Government/Industry Aeronautical Charting Forum (ACF) Meeting 14-01 April 30 – May 1, 2014 MITRE McLean, VA 20172

CHARTING GROUP MINUTES

I. Opening Remarks

The Aeronautical Charting Forum (ACF) was hosted by The MITRE Corporation at their location in McLean, VA. Valerie Watson, AJV-3, opened the forum on Wednesday, April 30. Valerie acknowledged the ACF Co-chair Tom Schneider, AFS-420, who presided over the Instrument Procedures Group (IPG) portion of the Forum. Valerie also expressed appreciation to MITRE and MITRE representative AI Herndon for hosting the 14-01 ACF. AI Herndon welcomed the ACF participants to MITRE.

II. Review Minutes of Last Meeting, ACF 13-02

The minutes from the 13-02 ACF meeting were distributed electronically last fall via the AeroNav ACF website: <u>http://www.faa.gov/air_traffic/flight_info/aeronav/acf/</u>. The minutes were accepted as submitted with no changes or corrections.

III. Agenda Approval

The agenda for the 14-01 meeting was accepted as presented.

IV. Change in ACF-Charting Group URL

Valerie Watson, AJV-3, briefed the audience of the change in the web address for the ACF - Charting Group. The new url is as follows:

http://www.faa.gov/air_traffic/flight_info/aeronav/acf/

Please update your browser's book marks accordingly as the old address will not have a redirect link to the new URL after 1 June 2014.

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

ICAO/IFPP Committee Report

Mike Webb, AFS-420 and U.S. member of the ICAO Instrument Flight Procedures Panel (IFPP), <u>provided an update</u> on the ICAO/IFPP Committee activities and an overview of the key topics of the recent spring meeting of the ICAO/IFPP Integration Working Group (IWG) held in Dubai, UAE.

Mike reported that there has been resolution of the IACO State letter regarding Performance Based Navigation (PBN) procedure naming conventions. ICAO will change the PBN procedure title from RNAV to RNP by 2022. The US is going to retain RNAV in future PBN procedure titles. That is the only difference that the US will file and plans are to adopt all other ICAO PBN charting recommendations.

George Bland, USAF, asked if the ICAO Aeronautical Charting Manual Doc 8697 will be updated with the PBN charting standards by 2022. Mike stated that the manual will not be updated until all of the PBN details have been finalized.

Mike then presented an overview of Performance Based Operations Aviation Rulemaking Committee (PARC) PBN Procedure Naming Action Team activities since the last ACF. The team focus is on determining recommendations to present to the PARC regarding an implementation strategy. In order to do this, the group has come up with several prototype approach plates showing the myriad of possibilities with regard to showing a single NAVSPEC vs multiple NAVSPECS on a single procedure. The prototypes also depict a PBN requirements box presented in different ways and in different locations on the chart that are still under consideration by the Action Team. A sampling of prototypes was presented to the group.

Kevin Bridges, AIR-131, stated that if multiple NAVSPECS are going to be used on a single procedure, the whole procedure could be removed from the pilot's database if unable to comply with any part of the PBN requirements for that procedure. Martin Zillig, Lido, stated that if portions of the procedure are unusable, the FMS may be able to remove just the transitions that are not compatible.

Rob Goodson, NGA, asked if other chart producers will have to comply with the charting requirements for PBN. Ted Thompson, Jeppesen, stated that the PBN information that is on the source document will be charted, however, the details of *how* the information is presented on the chart could differ.

Mike stated that by the next ACF he expects the PARC to have a set of recommendations ready to present to the FAA.

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

Airport Surveying – GIS Program

Dr. Mike McNerney, AAS-100, provided an update on the progress made on the FAA's Airports GIS program. Since the last ACF, AAS-100 has continued to make improvements on the electronic Airport Layout Plans (ALP) with the goal being to provide a custom printed ALP. Dr. McNerney reported that testing of the Modification of Standards tool has begun with the ASW and ASO regions. He also reported that improvements have continued to the repository for aerial photography on the cloud server and the number of ortho-rectified aerial imaging continues to grow.

A new feature highlighted by Dr. McNerney is the Airport 20:1 Penetration Visualization Tool. This new tool will be expanded in the future to other obstacle penetration surfaces.

Dr. McNerney also reported that the planned data migration from NASR into Airports GIS is to take place in September 2015. Once that migration takes place, Airports GIS will be the authoritative source for airport data.

Terry Rhea, AAS-100, then provided a demonstration of the Surface Analysis and Visualization Tool (SAVT). SAVT allows users to analyze, review, edit, and mitigate surface penetrations. The tool utilizes Google Earth images and enables the user to zoom in and look at the obstacle surface and see the objects attribute data. The data is then compiled into a Penetration Report which can be used by the airport to generate a compliance plan detailing how the airport plans to mitigate the penetrations. A mitigation summary report can be viewed to check on the status of all objects in the penetration report. Once the mitigation report has been submitted by the airport, the flight procedures office can see the report and the mitigation actions that have been taken.

Kel Christianson, AFS-470, inquired as to the various sources of obstacle data being used. Dr McNerney stated that currently the tool is pulling obstacle data from AirNav, FAA's Digital Obstacle File, airport surveys, etc. However, they are working toward having a single authoritative source for all obstacle data.

Bob Lamond, NBAA, praised the new tool. Bob suggested that that a column be added for object type (antenna, water tower, etc.,) on the penetration report. He also stated that he would like to see this made publicly available as soon as possible. Dr. McNerney stated that they are in the process of making the tool available primarily to airports. Eventually it will be available for public use as read-only. Bob expressed concern about the server limitations and how that will affect public access. Brad Rush, AJV-3, stated that, based on his interaction with the Advisory and Rulemaking Committee (RTCA), the FAA will release this data, and yes, it will be available to be viewed by the public. The server limitations are expected to be resolved soon.

Rob Goodson, NGA, inquired as to the datum being used in the database. Dr. McNerney was not sure about the datum and said that he would get that answer.

