bottom altitude (and the fix or transition it is associated with) is on the procedure source document, the Terminal group can chart it, but the source will need to be clear and standard depiction (position, type size, boxed, etc.) will need to be established. Jim agreed that the information will need to be on the source document.

Valerie added that, regarding Jim’s recommendation that the top/bottom altitude be shown in the “briefing strip”, FAA SID and STAR charts do not have briefing strips and a standard will need to be established for the location of the information on the plate.

Ted Thompson, Jeppesen, commented that Jeppesen does not publish briefing strips on SIDs either. One of the issues he sees is that it sounds like the top/bottom altitude information will be communicated as a chart note. Chart producers struggle with knowing which notes are more important than others and how to accentuate them sufficiently for pilots to make them stand out.

Lev Prichard, APA, asked why it is necessary to depict the top altitude on the chart. Why can’t that piece of information be given by ATC?

Jim answered by stating that he believes all of the procedure information should be provided to the pilot via the chart.

Paul agreed with having the altitudes on the chart and commented that it would simplify matters for both pilots and ATC. Paul stated that at present, when a ‘descend via’ or a ‘climb via’ altitude is given, there is a perception that altitude restrictions depicted on the chart no longer apply. He believes that providing the top/bottom altitude will reinforce the altitude restriction(s).

There was a general consensus within the group that altitude restrictions should be depicted on the charts in a standardized fashion.

There are issues pertaining to how the information is to be sourced and Valerie reiterated that the altitudes and the fixes or transitions they are associated with must be clearly annotated on the procedure source documents. The charting offices will work on the detail of how (boxed, type size, etc.) the information will be charted. Ted concurred.

STATUS: OPEN

ACTION: Tom Schneider, AFS-420, to draft proposed revision to FAA Order 8260.46 to support top altitudes on SIDs and report back at next ACF.

ACTION: Jim Arrighi, AJV-141, to draft proposed revision to FAA Order JO 7100.9 to support bottom altitudes on STARs and report back at next ACF.

ACTION: Valerie Watson, AJV-3B, and Ted Thompson, Jeppesen, will create prototype charts with proposed depiction of these altitudes on SIDs & STARs for discussion at next ACF.

J. 13-01-267 Addition of ATC Radar Telephone Numbers in FAA AFD

Paul Eure, AJE-31, reviewed the topic on behalf of the submitter who did not attend the ACF. Paul stated that both he, representing the ATO Enroute Service Unit and Gary Fiske, TEG-Y90, representing the ATO Terminal Service Unit are both in support of publication, with certain limitations, of select ATC Approach Control telephone numbers. Paul voiced support for this only in limited scope for those approach control facilities responsible for providing departure clearances or arrival IFR cancelations (or landing time) at non-towered airports with instrument approaches, but no ground-based radio communication with ATC. Paul stated that it would be up to each facility to decide whether they wanted their phone numbers published in this limited capacity.

Paul commented that within the NAS, there are 2100 ATC sectors and there are challenges in securing and maintaining all the ATC Radar telephone numbers.

Lev Prichard, APA, voiced that if this is approved and the ATC telephone numbers are published, it could result in a sizeable amount of telephone traffic. He asked if the FAA might consider use of an 800 telephone number.

Paul commented that at present, the primary phone traffic experienced at the facilities is generated by calls coming in from the Remote Communications Outlets (RCOs) and from Lockheed Martin Flight Service Stations (FSSs). It was pointed out by a member of the audience that pilots are often able to obtain a direct phone number to an ATC radar facility from the fixed base operator (FBO) at same airport.

The audience agreed that there are benefits for a pilot being able to speak directly to a controller. The procedure eliminates the need for the pilot to go through a 3rd party (such as FSS) in communicating with ATC and eliminates "void times". Additionally, when a controller receives a cancelled IFR clearance directly from a pilot, he can free the airspace instantly and allow other aircraft clearance more efficiently.

Michael Poisson, AJT-2A3, voiced opposition to the suggestion of publishing ATC Radar telephone numbers. Mike argued that by publishing ATC Radar telephone numbers, the door opens for anyone and everyone to phone up the facility. He believes ATC facilities may well be inundated by phone calls from the public that have nothing to do with the function of controlling traffic and that would provide a significant distraction to the job at hand. Distraction of controller from their primary function could potentially become a safety issue.

As ATC is not unanimously in favor of this proposal, more discussion is necessary within Air Traffic. Enroute and Terminal ATC representatives need to discuss the matter to develop a single joint response.

