Government/Industry Aeronautical Charting Meeting (ACM)
Meeting 18-02
Charting Group
October 24-25, 2018
AOPA
Frederick, MD 21701

CHARTING GROUP MINUTES

I. Opening Remarks

The Aeronautical Charting Meeting (ACM) was hosted by the Aircraft Owners and Pilots Association (AOPA) at their headquarters located in Frederick, MD. Valerie Watson, FAA/AJV-553, opened the Charting Group portion of the forum on Wednesday, October 24. Valerie expressed appreciation to AOPA and Rune Duke for hosting the 18-02 ACM. She acknowledged ACM Co-chair John Bordy, FAA/AFS-420, who presided over the Instrument Procedures Group (IPG) portion of the meeting the previous day.

II. Review Minutes of Last Meeting, ACM 18-01

The minutes from ACM 18-01 meeting were distributed electronically last spring via the Aeronautical Information Services (AIS) ACM website: http://www.faa.gov/air_traffic/flight_info/aeronav/acf/. The minutes were accepted as submitted with no changes or corrections.

III. Agenda Approval

The agenda for the 18-02 meeting was accepted as presented.

IV. Presentations, ACM Working Group Reports and ACM Project Reports

Discontinuation of VOR Services

Ernesto Etienne, FAA/AJM-324, provided an update for the Very High Frequency Omnidirectional Range (VOR) Minimum Operation Network (MON) program. He reported that in Phase 1, 34 of 74 VORs have been decommissioned and that there are 16 more planned for discontinuance in the next six months. He said that the total number of VORs planned for discontinuance remains at 311.

Ernesto reported that the VOR MON office is in the process of expanding the standard service volume (SSV) from 40 NM to 70 NM for FAA owned and operated VORs that will remain active in the system. This change will require the establishment of two new NAVAID class codes that will correspond to the expanded service volumes: VOR Low (VL) and VOR High (VH).

John Collins, ForeFlight, asked how a pilot, during this transition, would know which SSV a given VOR has been designated. Valerie Watson, FAA/AJV-553 stated that NAVAID class codes are a NAVAID attribute databased in NASR and published as part of the NAVAID listings in the Chart Supplement Airport/Facility Directory. She also showed the VOR/DME/TACAN Standard Service Volume (SSV) Classifications table currently published in the Supplements that describes the service volumes for each NAVAID class code. She stated said that the National Airspace System Resource (NASR) database and the Chart Supplement will need to be updated to incorporate the new NAVAID class codes. She also voiced that the Aeronautical Information Manual (AIM) will need to be updated with explanations for the new class codes and the service volumes they represent.

Sam Blackwell, Jacobs Engineering, pointed out that the suggestion of using VL and VH as NAVAID class codes to indicate the new service volumes would cause an issue with AIRNC 424 coding because the database will only allow for one character in the class code field. Dale Courtney, FAA/AJW-292, said that there is a workgroup currently working on all of these issues. He said he would bring these issues to the workgroup. He said that the workgroup also recognizes the need to address NOTAM policy.

John Collins asked when the new SSVs will be available. Dale stated that his office is still drafting the necessary updates to the FAA Orders. Dale added that they all have to go through flight inspection first and that he expects that they might start showing up in the next year and a half. He said it may take until 2025 to flight check all of the subject VORs.

Valerie re-stated that prior coordination with the National Flight Data Center will need to be accomplished to ensure that the NASR database can be updated to accommodate the new NAVAID class codes and that specifics of the changes to the VOR/DME/TACAN Standard Service Volume (SSV) Classifications table in the Chart Supplements will need to be submitted to AJV-5 well ahead of the projected implementation date.

NOTAM Briefing

Lynette McSpadden, FAA/AJR-B3, provided a presentation on behalf of US NOTAM Governance. She reported that her office has been working on an update to FAA Order 7930.2, Notices to Airmen (NOTAM),

expected to be published early 2019. She highlighted that one of the changes in the new version will be ICAO compliance with contractions.

She then provided an update on the status of the Notice to Airman Publication (NTAP). She said that the plan is not to discontinue it, but to reduce it in size by removing obsolete data and data published elsewhere. She said that once other FAA documents such as the Aeronautical Information Manual, Pilot Controller Glossary, and Aeronautical Information Publication are updated, sections of the NTAP will be eliminated. She reported that FDC NOTAMS will no longer be published in the NTAP.

Lynette then provided a summary of NOTAM Task Force accomplishments. She stated that two of the Air Traffic Organization (ATO) Top 5 safety initiatives pertain to NOTAM issues. She presented 2018 accomplishments and activities (see slides 4 and 5).

She also discussed NOTAM outreach activities and how her office has been visiting airline operations centers. NOTAM issues discussed during these visits are outlined on Slides 7 and 8.

Controller Pilot Data Link Communications (CPDLC) Briefing

Valerie Watson, FAA/AJV-553, provided an update on CPDLC implementation. Valerie showed the audience the revised waterfall map and highlighted the changes regarding the roll out plan. She said that the rollout is projected to start with Cleveland Center (ZID) on 11/1/18, Kansas City (ZKC) on 11/26/18 and Memphis (ZME) on 12/20/18. She voiced that these are estimated dates of commissionings pending final word from the Data Comm Program Office. She stated that communication of the commissionings will initially be covered by NOTAM. As they are commissioned, the Data Comm Program Office, FAA/AJM-34, will provide the source data to the National Flight Data Center (NFDC). NFDC will then publish "CPDLC (LOGON KUSA)" as an ARTCC General Remark in the subject Center file within NASR. This NASR change will cause the text to be added to the Enroute Charts along the ARTCC boundary associated with the Center identifier text. Charts will likely not reflect these changes until the 3 Jan 2019 effective date.

Valerie added that the Aeronautical Information Manual (AIM) language for Enroute CPDLC was published in the 13 September 2018 edition. She asked that the audience read over the AIM language and submit comments.