Valerie Watson, AJV-3, asked how the airport data will be verified. Dr. McNerney stated that once the database is established as the authoritative source, airports will be required to enter their data into the website and the airport will be the source. Valerie asked if there are requirements for the airports to verify the originally imported airport data from NASR, much of which is old. Dr. McNerney said that the data will be sent to the airports, they will be required to verify the data, and then submit it with a digital signature.

Post meeting Update. "The deployment to the Eastern Service Center has been put on hold because of user issues with the RAPT teams. A version is expected to be released to the Eastern Service Area airports that only allows the Visualization and Analysis portion but no pushing of data to the RAPT within 30 days. An expected test of 50 airports in the Eastern Service Area with pushing of mitigation plans to the RAPT in 60-120 days is anticipated. All schedules are very preliminary."

ACTION: Dr. Mike McNerney, AAS-100, will provide an update at the next ACF.

Discontinuation of VOR Services

Rowena Mendez, AJM-324, <u>provided an update</u> on the progress made since the last ACF. Rowena stated that the plan includes the transition from 967 VORs to 500 VORs by a revised target date of FY2025. She stated that currently AJM-324 is focused on collaborating with the Tactical Operations Committee (TOC), working with DoD to determine which VORs they can sanction the discontinuance of and collaborating with AJV on how to integrate the VOR MON plan with the PBN program, the National Route Plan, and with Flight Procedures and Charting to insure that NAS operations are not compromised.

Gary Fiske, AJV-822, asked how the changes to the NAS infrastructure will be funded. Rowena responded that the program is currently focused on analyzing the overall technical and operational impact of the discontinuation of VOR services. Once the analytical work is completed, her office can start work on determining the associated costs.

John Belk, AJV-141, asked if there is an expectation that there will be RNAV replacements for conventional procedures as part of this program. He stated that there is not enough funding for that to be the solution. Rowena responded that currently, her office is only looking at the future costs of the discontinuation and that current VOR discontinuations based on PBN replacement procedures are not currently part of the program.

Mike McGinnis, American Airlines, asked if the large-scale Metroplex redesigns currently underway will help with this transition. Rowena responded that yes, they will help because they rely more heavily on PBN. Gary supported this and stated that metroplex projects are not designing routes that are predicated on NAVAIDs because they are aware of this future transition.

Bob Lamond, NBAA, stated that he is hopeful the plan is to retain sufficient VORs to ensure safety. He stated that he had submitted concerns to the FAA which have not been addressed, and VORs are already beginning to be turned off.

Valerie Watson, AJV-3, commented that there needs to be a greater understanding of the future usage of standalone DME facilities. The charting offices have a lot of questions about how to publish standalone DME facility data. Is there an associated frequency? Morse code? Associated RCOs? Rowena responded that they don't know all the answers yet. Right now, DMEs are still defined by the associated VORs. Valerie stated that for now, AJV and AIM will not publish standalone DMEs and will continue to leave them in the database as a VOR/DME with a remark that the associated VOR is out of service. Valerie asked Rowena if she could collaborate with her office and AIM to help define the database & charting requirements for standalone DMEs. Rowena agreed that when she has more answers, she will communicate them.

Gary asked if standalone DMEs will be left in the same location where the DME had been previously paired with a VOR or if the standalone DME could be relocated. Rowena stated that yes, relocation is a possibility and may be an opportunity for the FAA to eliminate some of its leases and save money.

Rowena stated that the Final Investment Decision will be made in FY 2015. Then the VOR Discontinuation Plan will start to take shape. Rowena is looking for ideas on how the discontinuation process can be made more efficient. She said that her office will continue to collaborate with all the stakeholders to identify requirements and address the concerns.

ACTION: Rowena Mendez, AJM-324, will provide an update at the next ACF.

PBN Implementation Process Order 7100.41

Dawn Ramirez, AJV-121, <u>briefed the topic</u> as a follow up to the Route Planning Briefing given at ACF 13-02. Dawn stated that there is change in focus on the National Route Plan from what was presented previously. There is a new <u>PBN Implementation Process Joint Order 7100.41</u> which relates to the development and implementation process for PBN procedures and routes. The details of the new implementation process are outlined in the presentation slides.

Bruce McGray, AFS-410, asked who is coordinating these changes with the VOR MON program office? Bruce stated the need to coordinate all the stakeholders for better collaboration. Dawn agreed that there needs to be more coordination in the future between the PBN office and the VOR MON office.

ACTION: Dawn Ramirez, AJV-121, will provide an update at the next ACF.

VI. Outstanding Charting Topics

05-02-179 Attention All-users Page for Simultaneous, Parallel RNAV Departures & PRM Approaches

Valerie Watson, AJV-3, briefed the topic. Valerie reported that AAUPs for approaches have been published. She also reported that the charting specifications are in place for the publication of RNAV Departure AAUPs, though none have yet appeared in the National Flight Data Digest (NFDD) for publication.

Kel Christianson, AFS-470, reported that the RNAV Departure AAUP guidance will be in FAA Order 8260.46 and the changes are to be published in May 2014. The content is the same as the original Order 8400.AAUP and formalizes the responsibilities for the creation, maintenance and publication of AAUPs. Kel added that no requests to publish RNAV Departure AAUPs have been received to date.

Tom Schneider, AFS-420, reported that the Notice for AAUPs for approaches will run out in June 2014. There will be a gap in the guidance until the approach guidance is published in FAA Order 8200.19, which is set to be published in February 2015.

Valerie stated that this issue shall remain open until the final guidance is published in FAA Orders 8200.19 and 8260.46.

STATUS: OPEN

<u>ACTION:</u> Kel Christianson, AFS-470, and Tom Schneider, AFS-420, to report on progress of the publication of the Orders.

07-01-195 Charting & AFD Information Re: Class E Surface Areas

Paul Gallant, AJV-11, was not in attendance and no status report was submitted on the progress made on the updates to the AIM and FAA Order JO 7400.2.

Lynette Jamison, AJR-B1, suggested that Paul Eure, AJV-11, be briefed on this issue and request his assistance in moving this issue forward.

Bob Lamond, NBAA, speaking on behalf of the original submitter of the Recommendation Document, expressed his dissatisfaction with the FAA for not yet having published the airspace that was agreed upon and finishing the work required to close this item. Bob requested that the issue be elevated to a higher management level within the FAA.

