

Government/Industry Aeronautical Charting Meeting (ACM)
Meeting 21-02
Charting Group
October 26-28, 2021

CHARTING GROUP MINUTES

I. Opening Remarks

FAA, Aeronautical Information Services (AIS) hosted the Charting Group portion of the Aeronautical Charting Meeting (ACM) on October 26-28, 2021. Due to the impacts of the COVID-19 pandemic, this meeting was held virtually. Samer Massarueh, FAA/AJV-A223, opened the meeting on Tuesday, October 26. Samer recognized and introduced Valerie Watson, FAA/AJV-A250, Chair of the Charting Group. He then acknowledged Jeff Rawdon, FAA/AFS-420, Chair of the Instrument Procedures Group (IPG) portion of the meeting held the previous day. Samer provided an overview of the purpose of the ACM, his role as facilitator, and explained how he planned to manage participation for the meeting attendees.

II. Review Minutes of Last Meeting, ACM 21-01

The minutes from ACM 21-01 meeting were distributed electronically via the AIS ACM website: https://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 21-02 meeting was accepted as presented.

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

Discontinuation of VOR Services (VOR MON)

Ernesto Etienne, FAA/AJM-323, provided a [briefing](#) on the Very High Frequency Omnidirectional Range (VOR) Minimum Operational Network (MON) program. The goal of the program is to support the National Airspace System (NAS) modernization goals as it transitions from VOR navigation to Performance Based Navigation (PBN). The plan is to discontinue approximately 34% (306) of VORs in the contiguous United States by 2030.

During Phase 1 (2016-2020), the FAA discontinued 82 VORs. In Phase 2, the FAA plans to discontinue the remaining 224 VORs. [Slide 5](#) of the presentation summarizes the VOR MON program status. [Slide 6](#) shows the 16 VORs that have been discontinued since ACM 21-01 and [slide 7](#) shows the discontinuances planned through March 24, 2022.

Ernesto briefly touched on the changes related to VOR Standard Service Volume (SSV) classes. Dale Courtney, FAA/AJW-263, provided a more detailed briefing on this topic (see the [NAVAID Service Volumes \(DME, VOR, and TACAN\)](#) briefing).

Ernesto stated they are continuing to focus on flight inspection for the new SSVs and mitigation of Instrument Flight Procedures affected by VOR decommissioning. He then provided contact information for the VOR MON Program on [slide 11](#).

Michael Stromberg, UPS-IPA, asked about specific concerns with the Rockford VOR that was discontinued recently. He said he is concerned that flight inspections are not being completed far enough in advance to solve the problems that come up and asked if this is a widespread problem. Dale said he doesn't know the details of the issue at Rockford, but he's not aware of many such issues occurring. He assured Michael that flight inspection is part of the plan and when issues such as these arise, the FAA will delay the discontinuance of the VOR. Ernesto took an action to follow up with Michael on the issues at this location. Valerie Watson, FAA/AJV-A250, suggested Michael also send an email with his concerns to the VOR MON Program office.

Rich Boll, NBAA, stated his concerns regarding the criteria used in the selection of a MON airport. He asked if consideration is given to making changes to the existing non-RNAV procedures at a MON airport to ensure pilots are getting the best possible climb gradient and the lowest possible landing minimums. Pat Mulqueen, FAA/AJV-A440, said the Instrument Flight Procedures (IFP) group was provided with a list of VOR MON safe procedures. He said they do not add any additional requirements to those procedures, but do try to get the lowest minimums possible. Dale said that prior to designating MON airports, the FAA took a holistic look at what would constitute the most useful airport in the event of an outage and considered various specific criteria. He said obtaining the lowest minimums was not a primary consideration, but this could receive reconsideration in the future and the VOR MON Program is open to discussing specific cases. Valerie asked that the contact information provided for the VOR MON program on [slide 11](#) be used in order to provide feedback on specific locations. She also suggested that in future ACM briefings, Ernesto could limit the briefing to an update on the status of the VOR discontinuances since most attendees are now familiar with the program.