V. Outstanding Charting Topics

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

Rick Mayhew, FAA/AJV-533, reviewed the history of this item, the purpose of which is to only publish Traffic Pattern Altitudes (TPA) in National Airspace System Resource (NASR) and the Chart Supplement when they differ from the "recommended" (or "standard") altitudes as published in the Aeronautical Information Manual (AIM).

John Johnson, FAA/AJV-5332, reported that work continues to remove recommended TPA entries from the NASR database. He said that there were over 1800 airports with TPAs and about 1000 of those appeared to be what the AIM describes as recommended altitudes. Of those, the National Flight Data Center (NFDC) team have verified and cleaned up approximately 800. John stated that NFDC is on track to finish the NASR clean up by the end of 2018.

Valerie Watson, FAA/AJV-553, reported that when the NASR cleanup is complete, AJV-5 will publish explanatory text in the front of the Chart Supplement to explain that only TPAs that are an exception to the recommended altitudes in the AIM will be published.

Rick stated that his action item to work with the Office of Airports to make changes to FAA Form 7480-1, Notice of Landing Area Proposal, to support multiple TPAs is ongoing and that he will continue that endeavor.

As update of the 7480-1 form is an accessory activity not necessary to the original proposal and as the NASR update will be completed by the end of 2018, Valerie recommended that this issue be closed. The group agreed.

STATUS: CLOSED

13-01-270 Stepdown Fix Chart Notes

Valerie Watson, FAA/AJV-553, reviewed the issue. She showed the audience the Aeronautical Information Manual (AIM) language that was published in the 29 March edition that explains stepdown fixes and altitudes and that they only apply within the Final Approach Segment to non-precision portion of the procedure and do not apply when flying a precision approach - ILS or approaches with vertical guidance (LPV, LNAV/VNAV) lines of minima. She pointed out a couple of minor changes that are already being worked by Bruce McGray, FAA/AFS-410, and that will be corrected in the next release of AIM.

Valerie then asked John Bordy, FAA/AFS-420, about the status of the updates to FAA Order 8260.19. John confirmed that the updates will be in Change 2 which will begin coordination in November 2018. Valerie stated that once the order has been updated, she will move forward with a specification change to update the TPP Legend Profile View page to clarify stepdown fix use. Once the FAA Order 8260.19 change is implemented, the stepdown fix chart notes will begin to be deleted on a day forward basis as procedure source is updated.

STATUS: OPEN

ACTION: John Bordy, FAA/AFS-420, to report on the status of revised guidance in draft FAA Order 8260.19.

ACTION: Valerie Watson, FAA/AJV-553, to work an Interagency Air Committee (IAC) Specification change to update the TPP Legend Profile View page to clarify stepdown fix use after the revised guidance has been published in FAA Order 8260.19.

15-01-295 Charting of Airports for the MON

Valerie Watson, FAA/AJV-553, reviewed the topic. Valerie stated that the National Airspace System Resource (NASR) database has been updated to accommodate VOR MON designated airports. Scott Jerdan, FAA/AJV-533, reported that he is still working with the MON Program Office to establish a Memorandum of Agreement (MOA) for maintenance of the MON Airport list until the MON Program Office is sunset in 2025. He said that it has been written and is currently with Leonixa Salcedo, FAA/AJM-324, for signature.

Valerie then discussed the long-term ownership and maintenance of the MON Airport list after the MON Program Office sunsets in 2025. She said that this issue is still under discussion, but Lonnie Everhart, FAA/AJV-5430, reported to her that the ownership will most likely go to the Flight Procedures Teams (FPTs).

STATUS: OPEN

ACTION: Scott Jerdan, FAA/AJV-533, will continue to work with the MON Program Office to establish a Memorandum of Agreement (MOA) for maintenance of the MON Airport list until the MON Program Office is sunset in 2025. Once this MOA is signed, Scott will authorize NASR to be updated with MON airport designation per the listing provided by the MON Program Office.

ACTION: Lonnie Everhart, FAA/AJV-5430, will report on discussions regarding the long-term ownership and maintenance of the MON Airport list after the MON Program Office sunsets in 2025.

15-02-298 Charting GLS DMax (Service Volume)

Joel Dickinson, FAA/AFS-470, reviewed the issue and presented an update. He said that he has been working closely with United Airlines, the original proponent of this item, to come up with a solution to make pilots aware of the service volume limit on GLS approaches. He reported that the FAA is working to establish a standard approach service volume (ASV) for GLS approaches. He said that he is working to have the new standardized GLS ASV published in the next edition of the Aeronautical Information Manual (AIM) and Instrument Procedures Handbook (IPH).

Michael Stromberg, UPS, questioned artificially limiting the ASV in order to make it standard for the purposes of avoiding a charted DMAX and expressed frustration at how this potential decision will hamper procedure design. He stated that the GLS service volume usually extends out from the sensor in all

directions, not merely the "cone" Joel has described, and that it often extends to much greater distances than what the proposed standard service volume is defined to be. He explained that ILS's are based on a directional antenna array, with considerable signal reflection/deflection challenges and as such we have a defined directional service volume. The GLS service volume is technically defined by a distance from the broadcasting ground antenna that does not rely on reflection/deflection. To create a smaller runway specific service volume based on an unrelated technology will mislead people how the technology works. In addition it could be limiting in creating approaches where a small part of the proposed GBAS enabled approach may be located outside the actual service volume. This would lead to having a waiver where none is needed, or the possibility of an approach not being created. Possible examples of where this could happen would be a large airport with the antenna not centrally located on the field, a location where the standard service volume would have to be reduced due to poor reception resulting from a particular, perhaps terrain, blocked range of azimuths, or when a nearby airport wants to create an approach off of an existing antenna at a closely located airport. All of this could be avoided by defining the service volume as the certified distance from the antenna.

Joel said that his office has followed ICAO guidance for the ASV and that the FAA already has a mechanism in place to extend the service volume if necessary, but he recognizes that this still needs attention with regard to GLS approaches. John Barry, FAA/AIR-6B1, offered to take the issue of expanding the GLS service volume to the RTCA GBAS working group for discussion.

Joel presented several options for depicting the GLS ASV on the Instrument Approach Procedure Charts (See slides 9-15). He also presented the option of no charting depiction because the ASV will be standardized and published in the pilot guidance.