- **ACTION:** Brad Rush, AJV-3, will contact AJV-11 to elevate this issue to a higher FAA management level and report at the next ACF.
- **<u>ACTION</u>**: Valerie Watson, AJV-3, will contact Paul Gallant and Paul Eure, AJV-11, to try to get this issue moving forward and will report at the next ACF.
- ACTION: Paul Gallant, AJV-11, to provide an update at the next ACF.

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

Bruce McGray, AFS-410, <u>briefed the topic</u>. Bruce stated that work has been done to raise the awareness of LVO/SMGCS operations in the US. ICAO harmonization efforts have also continued regarding US and International rules and procedures.

Bruce stated that the FAA is considering alternatives for Enhanced Flight Vision System (EFVS) technologies to enable aircraft to operate in LVO/SMGCS conditions. Bruce added that the FAA is open to considering the use of high-resolution Airport Moving Map (AMM) displays as an approved substitute. However, if the FAA is going to allow moving maps as a substitute, there would be an even greater need to secure reliable data.

Ted Thompson, Jeppesen, asked about the possibility of using high-resolution AMM EFB applications being allowed as substitutes. This again raised the issue of the lack of a centralized repository within the FAA for SMGCS procedural source information. It was noted that the Airport GIS program may address SMGCS-related airport features such as lighting, signage and markings. However, currently, both procedural information and airport feature data is available only from individual airport authorities. Bruce stated that he is trying to elevate the need for good data to a higher management level within the FAA.

Valerie Watson, AJV-3, voiced her concern that the FAA is obligated in Order 8000.94 to put a remark in the AFD entries for those airports with LVO/SMGSCS operations and that AeroNav Products has not yet received guidance. Bruce responded that this issue remains unresolved and further discussion is required between himself and the AFD team. He stated that progress had been slowed because of issues with the GIS database that have yet to be resolved.

Lynette Jamison, AJR-B1, asked that if a remark is placed in AFD airport entries, would a NOTAM requirement be established for when there are LVO/SMGCS-related equipment outages? If this is the case, she stated that this would have to go into the NOTAM Order when remarks start going in to the AFD. Bruce responded that they have not yet addressed NOTAM requirements.

Joshua Fenwick, AeroNav Data, asked if the FAA is planning to publish LVO/SMGSCS charts. Valerie responded that the FAA is not able to produce LVO/SMGCS charts at present due to both the absence of funding and the absence of a reliable source flow.

- **<u>ACTION:</u>** Bruce McGray, AFS-410, will coordinate with Valerie Watson, AJV-3, and the AFD Team regarding the publication of an AFD remark.
- **ACTION:** Bruce McGray, AFS-410, will coordinate with Airports Engineering, AAS-100, on acquiring funding for the following: loading of LVO/SMGCS attribute data into Airports GIS, and loading of procedural data and routing notes into a publicly disseminated database.
- **ACTION:** Bruce McGray, AFS-410, will coordinate with the NOTAM office regarding adding language into the NOTAM Order for LVO/SMGSCS equipment outages.

10-02-233 Removal of (ATC) Crossing Restrictions from STARs

Valerie Watson, AJV-3, briefed the issue. Brad Rush, AJV-3, stated that there is only one Departure Procedure remaining with an (ATC) crossing restriction which is scheduled to be removed in July 2014. An IACC specification change is currently in the approval process to remove the guidance related to adding (ATC) crossing restrictions to the charts.

STATUS: CLOSED

11-01-238 Aerobatic Area Symbols on VFR Sectional Chart

Chris Criswell, AJV-22, stated that since the last ACF, he has been in contact with Sue Gardner, AFS-800, who is part of a group working to verify the Aerobatic Practice Areas that are currently published in the Special Notices section of the AFD. Chris stated that aerobatic areas are contained in a database which exists within AFS-800. An effort has also begun within the working group to establish criteria for future publication and charting of Aerobatic Practice Areas. Chris expressed Sue's interest in a future meeting with AIM and AJV-3 regarding the establishment of publication/charting criteria.

STATUS: OPEN

ACTION: Chris Criswell, AJV-22, will continue to work with AFS-800 to establish a list of current Aerobatic Areas and to establish publication/charting criteria for these areas.

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

Valerie Watson, AJV-3, reported that an IACC specification change has been submitted for the inclusion of metering frequencies on FAA Airport Diagrams. Valerie is also working with the National Flight Data Center (NFDC) to standardize the format for storing and publishing metering frequencies. This issue shall remain open until metering frequencies have been charted on the appropriate airport diagrams. There are currently only four airports with published metering frequencies: CLE, MSP, ORD, and STL.

STATUS: OPEN

ACTION: Valerie Watson, AJV-3, will report on the status of the publication of Metering Frequencies on Airport Diagrams at the next ACF.

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

Valerie Watson, AJV-3, briefed the issue. Valerie commented on her attempts to obtain the release of ADS-B tower locations for publication. The ADS-B office is currently in discussions with General Council regarding the release of this data and as of this date, no decision has been made.

Lynette Jameson, AJR-B1, stated that there are around 400 GBT locations that have been identified by Tech Ops, some of which have been given identifiers so they can be databased and a NOTAM can be published against an outage. There was some confusion over the issue of whether or not there are currently GBT locations databased in NASR. It was confirmed by Chris Criswell, AJV-22, after the conclusion of the ACF that GBTs are NOT currently databased in NASR.

John Collins, GA Pilot, stated that the FAA currently publishes GBT locations on Gulf of Mexico Charts. AJV-3 was unable to confirm this at the meeting. Post ACF, it was confirmed that the ADS-B locations depicted on the Gulf of Mexico Charts were requested by the office that was then called Cartographic Standards and resided in Aeronautical Information Management (AIM). The GBT locations were provided by the requesting office in the form of a memo.