NAVAID Service Volumes (DME, VOR and TACAN)

Dale Courtney, FAA/AJW-263, [briefed](#) new NAVAID Standard Service Volume (SSVs) designations. He explained the VOR MON Program is in the process of implementing two new VOR SSVs in order to achieve VOR service within 70 nautical miles above 5,000 feet AGL. The new VOR NAVAID codes are VOR Low (VL) and VOR High (VH). Along with that effort, the NextGen DME Program is implementing two new DME SSVs primarily to support DME-DME RNAV service. The new DME NAVAID codes are DME Low (DL) and DME High (DH). The new NAVAID SSVs are in addition to the legacy SSVs of Terminal (T), Low (L) and High (H) that will remain in use.

Dale explained that the National Airspace System Resource (NASR) database has been updated to accommodate the new SSVs. Effective September 9, 2021, an “SSV” field was added to the TACAN/DME portion of combined NAVAID records in order to separate the SSVs for the component NAVAID parts. Existing NAVAID SSV records are currently reflected in the new field. Starting with the December 2, 2021 effective date, the new SSV types will begin to be populated. The FAA plans to add approximately 25 new SSVs per chart cycle. The examples on [slides 6-9](#) show the revised eNASR NAVAID records.

Valerie Watson, FAA/AJV-A250, showed [examples](#) of the charting and product changes resulting from the implementation of the new SSV types. Impacted products include the IFR Enroute Low and High Altitude Charts, the Chart Supplement Airport/Facility Directory (A/FD) legends and A/FD airport entries, and the explanatory guidance in the Chart Users’ Guide.

John Collins, ForeFlight, asked if coordination of FAA Order 7110.65Z guidance regarding limitations on clearances based on service volumes had been done. John said he is concerned the service volume limitations may unnecessarily block some clearances. Dale said he will look at the language in the Order but, in terms of access in and out of airports, he doesn’t think this will impact clearances because the new SSVs start at 5,000’ above ground level.

Chart Supplement Update

Jeff Lamphier, FAA/AJV-A240, provided an [update](#) on the Chart Supplement modernization effort. He explained that his team is currently working on separating the continental United States (CONUS) publication requirements from the Pacific and Alaska publication requirements. As part of that effort, his team held a Pacific Chart Supplement stakeholder meeting. The workgroup has provided a set of [recommendations](#) which have been posted to the ACM website. Jeff asked that interested parties review the recommendations and provide comments to 9-AWA-AJV-A2-Apt-MapTeam@faa.gov.

Jeff reported that the internal software migration is now complete. His team will continue stakeholder engagement and Charting Notices will be posted prior to the removal of any content. He said current work includes cleanup to fuel entries, the new SSV changes, Pavement Classification Rating (PCR) updates, and enhancements to the XML. [Slide 5](#) shows an example of the types of XML updates being worked. This is happening in two phases. In Phase 1, XML tags will be added to the continuation pages for airport entries. In Phase 2, XML tags will be added for all entries contained in the back portion of the Chart Supplements.

With regard to next steps, Jeff said that the Alaska Chart Supplement stakeholder advisory working group will begin in early December 2021 in coordination with the FAA Alaska Aviation Safety Initiative (FAASI). He also

explained that his team is working on finalizing the documentation of the current state of the CONUS Chart Supplements in the Interagency Air Committee specification by 2022 and the Alaska and Pacific supplements by 2023. This will establish a baseline, allowing for a formal process for adding and removing content in the Chart Supplements in the future. Jeff said his team is also continuing to work with the service areas to find content owners of all published information contained in the Supplements. He said status updates will continue to be given at the ACM. Questions can be submitted to 9-AWA-AJV-A2-Apt-MapTeam@faa.gov.

ICAO NOTAM Policy Briefing

Katie Ludwig, FAA/AJV-A360, [briefed](#) the audience on the Notices to Airmen (NOTAM) modernization initiative and update to NOTAM policy. She explained that the update is designed to address the FAA Reauthorization Act of 2018 and the Pilot's Bill of Rights to ensure US NOTAMs are compliant with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs), and to reduce the overall number of NOTAMs. Katie said Change 2 of the NOTAM Order 7930.2S will be published in December 2021, is designed to reduce the number of unnecessary NOTAMs, and will lay the foundation to publish and implement the full ICAO-compliant NOTAM order by December 2024. Early wins include adding more ICAO-compliant contractions, making Takeoff and Landing Performance Assessment (TALPA) enhancements to support the NOTAM reduction effort, prohibiting Field Condition (FICON) NOTAMs for closed runways, allowing only one FICON NOTAM per runway surface, and updating the FAA permanent (PERM) NOTAM policy so that PERM NOTAMs can be closed once the information in the NOTAM is published elsewhere.