Ron Baker, United Airlines, made a presentation in support of United Airlines original request to show the service volume limit on GLS signal on approach charts. He added that United would also like to see ILS Localizer service volumes accurately indicated on approach charts. Valerie Watson, FAA/AJV-553, stated that this specific discussion needs to be limited to the GLS issue and a proposal related to the depiction of localizer service volumes would have to be brought to the ACM as a new recommendation. Ron agreed.

Valerie asked the audience if they agreed with Ron that it is necessary to have a charted indication of GLS ASV along the final approach course. There was audience agreement. After considerable discussion regarding the various suggested depictions, Valerie asked that the audience reconsider Ron Renk's original charting solution of labeling the first fix on the Final Approach Course (FAC) or the extended FAC inside of the lateral extent of the GLS signal with "(DMAX)" text designation. Since the term (DMAX) is no longer appropriate, it was suggested to use (GLS) instead. There was audience consensus for this solution. Valerie stated that if that is how it will be charted, she agreed that the definition of what that point means on the chart will need to be clearly explained in the chart legend, e.g., the first point on the FAC or extended FAC where the pilot can intercept lateral GLS guidance. Valerie stated that pilot instruction, such as "switch to approach mode" would NOT be appropriate – the FAA chart will show where the lateral guidance is available, but not what action the pilot is to take.

Valerie then asked John Bordy, FAA/AFS-420, if he could pursue FAA Order 8260.19 changes to support documentation of the (GLS) fix designation on GLS procedure source forms. He agreed.

Joel said that he would take the ACM consensus back to his management. He also said he would look into taking the issue to the U.S. Instrument Flight Procedures Panel (US-IFPP). John Bordy also said he would take the recommendation back to his management for discussion and potential support in FAA Order 8260.19 so that the "(GLS)" designation is properly documented on the procedure source documents assigned (and then charted) to the correct fix.

STATUS: OPEN

ACTION: Joel Dickinson, FAA/AFS-470, and John Bordy, FAA/AFS-420, will take the ACM consensus for the charting of the GLS Approach Service Volume on Instrument Approach Procedure charts to the US-IFPP.

ACTION: John Bordy, FAA/AFS-420, will pursue 8260.19 revision to support "(GLS)" fix designation.

ACTION: Valerie Watson, FAA/AJV-553, to draft an Interagency Air Committee (IAC) Specification change for charting of the GLS Approach Service Volume on Instrument Approach Procedure charts.

ACTION: John Barry, FAA/AIR-6B1, will take the issue of expanding the GLS service volume to the RTCA GBAS working group.

16-01-301 RVR Locations in FAA Documentation

Valerie Watson, FAA/AJV-553, reviewed the topic. She reported that since the last ACM, an AJV-5 generated test spreadsheet was published for review on the ACM-CG website that it is hoped will satisfy user needs for ILS information. Based on the input received since the posting, it is believed that this report contains the majority of the information that was contained in the discontinued ILS Components List and that it meets the needs of the original request.

Valerie asked Brian Murphy, FAA/AJV-562, about the plan for the publication of the spreadsheet. Brian stated that his office is still working on finalizing the process, but that he expects regular posting on the AJV-5 website http://www.faa.gov/air_traffic/flight_info/aeronav/procedures/reports/ every 28 days beginning with the January 3, 2019 effective date. There was agreement that all actions have been fulfilled and this item could be closed.

STATUS: CLOSED

16-02-309 Publishing of CLNC DEL Phone Numbers in Chart Supplement

John Johnson, FAA/AJV-5332, reviewed the issue. John said that the first phase of the project, adding phone numbers to towered airport records in NASR and subsequently the Chart Supplement, that may be used for clearance delivery and/or cancellation of IFR flight plans, is now complete. John said they are now coordinating with Jeff Black, FAA/AJR-B6, on Phase 2, which is the addition of Air Route Traffic Control

Center (ARTCC) Flight Data Unit (FDU) phone numbers for non-towered and part-time towered airports. This project is on track for completion by summer of 2019.

STATUS: OPEN

ACTION: Scott Jerdan, FAA/AJV-533, and John Johnson, FAA/AJV-5332, will continue to coordinate with Jeff Black, FAA/AJR-B6, to publish the ARTCC phone numbers in NASR for non-towered and part-time towered airports.

16-02-310 Inclusion of MSA Info for ODPs, SIDs & STARs

John Bordy, FAA/AFS-420, provided an update on discussions held at the last U.S. Instrument Flight Procedures Panel (US-IFPP) Departure Working Group and STAR Working Group meetings. John stated that there was very little support for adding MSAs to SIDs and STARs. They discussed the issue with industry representatives and the group agreed that the issue needed to go back to the ACM for further discussion with the larger group.

Rich Boll, NBAA, said that the US-IFPP saw this as a chart clutter issue. He said they did discuss other concept changes to MSAs for consideration. They suggested that the MSA could be changed so that it is centered on the Airport Reference Point (ARP), resulting in one MSA per airport. They also suggested allowing for sectorization on RNAV MSAs. If these changes were applied, it would allow for a single MSA per airport that could be applied to all procedures at that airport. Rich added that he supports these changes discussed.

John pointed out that these changes are not being pursued by the US-IFPP at this point but are just conceptual ideas for discussion. He said that there are disadvantages to consider with the one MSA idea as well. John added that there was not US-IFPP support for adding MSAs to STARs. He said that this item is still open in the US-IFPP and will be discussed again at the January 2019 meeting.

There was clear support expressed again in the ACM audience for charting MSAs on DPs (but not on STARs). This was the same consensus reached at the last meeting. Valerie expressed that the ACM Charting Group could not take action until support was gleaned from Flight Standards. John said that this item is still open in the US-IFPP and will be discussed again at the January 2019 meeting.

STATUS: OPEN

ACTION: John Bordy, FAA/AFS-420, will report on discussions that take place at the January 2019 meeting of the US-IFPP.