Valerie inquired as to what progress has been made since last ACF on the AFD Team's discussion with the Alaska and Western Regional Offices regarding ADS-B coverage graphics at 5,000 and 10,000 foot flight levels to be published in the Alaska Flight Supplement. Bob Carlson, AJV-322, reported that he hasn't spoken to the Region regarding the graphics. He stated that the AFD Team would not create the graphics and that the graphics would have to submitted print-ready from the regional offices.

STATUS: OPEN

- **<u>ACTION</u>**: Valerie Watson, AJV-3, will continue to attempt to obtain the release of ADS-B tower locations for publication in NASR so that 3rd party vendors would have access to them.
- <u>ACTION:</u> Bob Carlson, AJV-322, will contact the Alaska and Western Regional Offices to see if they wish to provide additional print-ready ADS-B coverage graphics at 5,000 and 10,000 foot flight levels to be published in the Supplement Alaska.

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

Chris Criswell, AJV-22, reported that, per ACF recommendation, all traffic pattern altitudes, standard and nonstandard, will be added into NASR for all airports. This will be a day forward implementation beginning in July 2014.

Valerie Watson, AJV-3, stated that this issue will remain open pending implementation.

STATUS: OPEN

ACTION: Chris Criswell, AVJ-22, will report on the progress of populating all traffic pattern altitudes at the next ACF.

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

Bob Carlson, AJV-322, reported that Airport Manager contact information has now been published in the AFD. Work is currently underway to also publish this information in the Alaska Supplement.

STATUS: CLOSED

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

Kel Christianson, AFS-470, shared a statement from Mark Steinbicker, AFS-470, regarding discussions in the PARC on the subject of FPAs. No decision has been made yet. However, Mark's statement indicated that there should not be an expectation that the angles will be charted.

There was general disappointment in the room at the news that FPAs may not be published. Discussion followed as to whether the FPA would be useful only for specific operators and whether or not the FAA could make this data available so that those operators who can use it would have it.

Bob Lamond, NBAA, stated that the FPA would not have limited use and that many FMS systems can use FPAs. Kevin Allen, US Airways, reiterated his recommendation that the angle be presented as "suggested" or "advisory".

Jim Arrighi, AJV-141, commented on the possibility that the data could be made available for specific operators that are equipped use it. Ted Thompson, Jeppesen, stated that Jeppesen would not add FPAs to the charts or to the data unless it was included on the FAA procedure source document. He also commented that there are chart/database compatibility issues that need to be considered. There should not be items that are databased that are not also depicted on the chart and vice versa.

Brad Rush, AJV-3, stated that there is currently nothing in the criteria to support charting FPAs. In order to get the FPA published on a chart, a policy decision will have to be made. Kevin reiterated that he would like to see a change in the policy so "advisory" FPAs can be charted.

Kel reported that Mark Steinbicker will continue to work this issue in the PARC, taking into consideration the strong support from ACF attendees regarding the continued desire have FPAs calculated and published.

STATUS: OPEN

<u>ACTION:</u> Kel Christianson, AFS-470, will report on progress made by the PARC VNAV Action Team.

<u>13-01-266 Standardized Depiction of Altitude Restrictions on Bottom, Top and Maintain Altitudes on Standard</u> <u>Terminal Arrival (STAR) and Standard Instrument Departures (SIDs)</u>

Tom Schneider, AFS-420, reported that the language supporting the requirement for a top altitude on departures has been added to FAA Order 8260.46E which is set to be finalized in June 2014.

Valerie Watson, AJV-3, reported that an IACC Requirement Document to support the publication of a top altitude on departures has been submitted to the MPOC.

Jim Arrighi, AJV-141, reported that the Office of Responsibility for FAA Order 7100.9 will be changed from AJV-0 to AFS-400 within a couple of months. Jim stated that there will be no policy changes made to the Order until the handoff is made official. (Meaning that no Bottom Altitude changes have been or will be made to the Order until it is in the hands of Flight Standards.)

Mike McGinnis, American Airlines, brought a concern to the group on behalf of Lev Prichard, APA. Mike briefed the group on the <u>NELYN Departure for DFW</u> which has what could be interpreted as two top altitudes associated with different departure runways. The original proposal, agreed upon at the last ACF, was understood to be for a single top altitude to be established/designated for each departure procedure. The group agreed that there are many departures currently published that do not lend themselves to the single top altitude philosophy and will need to be redesigned in order to comply.

Brad Rush, AJV-3, stated that the procedure being discussed does not comply with the new criteria and that there are many more in the system that do not.

Jim Arrighi stated that he has always asserted that multiple top altitudes would need to be supported. A lengthy and spirited discussion ensued which resulted in the conclusion that there had been a breakdown in communication regarding single vs multiple top altitudes on a departure. Minutes from the previous ACF support agreement that only a single altitude would be supported. In the interim, Tom revised FAA Order 8260.46 and Valerie created charting specifications in accordance with this decision. Tom expressed frustration that when the draft version of the FAA Order 8260.46E (containing guidance supporting a single top altitude) was circulated for comment, no objections were received. Jim stated that the departure guidance needs to be rewritten to include the possibility of more than one top altitude and that when the guidance is written for arrival procedures, it too will need to support multiple altitudes.

Ted Thompson, Jeppesen, said there is an underlying problem with showing more than one top altitude. Pilots will still have to read through multiple altitudes and decide at which point in the procedure which altitude is important to them. Ted expressed a concern over the fact that techniques to highlight, denote or identify a single altitude on charts will not work in cases where multiple altitudes may be used. He asserted that when numerous items are highlighted on a chart, the "highlighting" is lost and the effort is moot.

Rob Goodson, NGA, stated that he supports the depiction of only a single top altitude. He suggested that if there are multiple top altitudes, the transitions should be broken up onto multiple procedures. Jim responded that this avenue was considered and may well be the ideal solution, but is not likely to be supported for financial reasons.

Tom restated his dissatisfaction with the fact that the FAA Order 8260.46 changes have already been coordinated and are scheduled to be published in June 2014, but agreed to pull the Top Altitude guidance from the Order until a final decision has been made regarding charting. Once this is complete, the language can be rewritten accordingly.

Valerie stated that she will create new prototype charts and rewrite the charting specification to support the possibility of multiple Top Altitudes.