STATUS: OPEN

ACTION: Paul Eure, AJE-31, will engage Terminal ATC and report back at next ACF with a consolidated, unanimous ATC response.

K. 13-01-268 Making Alternate Missed Approach Text Accessible to ATC

Bob Lamond, NBAA, briefed the topic on behalf of Rich Boll, NBAA, who was unable to attend. Bob stated that because alternate missed approach procedures can be issued to pilots, NBAA supports publication of these procedures in text form in the front of the Terminal Procedures Publications (TPPs) where they will be easily accessible to both controllers and pilots. NBAA spoke to NATCA about the issue prior to the ACF and they were in agreement with NBAA in support of this request.

Bill Hammett, Contract Support, AFS-420, inquired why air traffic controllers do not already have ready access to alternate missed approach information in the required position binders maintained by the facilities. A general discussion ensued regarding the apparent lack of maintenance of certain information within ATC facilities and the difficulties of information dissemination to the controller. It was confirmed that the information is sent to ATC facilities, but does not consistently end up in the hands of the controller.

Tom Schneider, AFS-420, commented that the initial establishment of the alternate missed approach procedures is coordinated with ATC, but it appears that the final publication of them is not transmitted to the controller. He suggested that FAA Order JO 7210.3 needs additional detailed guidance to insure that the published procedures are available to the controllers.

Bob concurred with Tom's comment, emphasizing that this information needs to be in easy reach of line air traffic controllers.

STATUS: OPEN

ACTION: Paul Eure, AJE-31, and Michael Poisson, AJT-2A3, will develop revisions to FAA Order JO 7210.3 to ensure that alternate missed approach procedures, as specified on the applicable FAA 8260-series forms, are accessible to controllers. They will report progress at next ACF.

L. 13-01-269 Conversion from Local Time to Coordinated Universal Time (UTC) on FAA VFR Charting Products

Rick Fecht, AJV-321, [briefed the issue](#). Rick stated that current FAA-produced VFR charts show hours in local time. This is not consistent with the FAA-produced IFR charts or the FAA flight supplements, all of which depict hours in Coordinated Universal Time (UTC). Rick mentioned that the FAA National Flight Data Center (NFDC) is in the process of converting all instances of local time to UTC in the National Airspace System Resources (NASR) database. For purposes of standardization, it is proposed that all AeroNav Products' charts and supplements depict hours/times in UTC. Rick inquired of attendees whether there is any objection to revising the times on FAA-produced VFR Charts to UTC.

There were no objections voiced by the group. Rick announced that he will initiate the specification revision to support the change.

STATUS: OPEN

ACTION: Rick Fecht, AJV-321, to draft a Requirement Document for submission to the IACC/MPOC to support the charting change. He will provide an update at next ACF on implementation.

M. 13-01-270 Step Down Fix Chart Notes

Kevin Bridges, AIR-130, briefed the issue. Kevin [reviewed current charting practices](#) related to the notes associated with stepdown fixes on LNAV approaches that utilize Baro-VNAV systems. Kevin commented that pilots are increasingly treating Baro-VNAV vertical guidance as if it were like an ILS. This may have unintended consequences and pilots may fly the incorrect flight path.

Tom Schneider, AFS-420, stated that this issue should be submitted to the United States-Instrument Flight Procedures Panel (US-IFPP) for discussion. If the US-IFPP determines that there is a need to change the note, both the Instrument Procedures Group and the Charting Group can address the issue.

STATUS: OPEN

ACTION: Kevin Bridges, AIR-130, to take the suggestion to the US IFPP and report on the outcome at next AFC.

VIII. Closing Remarks

Valerie Watson, AJV-3B, thanked everyone for their participation and voiced special appreciation to Innovative Solutions International and Pragmatics, Inc. 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/acfigp/

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, Contract Support), a written status update no later than October 5, 2013. Note: These status reports will be used to compile the minutes of the meeting and will serve as a documented statement of your presentation.

Appreciation to Alex Rushton, Contract Support, AJV-3B, for recording the Minutes and to Jennifer Hendi, AJV-3B, for presentations assistance.

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

IX. Next Meeting

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

ACF 14-01 is tentatively scheduled to be held on April 29 – May 1, 2014, hosted by MITRE in McLean, VA.

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

X. Attachments

- A. 13-01 Attendee Roster
- B. 13-01 Office of Primary Responsibility (OPR)