17-02-311 TFR Charting: Recommendations of the RTCA Tactical Operations Committee

Scott Jerdan, FAA/AJV-533, reviewed the issue. He said that AJV-5 met with Talwyn Haley of the Systems Operations Security Office, FAA/AJR-24, in May 2018 and that they have agreed to be the charting source for a number of what will be called “National Defense Airspace TFRs” that are currently only published as TFR

NOTAMs but are intended for charting on FAA VFR products. Scott said the two offices are currently working on a Memorandum of Agreement (MOA) that states that Sys Ops Security will commit to providing and maintaining the TFR information so that AJV-5 can keep the data current.

Rick Fecht, FAA/AJV-5223, showed the audience a graphic example of how National Defense Airspace TFRs will appear on the VFR chart. Valerie Watson, FAA/AJV-553, said that the charting specification is in process. Once the MOA is signed, the data is submitted, and the specification change is approved, Visual will start charting National Defense Airspace TFRs.

Scott also reported that sporting event 3 NM rings have been added to Radar Video Maps and Controller Charts. The National Defense Airspace TFRs will be added to those products once the data has been submitted by the Sys Ops Security Office.

STATUS: OPEN

ACTION: Scott Jerdan, FAA/AJV-533 will continue to coordinate with Systems Operations Security Office regarding the status of the Memorandum of Agreement (MOA) and subsequent submission of the data for charting.

ACTION: Valerie Watson, FAA/AJV-553, will process the Interagency Air Committee (IAC) Specification change to add National Defense Airspace TFR depiction to the VFR charts.

ACTION: Scott Jerdan, FAA/AJV-533, to provide an update on adding National Defense Airspace TFRs to Radar Video Maps and Controller Charts.

17-02-312 Standardized Communications on DPs and STARs

Valerie Watson, FAA/AJV-553, reviewed the issue. She reminded that audience that on STARs, there was ACM agreement to chart ATIS and APP CON when available in the authoritative source database and Center frequencies (not numerical) when specified on the procedure source document. On Departures, there was ACM agreement to chart DEP CON when available in the authoritative source database, and any other frequency type (numerical frequencies should never appear on the procedure source document) will only be charted when specified on the procedure source document and preceded by the command “CHART”. Valerie stated that an Interagency Air Committee (IAC) Specification change has been drafted for standardized communications on DPs and STARs. She intends to await coordination and concurrence on the proposed changes to FAA Orders 8260.19 and 8260.46 before submitting the specification change. This will allow all parties (especially those designing Departure and Arrival procedures) to read, understand and approve the revised .19 and .46 guidance well ahead of time, so they will understand that any comm types, outside of what will now be the standard (ATIS and APP CON for STARs, DEP CON for DPs), will need to be documented on the specific procedure source form preceded by the command “CHART”.

John Bordy, FAA/AFS-420, said that the FAA Order 8260.19 changes should appear in Change 2 which will begin coordination in November 2018. Revisions to FAA Order 8260.46 will have to wait for the next edition, which will be updated in the next 12 months.

Valerie said that when the new language in the 8260.19 and 8260.46 is coordinated, it should be made clear that the above stated communications will be the only ones charted unless other communications are specifically requested on the procedure source form. She also said that AJV-5 will not remove any existing communication information from the charts until a new procedure source form is received with revised communications.

STATUS: OPEN

ACTION: John Bordy, FAA/AFS-420, to report on the status of revised guidance for standardized communications on STARs and DPs in FAA Orders 8260.19 and 8260.46.

ACTION: Valerie Watson, FAA/AJV-553, will submit an Interagency Air Committee (IAC) Specification change for standardized communications on DPs and STARs after the revised guidance has been published in FAA Orders 8260.19 and 8260.46.

17-02-314 Charting of ILS Classification System for Category I ILS Approaches

Valerie Watson, FAA/AJV-553, reviewed the issue. Valerie asked if action had been taken by AFS-410 to publish the ILS Category Code explanatory language (suggested by Michael Stromberg and Chris Zimmerman at the last meeting) in the Aeronautical Information Manual (AIM). Doug Dixon, FAA/AFS-410, responded that his management does not support the effort to publish this guidance in the AIM. His office maintains that this information would be useful for only a very narrow audience and that it should be in the airlines OpSpecs. He stressed that the information is available in other places for those pilots that need it and reiterated that it is far too narrowly useful language for AIM inclusion.

John Blair, FAA/AFS-410, said that there is a new Advisory Circular, AC 121-118, that provides operators with information on ILS Facility Performance Classification Codes. Rich Boll, NBAA asked if the suggested AIM guidance could be published in the Instrument Procedures Handbook (IPH) instead. John said they prefer to only publish the information in the AC and not in the AIM or the IPH. Michael Stromberg, UPS, asked if they could add the explanatory language and the diagram with the foot distances that he had requested adding to the AIM to the AC. Doug said he would take that back for consideration.

STATUS: OPEN

ACTION: Doug Dixon, FAA/AFS-410, to investigate adding the suggested Aeronautical Information Manual (AIM) guidance to Advisory Circular 121-18.

17-02-315 Updating Terminal Procedure Publication (TPP) Comparable Values of RVR and Visibility Table

Valerie Watson, FAA/AJV-553, briefed the issue. Valerie showed the revised Comparable Values of RVR and Visibility Table that will be published in the Legend of the Terminal Procedures Publication on 8 November 2018. She explained that this table incorporates RVR and Visibility comparable values that are published in

FAA Order 8260.3 and is not counter to, but expands upon, those in 14 CFR Part 91.175(h). All affected procedures, approximately 500, will have visibility revised per the new table as of the 8 Nov 2018 publication date. It was agreed that this item could be closed.

STATUS: CLOSED

17-02-316 Improving OROCA to Meet FAR 91.177 Requirements

Valerie Watson, FAA/AJV-553, briefed the issue. Brian Murphy, FAA/AJV-562 discussed his investigation into Minimum IFR Altitude (MIA) and Minimum Vectoring Altitude (MVA) assessments and he reported that the current Off Route Obstruction Clearance Altitudes (OROCA) assessment is already using the same data as the MIA and MVA assessments. He said the OROCA tool could be run on a weekly basis, however, his concern is that there is not yet a system in place for the publication of NOTAMs for OROCA changes.