STATUS: OPEN

ACTION:	Valerie Watson, AJV-3, will create prototypes for the depiction of multiple top altitudes on Departures.
<u>ACTION:</u>	Valerie Watson, AJV-3, will draft a revised IACC Recommendation Document to support the publication of multiple top altitudes on Departures.
<u>ACTION:</u>	Tom Schneider, AFS-420, will pull the single top altitude language from FAA Order 8260.46E and rewrite it to support the revised decisions made regarding charting multiple top altitudes on Departures.
ACTION:	Jim Arrighi, AJV-141, will provide an update on the progress of the transfer of FAA Order JO 7100.9 to

AFS-400.

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

Valerie Watson, AJV-3, reviewed the topic. Gary Fiske, AJV-822, stated that this has been a low priority issue. Gary stated that he is personally not opposed to the idea of publishing the telephone numbers; however, having only recently been tasked with this issue, he needs to go back and get ATC consensus. Gary did question where the numbers will be published and wanted to ensure that such information would be easily accessible by pilots. Gary inquired if the plan was to publish the contact telephone numbers on approach plates.

Valerie responded that the current plan is to only publish the numbers in the AFD. John Collins, GA Pilot, commented that more pilots are using the AFD because with the widespread use of iPads, airport information is easy to retrieve. He believes that publication of the numbers in the AFD would be sufficient.

Ted Thompson, Jeppesen, opposed the idea of putting the numbers on the approach plates because maintenance of those numbers would become a problem.

Bob Lamond, NBAA, commented that the original request was not to publish ATC phone numbers on approach plates, but to establish a consolidated telephone listing in the AFD.

Eric Fredericks, AJV-823, stated that he supports the listing of ATC phone numbers, but expressed concern that not all facilities can accept calls. Eric also questioned who within the ATC facility would handle such incoming phone calls. He highlighted that there is no simple solution and that this issue will require some legwork on the part of ATC.

Valerie emphasized that there is pilot support for this issue and the ACF should continue to work toward getting the ATC numbers published.

STATUS: OPEN

ACTION: Gary Fiske, AJV-822, will work to get a consolidated ATC response and report at the next ACF.

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

Valerie Watson, AJV-3, reviewed the topic. Valerie pointed out that FAA Order 8260.19F was revised to remove the "or as directed by ATC" text from the primary missed approach instructions.

Gary Fiske, AJV-822, having only recently been tasked with this issue, stated that there has been no progress within ATC since the last ACF. Speaking as a controller, Gary questioned the need to publish and maintain the alternate missed approach information when the pilots and controllers already get the information from the NOTAMs. He suggested that the guidance in FAA Order JO 7110.65, Paragraph 4-8-9, be changed to remove references to the 8260 series Form and that the issue be closed.

Tom Schneider, AFS-420, expressed concern that the controller may not be aware of the alternate procedure if they don't have the 8260 series Form. He also noted that if the primary missed approach can't be used, there could be a lag in the time it takes to get the alternate missed approach NOTAM'd. Lynette Jamison, AJR-B1, commented that, in her experience, ATC only pulls NOTAMs every eight hours.

Bob Lamond, NBAA, representing the original proponent of this issue, is opposed to closing this item. He indicated that he would have Rich Boll, NBAA, contact Gary to discuss the matter offline.

Valerie stated that she believes there is value in having the alternate missed instructions in the hands of the controllers rather than relying totally on the NOTAMs. Brad Rush, AJV-3, stated that we need to ensure that the controllers are aware that the alternate instructions exist and that they are available.

STATUS: OPEN

ACTION: Gary Fiske, AJV-822, and Rich Boll, NBAA, will discuss the issue offline and report at the next ACF.

ACTION: Gary Fiske, AJV-822, will work to get a consolidated ATC response and report at the next ACF.

13-01-270 Step Down Fix Chart Notes

Kevin Bridges, AIR-130, reviewed the topic. He stated that this issue was discussed at the US-IFPP and that there was support for changing the profile note. The note will be changed from "LNAV only" to "LNAV/VNAV and LNAV only".

Kel Christianson, AFS-470, stated that these changes will be in the next AIM update scheduled for publication in January 2015.

Tom Schneider, AFS-420, stated that the note will be updated in the next update of FAA Order 8260.19.

Valerie Watson, AJV-3, stated that updates to the notes will be applied to the charts through either an amendment to the 8260 Form or a P-NOTAM.

STATUS: OPEN

ACTION: Tom Schneider, AFS-420, will revise FAA Order 8260.19 and report at next ACF.

ACTION: Kel Christianson, AFS-470, will track requested AIM changes and report back at next ACF.

13-02-272 Charted Critical DME Note on RNAV SIDs and STARs

Valerie Watson, AJV-3, reviewed the topic. Tom Schneider, AFS-420, reported the FAA Order 8260.46 already supports the depiction of the Critical DME on Departure notes. Brad Rush, AJV-3, stated that there are twelve outstanding Departure procedures which will be revised as they are amended.

Jim Arrighi, AVJ-141, reported that FAA Order JO 7100.9 already supports the depiction of the Critical DME in Arrival chart notes. Brad reported that a list of STAR procedures with notes that need to be updated has been sent to Air Traffic and the notes will be updated as the procedures are amended.

Lynette Jamison, AJR-B1, had no update since the last ACF regarding how NAVAID outage NOTAMs are worded. She will continue to research how the NOTAMs are worded and whether or not this needs to be enhanced so that the DME portion of a NAVAID can be specified as OTS.

Editor's Note: Post ACF, Lynette confirmed that the DME aspect of a facility is clearly listed in a NAVAID outage NOTAM.

STATUS: CLOSED

13-02-273 Publication of Diverse Vector Areas (DVAs)

Tom Schneider, AFS-420, reported that FAA Order 8260.46 guidance for DVAs will be published with the June 2014 update. AFS-420 will work revisions to the Instrument Procedures Handbook (IPH).

Valerie Watson, AJV-3, reported that an IACC Recommendation Document has been submitted to the MPOC in support of the publication of DVAs as part of Takeoff entries in the front matter of the TPPs.

Bruce McGray, AFS-410, reported that he is still working on drafting guidance material for insertion into the AIM.

Valerie stated that publication of DVAs should wait until the AIM guidance is in place so that pilots understand what they are and how they are to be used.

Editor's Note: Order 8260.46E was signed on May 30, 2014.

STATUS: OPEN

- **ACTION:** Bruce McGray, AFS-410, will continue to work with AFS-420 on drafting guidance material on DVAs for insertion into the AIM and report back at the next ACF.
- ACTION: Tom Schneider, AFS-420, will report on updates to the IPH.

VII. New Charting Topics

14-01-274 Solar Power Plant Ocular Hazard Symbol on Aeronautical Charts

Valerie Watson, AJV-3, briefed the issue on behalf of the submitter, the FAA Western Service Center Operations Support Group. Valerie stated that the number of Solar Energy Power Plants has rapidly increased over the past several years. Many of these sites cover hundreds of acres and can contain hundreds of thousands of mirrors. <u>Pictures were displayed</u> to the group of several existing plants. The Service Center is concerned that the only thing charted currently is the associated obstruction tower often located in the center of the solar farm. This does not address the associated glare from the mirrors during day-time operations, which may present an ocular hazard to flight crews passing within the vicinity of such solar farms. The submitter of this request would like to see solar farms indicated on visual charts not only as a visual landmark for VFR navigation, but also identified as a potential hazard to pilots.

Ron Haag, AJV-321, stated that there is already a precedent for similar hazards being shown on the visual charts as a landmark symbol with a boxed note.

Ted Thompson, Jeppesen, asked how the information will be sourced and maintained. Chris Criswell, AJV-22, questioned why it would have to be databased and stated that there are currently similar items on visual charts that are not contained in any database. Ron stated that his office could go through the Operations Support Group (OSG) to get a listing of the areas that should be charted.

John Moore, Jeppesen, stated that the group still needs to try to define the problem. He questioned whether these areas should be considered as landmarks or if these sites should be considered a hazard and charted as such. He started that the source would have to meet certain criteria in order to be considered a hazard.

Melissa McCaffrey, AOPA, stated that she is part of the Southern California Airspace Users Working Group and pilots there have stated that this is a hazard. She offered to go back to that group and try to get more information from pilots in that area.

Jolda Reed, AJV-W21, stated that these areas are potential hazards and recommends that they be charted as such. Jolda cited the Airport Cooperative Research Program report regarding solar energy and its potential impacts on aviation in her comments.

Valerie stated that we do not have enough information yet to know whether or not this should be defined as a hazard or if it should be charted as such. Visual charting team can, under current specifications, show these farms as landmark objects or areas with accompanying text to identify them as solar farms, but it is beyond the scope of the charting offices to designate them as "hazards".

STATUS: OPEN

- **ACTION:** Ron Haag, AJV-321, will work with the Western Service Area, Operations Support Group, to pursue the charting of these areas a landmark object or area symbol with identifying text.
- **<u>ACTION:</u>** Melissa McCaffrey, AOPA, will gather more information from pilots in Southern California and will report back on the scope of the problem.

14-01-275 Charting Speed Limited Areas on Instrument Approach Plates

Valerie Watson, AJV-3, briefed the issue on behalf of the submitter, Bennett Taber, Dreamline Aviation. Valerie stated that the recommendation relates to pilots exceeding the 200K speed limit below Class B airspace because the parameters of the Class B airspace is not depicted on approach charts. To demonstrate the concern to the group, Valerie showed an approach into Santa Ana, CA (SNA). The proponent contends that pilots are unaware when flying the approach that they are under a shelf of LAX Class B airspace and must reduce their speed below 200K. Mr. Taber suggests that the parameters of Class B airspace be graphically depicted on Instrument Approach Plates (IAPs) to insure that pilots do not exceed the speed restriction specified in 14 CFR Sec 91.117(c).

Gary Fiske, AJV-822, stated that currently ATC may assign an instruction, but the rule may require something else. He stated that the rule trumps ATC direction. Gary stated that this may soon become a non-issue due to an ongoing rulemaking action change to 14 CFR Sec 91.117(c) that will add the language "or as otherwise authorized by ATC". This revision will permit ATC to assign speeds under Class B airspace higher than the specified 200K and pilots will not be in conflict when adhering to the ATC instruction.

Valerie questioned the group as to whether these areas should be shown on the approach charts. She stated that it was her understanding that pilots are expected to conduct the necessary pre-flight activities so that they are aware if they will be entering into Class airspace.

Ted Thompson, Jeppesen, stated that showing airspace on the charts would be cartographically impossible due to several issues including chart clutter and the fact that DPs and STARs are not drawn to scale. Rob Goodson, NGA, agreed that charting airspace on the IAPs would not be possible due to chart clutter.

Bob Lamond, NBAA, stated that part of the problem is that there are speeds on the charts that violate the rules. Ted stated that there seems to be a disconnect between PBN aircraft and the structure and regulation of non-PBN airspace. Valerie stated that charting cannot solve those issues.

Gary reiterated that, once the rule gets changed, this issue should no longer be a concern. Brad Rush, AJV-3, responded that the rule change is part of the answer, but that pilots need to be situationally aware of their location relative to the Class B airspace and behave accordingly.

Mike McGinnis, American Airlines, stated that if a pilot is looking at an approach chart, there is no awareness that he is under a Class B shelf. He suggested that rather than chart the parameters of the airspace, perhaps a note could be placed on the chart to make the pilot aware. Brad stated that the approach charts are not designed to warn pilots about airspace. There are 30 Class B areas in the country, they are all located in high profile metropolitan areas and pilots are not unaware of them. Ted and Valerie both stated that adding a note would cause too much chart clutter.

Brad asked Gary to contact SOCAL TRACON regarding their local situation and specifically the alleged high numbers of speed violations in the area.

At the end of the discussion, Valerie asked the group if there was support for the depiction of Class B airspace on the approach charts. There was general agreement that a charting solution is not the answer.

STATUS: OPEN

- **<u>ACTION:</u>** Gary Fiske, AJV-822, will update the group on the status of the change to the Rule.
- **ACTION:** Gary Fiske, AJV-822, will contact SOCAL TRACON regarding these issues and the discussion at the ACF and report back to the group.