Valerie asked if running the OROCA assessment weekly would be sufficient. Rune Duke, AOPA, said that is acceptable.

Valerie then asked John Bordy, FAA/AFS-420, if he could begin work to determine and publish a revised OROCA definition and sanctioned use. John said that he will work with the Flight Operations Group on that piece. He then asked if anyone is looking into if the Obstruction Evaluation/Airport and Airspace Analysis (OE/AAA) Program should have a role or if the Obstacle Evaluation Group (OEG) can provide notification of obstacles. John stated that he will look into those questions to see if either is feasible. Valerie commented OE/AAA program may not be needed because that level of detail is not necessary with the large buffer that is built into the OROCA values.

Valerie then discussed NOTAMs. If the OROCA values are to be sanctioned for off-route safe flight altitudes (and this will depend on the formal definition/use wording that Flight Standards develops and stands behind), any changes to the values, though they happen infrequently, will need to be updated via NOTAM. That NOTAM process and office of responsibility for OROCA changes still needs to be determined. Valerie said that after the Flight Standards piece is accomplished (definition and use of OROCA for off-route safe flight), she and Lynette McSpadden, FAA/AJR-B3, will work on NOTAM publication details.

STATUS: OPEN

ACTION: John Bordy, FAA/AFS-420, will work to determine and publish a revised OROCA definition and sanctioned use.

ACTION: John Bordy, FAA/AFS-420, will investigate the need to include the OE/AAA program in the OROCA obstacle evaluation process.

ACTION: Valerie Watson, FAA/AJV-553, will work with Lynette McSpadden, FAA/AJR-B3, to determine the process for publication of NOTAMs for OROCA changes after the Flight Standards definition has been established.

17-02-317 Nome Selection Panel Extension

Rick Fecht, FAA/AJV-5223, reviewed the issue and explained that the World Aeronautical Chart discontinuation left an area from Alaska and Russia between which VFR airway B369 transits no longer covered by a VFR chart. Rick announced that the new inset showing the area of concern presented at the last ACM will appear on the Nome VFR Sectional chart for the 20 June 2019 publication. He said that he has been in touch with the proponent of the original request, and he was very happy with the solution.

Valerie Watson, FAA/AJV-553, reported that the Interagency Air Committee (IAC) Specification change to accommodate the new inset has been approved. There was agreement to close this item.

STATUS: CLOSED

17-02-318 Charting of Helicopter Route per RNP NAVSPEC 0.3

Mike Webb, FAA/AFS-420, reviewed the subject of RNP 0.3 values on Helicopter RNAV (TK) routes, including their potential use, aspects of databasing the RNP values and charting. He said that he has socialized the Concept of Operations with the FAA and with the helicopter industry (Slide 3) and received good feedback. He stated that industry agreed that a single RNP value per airway is acceptable. The next steps are to determine the best way to database the RNP values and to develop charting specifications for adding RNP 0.3 to the route information on Enroute charts.

For charting, Mike said his proposal is to add "RNP 0.3" to the route identifier text along the subject TK Routes on the Enroute Low charts. He also opened for discussion the idea of a PBN Notes Box (supported by ICAO) in either the chart legend or as a new tabulation to identify which TK routes require aircraft and aircrew RNP 0.3 NavSpec approval Consensus was that the RNP 0.3 needs to be charted on the route, but not in the legend or tabulated form. There was discussion about the need to update AC 90-105A, Approval Guidance for RNP Operations and Barometric Vertical Navigation, to accommodate this change. Mike said that he will look into what changes are needed to the AC once the requirements are finalized.

Rune Duke, AOPA, expressed concerns about Air Traffic Control (ATC) and flight filing that still need to be addressed. ATC will not know which pilots are cleared to use these routes. Rich Boll, NBAA, asked if there will be a PBN code assigned to RNP 0.3 so that it can be entered into ERAM (En Route Automation Modernization). He said if this is not done, only the pilot will know if they are qualified to fly the route. Mike said that he will have to talk to ERAM representatives about this issue and see if the software could be adapted to recognize a TK RNP 0.3 route. Rich commented that ERAM does recognize ICAO PBN codes and on the International Flight Plan Form, block 18, and that an equipment code can be entered, however, there currently is no code for RNP 0.3. It was also pointed out that the database may not be able to use a decimal point, so 03 would have to be used. Mike committed to working with the ERAM office to resolve these issues.

Scott Jerdan, FAA/AJV-533, said that there is a planned update of the National Airspace System Resource (NASR) database to add an RNP attribute to the airway resource. He said that once that is complete, perhaps ERAM could ingest the data from NASR.

Mike said that if ERAM is updated with the new field, pilots will have to know to file the new code. This guidance will need to be explained in the Aeronautical Information Manual (AIM). Specifically Table 5-1-6, PBN/NAV Specifications.

STATUS: OPEN

ACTION: Mike Webb, FAA/AFS-420, will verify that ERAM can be adapted to recognize a TK RNP 0.3 route and if ATC can use this data to determine who is qualified to fly the routes.

ACTION: Mike Webb, FAA/AFS-420, if/when the above has been determined to be feasible, will work on updating Table 5-1-6 in the AIM to add the RNP 0.3 PBN/RNAV Specification.

ACTION: Scott Jerdan, FAA/AJV-533, will report on progress to add a RNP attribute in the airway resource in NASR.

ACTION: Valerie Watson, FAA/AJV-553, will work on a draft IAC specification change to support depiction of RNP values on TK Routes on Enroute Low charts.

18-01-320 Publish Center Surface Boundaries in NASR

Valerie Watson, FAA/AJV-553, reviewed the issue. Scott Jerdan, FAA/AJV-533, provided an update on progress made since last ACM. Scott stated that his team provided the Center surface boundary data to ForeFlight for testing and that Foreflight reported that the data and the format will meet their needs. Scott reported that Jill Olson, FAA/AJV-553, is working to establish a Memorandum of Agreement (MOA) with the ERAM office to supply the necessary data to AJV-5 on a regular basis. Once the MOA is in place, and the data is being received, AJV-5 will post the data on the AJV-5 website for dissemination every 56 days.