14-01-276 Removal of Non-Alaska Facility Information from Alaska Supplement

Valerie Watson, AJV-3, briefed the issue on behalf of the submitter, Marshall Severson, FAA Alaska Flight Services Information Area Group. Mr. Severson is asking to remove non-Alaska facilities information from the Alaska Supplement. Over the last few years, the Alaska group has been slowly identifying concerns about accuracy of the data.

Valerie stated that requests to add certain non-Alaska airport or facility information into the Alaska Supplement have come in over the last 30 years by special request. Valerie expressed hesitation for the removal of such content without an understanding of how that will impact the users. Before agreeing to remove this information from the Supplement, she stated that the users should be polled to see if there is consensus. Valerie asked Melissa McCaffrey, AOPA, to take the issue back and speak with the AOPA membership regarding this issue.

Mike Yorke, AAL-03, speaking as a user of the Alaska Supplement, stated that he feels that it is helpful to have the non-Alaska information published. He is aware of the proponent's recommendation and said that the issue was being raised because it appears that the non-Alaskan information is not being maintained and there are a lot of errors in the data. Valerie responded that the FAA is responsible for the upkeep of the data. If errors are found, they should be reported.

- **<u>ACTION:</u>** Melissa McCaffrey, AOPA, will speak with the AOPA membership regarding the possible removal of non-Alaska information from the Alaska Supplement and report at the next ACF.
- **<u>ACTION:</u>** Valerie Watson, AJV-3, will speak with the proponent of this issue regarding the discussions held at the ACF and regarding maintenance of the data currently published.

14-01-277 Discontinuation of World Aeronautical Chart (WAC)

Ron Haag, AJV-321, <u>briefed this issue</u> on behalf of FAA AeroNav Products, VFR Charting. Ron emphasized at the beginning of his briefing that the recommendation for the discontinuation of the WACs is only in the initial stages of consideration. Ron added that the purpose of bringing this topic to the ACF is to gather user input.

Ron outlined the reasons the FAA is investigating the possibility of discontinuing the publication of the WAC, including; the availability of digital Visual Charts, the expanding use of devices such as iPads and Electronic Flight Bags, the loss of NGA as key purchaser, and an overall decline in printed chart subscribers. Ron commented that the decline in the paper sales of the WAC charts has been more rapid than other FAA Charting products. Ron also stated that there is duplicate coverage on the Sectional Charts in all but a very limited area. The proposal is to discontinue the WACs, except where obligated by international agreement, or in areas that do not have sufficient alternate VFR (Sectional) coverage. Ron then opened the floor to user comments.

John Kernaghan, NBAA, commented that FAR Part 135 operators are required to have Visual charts in the cockpit and he felt that some pilots choose to carry the WACs because a single WAC covers a great deal more geographical area than a Sectional chart. He said he will poll some of NBAA's membership to determine the level of demand for the WACs.

George Sempeles, AOV-310, stated that the WACs are a required product by ICAO and the US would have to file a difference if they are discontinued.

John Moore, Jeppesen, asked about the international agreements and the requirements of those agreements. Ron responded that his office is looking into that issue. John then stated that despite the decline in sales, there are still a sizable number of users that still purchase the WACs. He suggested that the FAA try to determine who those users are and if the available alternatives would be suitable for those users.

Melissa McCaffrey, AOPA, commented that many pilots may be using the WACs for flight planning purposes. She asked if there would be a public comment period. Ron responded that yes, there would be outreach and time for public comment.

Bruce McGray, AFS-410, suggested that the original intent of the WACs be reviewed to ensure that the original requirements are being met by other products. Bruce also inquired as to whether the proposal would be open to formal comment. Ron reiterated that yes, a public comment period would be provided.

Jay Jackson, AJV-222, suggested that coverage of the sectional charts could be expanded to meet the geographical requirements. Ron responded that expansion of the Sectional chart coverage would probably prove cost prohibitive.

Valerie Watson, AJV-3, asked Melissa if she could poll the AOPA membership to gather feedback on the impacts of discontinuing the WACs. Melissa responded that she would coordinate with Ron and begin doing some regional outreach.

- **ACTION:** Ron Haag, AJV-321, will take the comments received at the ACF back to the VFR charting team management, will seek a venue for public comment and will report back at the next ACF.
- **ACTION:** Melissa McCaffrey, AOPA, will coordinate with Ron Haag, AJV-321, to begin to gather feedback from the AOPA membership and report back at the next ACF.

14-01-278 Alaska Designated Common Traffic Advisory Frequency Area Chart Depictions

Mike Yorke, AAL-03, <u>presented this issue</u>. Mike described several mid-air collisions and near mid-air collisions that have occurred in Alaska. The findings of the NTSB were that there was inadequate visual lookout contributed to by a lack of standardization of CTAF frequencies. As a result, a government/industry working group was formed to come up with recommendations reduce the confusion regarding overlapping CTAF areas with different frequencies.

One of the recommendations generated by the Working Group is the establishment of designated CTAF area boundaries. The CTAF areas are already set to be published graphically in the Special Notices section of the Alaska Supplement. The working group is proposing a change to charting convention to add the symbology for CTAF area boundaries to Visual Charts.

John Moore, Jeppesen, stated that once these areas are charted for Alaska, this concept may be desired elsewhere. John stated that the FAA should look carefully at the impacts of depicting CTAF areas on visual charts. Mike agreed that if this concept works well, it is likely that Alaska will ask for more of these areas to be charted in the future. Valerie stated that the charting offices would not want to see this concept expand into the lower 48. She stressed that the charting specifications that would allow these boundaries on the Alaskan charts would also apply to the entire chart series.

Ron Haag, AJV-321, reported that the May 29, 2014, Juneau Sectional chart will include the addition of CTAF frequencies associated with airports. Ron inquired if this could be a solution to the problem.