Valerie asked if the National Airspace System Resource (NASR) database will be populated with Center Surface Boundaries. Brian Murphy, FAA/AJV-562, replied that in the short-term, they will not be in NASR, but that is a long-term goal.

STATUS: OPEN

ACTION: Jill Olson, FAA/AJV-553, will continue work to establish a Memorandum of Agreement (MOA) with the ERAM Office to supply AJV-5 with the Center Surface Boundary data files every 56 days.

ACTION: Brian Murphy, FAA/AJV-562, will work to establish a 56-day posting schedule for the Center Surface Boundary data to the AJV-5 website once the Memorandum of Agreement (MOA) with the ERAM Office is in place and the data is being received.

18-01-321 Grand Canyon VFR Aeronautical Chart Update

Valerie Watson, FAA/AJV-553, reviewed the issue. Rick Fecht, FAA/AJV-5223, provided an update on progress made since last the last ACM. Rick stated that the Visual Charting Team has been working with Brian Durham, FAA/AJV-W22, and the Western Service Area to update the Grand Canyon VFR Aeronautical Chart and that a revised edition will be published on 28 Feb 2019. Rick added that from this cycle forward, the Grand Canyon chart will be updated every three years. Rune Duke, AOPA, the original proponent of the recommendation, expressed his appreciation. There was agreement to close this item.

STATUS: CLOSED

18-01-322 Recognition of Specific PERM NOTAMs as Authoritative Source

Lynette McSpadden, FAA/AJR-B3, reviewed the topic and provided an update on behalf of the PERM NOTAM Workgroup. Lynette said that Workgroup provided a list to the NOTAM Policy Office of items that they recommend be changed in the National Airspace System Resources (NASR) database, and therefore subsequently on FAA charts/pubs, based solely on a PERM NOTAM. The response was that only three items on the list could be updated because the others have NAS element dependencies associated with them, such as other NAVAIDs, airspace, procedures, etc. It was also determined that if even these items were to be updated via PERM NOTAM, NOTAM policy would need to be updated to allow the FAA to cancel those PERM NOTAMS after publication. In order to determine if the FAA can cancel PERM NOTAMs on behalf of an airport, a safety analysis will need to be conducted. Lynette said that the earliest time that could take place is after the release of the S version of the NOTAM Order 7930.2 in February 2019.

Lynette discussed a couple of possible modifications to NOTAM Manager that could help ease the problem. One suggestion is to add an education piece to the training program so that airport proponents initiating NOTAMs understand it is their responsibility to ensure these changes are also submitted to the FAA for permanent publication via the NFDC Portal. Another suggestion is to create a pop-up reminder in NOTAM Manager whenever PERM is used as an end date, directing the proponent to the NFDC Portal for input of the data into that conduit so that it is charted.

Lynette said that the NOTAM Task Force reviewed all of the PERM NOTAMs from January 2018 and found that of approximately half of them, the information had already been revised on FAA charts, but the airport did not take the necessary step to cancel the NOTAM. She announced that the NOTAM Task Force will not continue to review all PERM NOTAMS on a regular basis.

Rune Duke, AOPA, emphasized the need for the FAA to continue to pursue this issue. Lynette agreed and said that there needs to be more management of the NOTAM system. She said that the first step will be to conduct the safety analysis to determine if the FAA can have the authority to cancel NOTAMS with a PERM end date.

The discussion then shifted to the reasons why airports don't comply with NOTAM cancellation guidance and ways they could be forced or encouraged to comply. The possibility of losing Airport Improvement Plan

(AIP) funding if an airport does not comply was suggested. Lynette said that AIP airports are not the problem, but mostly the smaller general aviation airports that don't receive FAA funding.

Rune commented on an effort made by AOPA to engage airports. A letter was sent out by AOPA to the airports identified with an existing PERM NOTAM in the system to try to encourage them to submit the necessary information to the FAA and then cancel the NOTAM. The found that some airports took action, but unfortunately many others did not.

Lynette repeated that in her view, the next step is for a safety analysis to be conducted in order to determine if the FAA can cancel PERM NOTAMs on behalf of an airport. Lynette anticipates the safety analysis work to start in CY2019 and she will provide an update at the next ACM.

STATUS: OPEN

ACTION: Lynette McSpadden, FAA/AJR-B3, will report on progress of a safety analysis to determine if the FAA can cancel PERM NOTAMs on behalf of an airport.

18-01-323 Standardizing the Labeling of Parking Areas on Airport Diagrams

Rune Duke, AOPA, provided a review of the topic. He reminded the audience of the standardized terms agreed to for parking/ramp areas on airport diagrams at the prior ACM: GA Ramp, FBO Ramp, and ALTN Access Ramp. He said that in order for this change to happen, the first step is for the FAA Office of Airports to adopt these terms in their relevant documents, possibly including but not limited to AC 150/5300-19, Airport Data and Information Program. Once sanctioned and documented by the Office of Airports, the terms can be submitted for publication in the Pilot/Controller Glossary (PCG) of the Aeronautical Information Manual (AIM) and the charting specifications can be revised. He has so far been unable to engage the Office of Airports to agreeing to the use and documentation of these designations and there were no representatives of that office present. Rune briefed that because this is a high priority issue for the aviation industry, AOPA, along with others in the aviation community, have submitted a letter to the FAA Administrator asking for support. Rune also shared a letter of Congressional support for this issue.

Rune stated that he will continue to work with the Office of Airports in an attempt to have the relevant Airports documents updated.

Valerie Watson, FAA/AJV-553, reviewed the four action items from the last ACM. She said that they will all remain as actions, however they are all dependent upon action first being taken by the Office of Airports. Scott Jerdan, FAA/AJV-533, said that the last action item regarding the collection of parking area labels should be revised to the Airport Mapping Team because the National Flight Data Center (NFDC) does not collect this data.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-553, and Rune Duke, AOPA, will continue to coordinate with the Office of Airports to sanction use of the proposed terms and update their relevant documents.

ACTION: Valerie Watson, FAA/AJV-553, and Rune Duke, AOPA, will submit the new parking area definitions for publication in the Pilot/Controller Glossary (PCG) of the Aeronautical Information Manual (AIM) and once the Office of Airports has updated their guidance.

ACTION: Valerie Watson, FAA/AJV-553, will revise the Interagency Air Committee (IAC) Specifications and the Chart User's Guide after the new parking area definitions have been published in the Pilot/Controller Glossary (PCG) of the Aeronautical Information Manual (AIM).

ACTION: The Airport Mapping Team, FAA/AJV-5640, will research possible outreach to airport proponents in collecting the standardized airport diagram parking area terms after the above steps have been accomplished.

VI. New Charting Topics

18-02-325 Computer Navigation Fix

Joel Dickinson, FAA/AFS-470, presented the issue. Joel explained that his office received an Air Traffic Safety Action Program (ATSAP) report that stated that there is confusion among pilots and controllers regarding the use of Computer Navigation Fixes (CNFs). He said that the Aeronautical Information Manual (AIM) provides adequate guidance, however the descriptions on the Enroute Chart and Terminal Procedures Publication (TPP) legends are inconsistent and vague. Joel proposed making the descriptors consistent and to have them both read "Not for Navigation. No ATC Function".

Valerie Watson, FAA/AJV-553, agreed that all FAA legend material should agree in describing CNFs and suggested the Computer Navigation Fix text say only "No ATC Function", voicing that she fears adding "Not for Navigation" to what is specifically called a Navigation Fix would lead to even more confusion. Others in the audience agreed.

Joel suggested the confusion with CNFs may be evidenced by the fact that pilots are purportedly asking for clearances to CNFs. John Bordy, FAA/AFS-420, suggested that Air Traffic Control be brought into the discussion and that there might need to be an update to FAA Order 7110.65 so that air traffic policy is in place to prevent clearances to CNFs. Dale Courtney, FAA/AJW-292, stated that the discussion is an overreaction to the problem and that a pilot would never be cleared to a CNF. He said that this is not a safety issue and the guidance already in place in the AIM is sufficient.

There was ACM consensus to add "No ATC Function" to the CNF symbol description in the Terminal Procedures Publication (TPP) legend to make it consistent with the Enroute chart legends. Valerie said that she would move forward with that change. Since there will be no further action other than the minor edit to the legend, there was consensus in the room to close the item.

STATUS: CLOSED

18-02-326 Change to Hot Spot Publishing Requirements

Cheri Walter, FAA/AJI-141, presented this recommendation. Cheri stated that Wrong Surface Landing (WSL) risk is one of the Air Traffic Organization's Top 5 hazards. WSL events occur when aircraft tries to land on the wrong runway or taxiway. She said that there is an average of one WSL event per day. Cheri said that the Runway Safety Office's position is that WSLs are surface events and should qualify for publication as a Hot Spot on Airport Diagrams. She pointed out that there have already been several WSLs published as Hot Spots.

Valerie Watson, FAA/AJV-553, showed the audience the text from the Aeronautical Information Manual (AIM), the Chart User's Guide, the Terminal Procedures Publication (TPP) Legend, and the TPP Hot Spot page. She pointed out that they all have language describing the purpose of Airport Diagrams as assisting in the movement of ground traffic and not for use during approach or landing operations and that Hot Spots are to be used to highlight locations with an increased risk during surface operations. She explained that

there is no expectation that a landing pilot would consult an airport diagram prior to alighting. In practice they might, but that is not the expectation. John Barry, FAA/AIR-6B1, agreed that it is unrealistic to expect that pilots on approach are looking at the airport diagram. Rune, AOPA, agreed and also said that he had seen the safety study and there was not a recommendation to revise Hot Spots to mitigate landing risk.

Valerie explained that the few existing Hot Spot descriptions that were published using the words "wrong surface *landing* risk" were published in error and should have been reworded by the Airport Mapping Team in conjunction with the Runway Safety Office prior to publication. Bob Carlson, FAA/AJV-524, stated that the Airport Mapping Team would work with Runway Safety to arrive at text acceptable for the errant entries so that they can be republished in compliance with current guidance. Bob suggested that simply removing the term "landing" so that these entries read "wrong surface risk" would probably solve the issue in most cases. Cheri agreed with this plan, will work with the Airport Mapping Team to correct the existing errant entries and will ensure that future Hot Spot submissions from Runway Safety do not speak to "landing" risk.

Charles Wade, Delta Air Lines, asked if the FAA has criteria that identifies which areas of an airport are high enough risk to qualify as a Hot Spot. Cheri said that there is no specific criteria, but that they are charted at airport locations that have known issues. Rich Boll, NBAA, said that there seems to be a growing use of Hot Spots for issues other than runway incursions. Cheri said that her office does a lot of coordination locally to determine problem areas, but agrees that the decision to create a Hot Spot is subjective. She said that her office tries to be proactive rather than reactive, while at the same time trying to keep the number of published Hot Spot to a minimum.

Valerie indicated that Airport Mapping Team will work with the Runway Safety Office on the specific verbiage to use in order to correct the errant published Hot Spots that contain "landing" risk wording. She also pointed out the consensus of the room that Hot Spots have started to proliferate and that perhaps the Runway Safety Office should look into tightening publication requirements to reduce the number of Hot Spots and to ensure that Hot Spots are not used for identifying commonplace airport situations (such as short taxiways between runways) that pilots are expected to know how to handle. Cheri agreed and stated that she would take this input to her management in Runway Safety.

STATUS: CLOSED

18-02-327 IAP Chart Modernization

Rich Boll, NBAA, briefed the topic. Rich presented four recommendations to modernize and improve the presentation of Instrument Approach Procedure (IAP) Charts.