Mike stated that he still thinks that adding boundary lines to the chart to define the parameters of the areas is of greater value. Adding a CTAF boundary line is the only way the pilot will know where the frequency changeover is. Ron stated that adding CTAF boundary lines to the sectional may not be very useful to pilots if the areas are too small to be shown clearly on the chart. He suggested the possibility of a separate inset that would be available digitally.

Melissa McCaffrey, AOPA, commented that there is value in showing this information on an inset similar to the Juneau High Density Traffic Area inset. Ron stated that there is not enough room on the Anchorage Section or TAC charts to place an inset. He stated that the Anchorage enroute inset currently does not cover enough space to cover these areas. Ron will look into the possibility of adjusting this inset coverage.

George Sempeles, AOV-310, recommended that a note could be placed on the sectional to direct pilots to a separate publication. Valerie spoke in support of this notion & voiced that consideration should be given to directing users via chart notes to the detailed CTAF Area graphics in the Alaska Supplement or insets, and warned that the addition of linework in small-scale areas on Sectional charts will likely compromise the portrayal of existing data. Mike agreed that he would like to see a note on the chart.

Melissa suggested that Ron be made part of the working group for this issue. Ron stated that there are a range of possible solutions that he will investigate and he will coordinate with Mike and the working group to address this issue.

STATUS: OPEN

ACTION: Ron Haag, AJV-321, will coordinate with Mike Yorke, AAL-03, to investigate the possible solutions discussed, develop prototype graphics and report at the next ACF.

14-01-279 Naming of FAA Certified, Nationally Disseminated AWOS-3 Systems on Private Use Airports

Regina Sabatini, AJV-22, <u>summarized the topic</u>. Regina stated that there has been an increase in FAA-certified AWOS-3 systems that are located on private-use airports. As a result, questions have arisen regarding to how those weather systems should be identified, covered by NOTAM and depicted on aeronautical charts.

Currently, private-use airports are assigned four character identifiers and public-use airports are assigned three character identifiers. Typically when an AWOS is located on an airport, the identifier matches the airport identifier. For AWOS systems located on private airports, however, there are limits in the usefulness in using a matching four character identifier. The identifier of an AWOS on a private airport would not be compatible with METARs and NOTAMS. Independent Stand-alone weather systems that are not associated with an airport are currently assigned three character identifiers. Regina proposed two solutions to the problem and solicited for feedback from the group;

- 1. Reassign the private use airport a three character FAA location identifier and then assign that same identifier to the weather system located on airport.
- 2. Assign a three character FAA identifier to the weather system that is independent of the four character private use airport identifier and treat the weather system as a standalone facility.

Valerie Watson, AVJ-3, indicated that she supports proposal number 2, however she still saw outstanding issues with it. There is currently no place in NASR to differentiate whether an automated weather system is FAA-certified and available for private or public use. Valerie stated that there is a concern that some of the privately owned AWOS systems on private airports have not been databased. Once theses privately owned AWOS systems have been databased, how will the charting office know which ones are certified and available for public use? Regina responded that only certified, public use facilities will be databased in the ASOS/AWOS file of NASR and made available for charting.

John Moore, Jeppesen, asked if there could be instances where a public instrument approach procedure refers to an AWOS on a private airport. Brad Rush, AJV-3, stated that today, the remote weather systems utilized on IAPs are located at public-use airports and are referred to by name only. Valerie stated that if, in the future, these stand-alone AWOS systems were utilized on IAPs, the chart could refer to the AWOS system only and not make reference to the private airport. She stated that we may need to consider identifying these systems by ident, as the private-use airport on which they are situated may not be published.

Ted Thompson, Jeppesen, asked how the AWOS will be referred to and how pilots will know where the AWOS is located. Regina stated that all of these weather systems would be contained in the ASOS/AWOS file of NASR and would contain positional information (Latitude/Longitude) and a location identifier. After some discussion, it was concluded by the group that all AWOS should be published with both name and identifier on the charts and when referenced in a note (as in a remote weather source on an IAP).

Cathy Riccio, AJV-22, indicated that in her conversations with Rick Funkhouser, AJV-22, he indicated that he would like to assign a four character private-use identifier to the AWOS systems located on private-use airports so that the airport and the weather system could be tied by the same location identifier. Regina stated that this option was investigated but was not viable because it is not compatible with METAR transmission or NOTAM publication, both requirements for nationally-disseminated, public-use weather systems.

Lynette Jameson, AJR-B1, expressed her support for proposal number two, referencing the compatibility with the NOTAM system.

Regina concluded that the consensus of the group supports proposal number two. She stated that her next step will be to take that option through the Safety Risk Management process.

- **<u>ACTION:</u>** Regina Sabatini, AJV-22, will proceed with the concept of assigning a three character identifier to AWOS systems on private use airports and will report back at the next ACF.
- **<u>ACTION:</u>** Valerie Watson, AJV-3, will draft a charting specification change to support charting stand-alone ASOS/AWOS (which includes those located on private-use airports) with both the name and the identifier on Visual & Enroute charts.
- **ACTION:** Brad Rush, AJV-3, will work with AFS-420 to determine if policy should be changed to include ASOS/AWOS location IDs in remote weather system notes on IAPs.

VIII. Closing Remarks

Valerie Watson, AJV-3, thanked everyone for their participation and voiced special appreciation to Al Herndon and MITRE 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 (Please note the changes in the Charting Groups URL and update your browsers book marks accordingly):

- 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, Contract Support), a written status update. 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 Jennifer Hendi, AJV-3 for recording the Minutes, to Steve VanCamp, Contract Support to AFS-420, for presentation assistance, and to Alex Rushton, Contract Support to AJV-3, for conference support pre- and post-conference.

IX. Next Meeting

ACF 14-02 is scheduled to be held on October 28-30, 2014, hosted by Innovative Solutions International at Pragmatics, Inc. corporate headquarters in Reston, VA.

ACF 15-01 is tentatively scheduled to be held on April 28-30, 2015, hosted by ALPA in Herndon, VA.

ACF 15-02 is scheduled to be held on October 27-29, 2015, hosted by Lockheed Martin at their Global Vision Center, located in Crystal City, VA.

X. Attachments

- a. 14-01 Attendee Roster
- b. Office of Primary Responsibility (OPR)