1. Remove the Airport Sketch from Approach plates concurrent with the addition of an Airport Diagram for every airport published in the Terminal Procedures Publication (TPP)
2. Remove Military Minimums
3. Incorporate Remote Altimeter Setting Source (RASS) as a separate line of minima
4. Incorporate Inoperative Components into a separate line(s) of minima

Discussion started with the proposed changes to the lines of minima, which would involve deletion of remote altimeter notes and inoperative component notes and incorporating those values in the exiting minima table. Rich reviewed two different ways the new lines of minima could be incorporated into the existing tables, stacked or side-by-side (See example charts). Valerie Watson, FAA/AJV-553, stated that Divya Chandra, who works with the Volpe Human Factors Office, stated a preference for the side-by-side depiction as less apt to be misread. John Bordy, FAA/AFS-420, questioned whether it is worth the space on the chart to add the Inoperative Minimums considering they are not often used. Rich stated that he finds value in having them on the Jeppesen charts and would like to see the same on FAA charts.

With regard to the removal of the airport sketch, Vince Massimini, Mitre, stated that he believes the sketch is of high value to pilots. He commented that, particularly at smaller airports, the airport sketch helps with situational awareness and ensuring proper alignment with the runway, particularly when performing a circling approach.

Dave Stamos, NGA, stated that the Department of Defense (DoD), across all service branches, does not support removal of the airport sketch, even with addition of an airport diagram. He said that a significant portion of military operations utilize circling and non-precision approaches and pilots do not want to flip pages to see the airport layout. He stated that military pilots want the added situational awareness provided by the current sketch depicting the final approach course. With regard to the proposal to remove the military minimums, he objected because having the ceiling and visibility on the chart helps to avoid situations where pilots are doing mental math in the cockpit. With regard to the addition of inoperative minimums, he said that this can be done during flight planning and does not need to be added to the charts. He stated that NGA and DoD non-concurs on all of these proposed changes.

George Bland, USAF, commented that the military is still using paper charts and that there are still things that they need to see on the charts. He said that they will not be able to agree to get rid of the sketch right now, but can look towards that in the future.

Rune Duke, AOPA, reported that AOPA had reached out to their membership in a survey to see how their pilots felt about these proposed changes. The conclusion of the survey found that pilots prefer the side-by-side minima depiction 2:1 over the stacked minima depiction or the current depiction. There were concerns expressed about the loss of the sketch, however only 23% preferred the current depiction over the newer alternatives. Pilots surveyed by AOPA also questioned the need to depict RASS on the charts.

Tom Loney, Royal Canadian Air Force, stated that in Canada, they changed their chart format and removed the airfield sketches from approach charts. He said he and others resisted the change at first, but five years later, he said that it has not been an issue. He said they do show a small graphic depiction of the approach lights with a track line.

John Blair, FAA/AFS-410, said that he shares the concerns of others over the loss of airport sketch. He pointed out that situational awareness is important, especially on offset procedures. He asked if there is a way to still capture the runway alignment intercept angle on the chart. Rich stated that they haven't looked at that yet, but perhaps a smaller sketch could be considered. George stated that NGA does not like to take exception to the specifications and that they would like to work to find a common goal.

There was agreement within the audience that the best way to move forward was through the establishment a workgroup to come up with new ideas and examples. Rich agreed to chair the workgroup.

Workgroup			
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STATUS: OPEN

ACTION: Rich Boll, NBAA, will report on progress if the IAP Chart Modernization Workgroup.

18-02-328 Standardizing RP* Notation

Felipe Cocco, Ethical Culture Fieldston School, presented the new recommendation. He stated that despite several past ACF/ACM discussions on the RP* notation on Visual Charts, the current charting still causes confusion in the pilot community. Currently, the RP* indicates that pilots need to refer to the Chart Supplement for additional information. He stated that he believes pilots misinterpret the meaning and think that RP* indicates that all runways have right traffic. He also pointed out that the symbology used on the chart varies in terms of depicting an asterisk versus a star and in how much space there is between the RP and the symbol. He recommends that the RP* notation be standardized and he also recommends moving the asterisk to before the RP to be consistent with the way asterisks are used with lighting symbology (*L).

Rune Duke, AOPA, agrees with putting the asterisk first. Rune asked if the examples with RP* are all due to glider traffic. George Bland, USAF, stated that the military uses RP* for other information too. Valerie Watson, FAA/AJV-553, stated that charting doesn't look at the content of the information included in the Chart Supplement. If there is information there, the notation on the chart will be RP*.

Rick Fecht, FAA/AJV-5223, said that inconsistent depiction of the notation on the charts is due to old fonts being mixed in with new fonts. He said the Visual Charting Team will fix the inconsistent depiction on the charts. For the notation to change to *RP, there would have to be a specification change processed.

Valerie polled the audience and determined that there is concurrence for the revised depiction to *RP when a user needs to go to the Chart Supplement to read the details of which runways use right traffic and for what types of aircraft. She said she will draft an Interagency Air Committee (IAC) Specification change to standardize the depiction of the asterisk on the charts and the Legend. She will also look at the language in the Chart User's Guide and Aeronautical Information Manual (AIM) to see if it sufficiently explains the meaning of the asterisk in the RP notation.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-553, to draft an Interagency Air Committee (IAC) Specification change to standardize the position of the asterisk in the RP notation on Visual Charts.

ACTION: Valerie Watson, FAA/AJV-553, will investigate updates to the language in the Chart User's Guide and Aeronautical Information Manual (AIM) to see if it sufficiently explains the meaning of the asterisk in the RP notation.

VII. Closing Remarks

Valerie Watson, FAA/AJV-553, thanked the attendees for their participation and voiced special appreciation to Rune Duke and to AOPA for hosting the ACM.

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/afx/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 meeting or provide the Chair, Valerie Watson (with an informational 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, FAA/AJV-553, for presentation assistance for the CG portion of the forum, conference support pre- and post-conference, and to Alex Rushton, Contract Support to FAA/AJV-553, for taking the minutes and conference support pre- and post-conference.

VIII. Next Meeting

ACM 19-01 is scheduled for April 23-25, 2019, host ALPA, Herndon, VA

IX. Attachments

a. 18-02 Attendee Roster
b. Office of Primary Responsibility (OPR)
c. List of Abbreviations Used in Minutes