Future updates include continued progress with ICAO compliance, working NOTAM policy to coordinate with FAA system development for ICAO implementation, and coordinating with other states who have recently converted to the ICAO format to ensure we learn from their experiences. Change 3 includes clarification of what does and does not comply with ICAO SARPs and additional guidance on PERM NOTAM issuance. Questions can be directed to the NOTAM Governance Group at the contact information provided on [slide 6](#).

Rich Boll, NBAA, asked to confirm that the FAA is transitioning from the current domestic NOTAM format that pilots are used to seeing to an ICAO standard format for displaying NOTAMs. John Warner, FAA/AJV-A360, said yes, the FAA is transitioning to ICAO format and a digital NOTAM format that is machine readable. Rich expressed his concerns about not knowing what the new format is going to look like to pilots. Katie clarified it will be up to third party vendors how NOTAMs are displayed, but it is expected the change is likely to be largely transparent to the end user.

Jim McClay, AOPA, stated his understanding that there will be minimal impact to users. He said AOPA recently did a survey with their members on NOTAMs and asked whether users read raw or decoded NOTAMs. 82% of users indicated they read decoded NOTAMs, so AOPA hopes the change will be fairly transparent. That being said, they would like to see training/education for pilots.

ICAO NOTAM Implementation

Jennifer Ellison, FAA/AJI-314, [briefed](#) on the FAA's implementation of the International Civil Aviation Organization (ICAO) Notices to Airmen (NOTAM) format. She said the target date for implementation is winter 2024. She said the goal is to implement high quality, discoverable, and accessible ICAO-compliant NOTAMs. She said the FAA will update policies and procedures to incorporate ICAO Standards and Recommended Procedures

(SARPs) and the Federal NOTAM System (FNS) will be updated to publish all NOTAMs in ICAO format. Benefits include the ability to access the right NOTAMs at the right time, enhanced capabilities for sorting and filtering of NOTAM data, and international NOTAM harmonization via standardization with ICAO SARPs.

ICAO Phase 1 is scheduled for spring of 2022. The FNS will receive a software update that improves how it automatically translates digitally originated US NOTAMs into ICAO format. These ICAO-formatted NOTAMs will be available in the NOTAM search website and the NOTAM Distribution Service (NDS). The official format will remain the domestic format and is unlikely to impact users.

ICAO Phase 2 is the full transition to the ICAO format. Phase 2 will require preparation and training. The FAA will adopt ICAO requirements for NOTAMs and will implement these required changes to the FNS. This implementation includes NOTAM formatting, numbering, series, and NOTAM codes. The FAA will provide training to stakeholders both inside and outside the FAA before this change occurs. [Slide 5](#) shows some examples of what users will see in Phase 1 and [slide 6](#) shows some examples of what users will see in Phase 2.

Additional information on the ICAO NOTAM transition is available on the [ICAO NOTAM website](#). Also, on the second Tuesday of each month, the FAA holds a virtual meeting for all interested NOTAM stakeholders. Contact information is available on the ICAO NOTAM website.

Rich Boll, NBAA, asked what the new ICAO format will look like to pilots and whether or not the domestic format will still be available. John Warner, FAA/AJV-A360, said in the future, the ICAO format will be the only format available, however plain language will still be available as part of the new format. John stated it will be up to third party providers how they will display the NOTAMS. Rich asked if the FAA is working on updates to pilot training materials. Jennifer confirmed that there is an internal workgroup planning for those future updates.

Lev Prichard, APA, asked if the ICAO transition will result in a reduction of the number of NOTAMs that a pilot sees. John explained that the new format contains eight fields that can be used to filter and prioritize NOTAMs. This can be used by the third party vendors to reduce the number of NOTAMs a pilot sees.

Valerie Watson, FAA/AJV-A250, asked if efforts are being made to educate third party NOTAM providers so they will understand how to filter and sort NOTAMs. John said that is in the plan and that work will begin once the new format and the systems are finalized. Valerie then pointed out that AJV-A publishes NOTAMs and asked if training on how to publish NOTAMs in ICAO format has begun with FAA offices. Jennifer said they have begun working with NOTAM originators and adequate training will be provided.

Heidi Williams, NBAA, emphasized that the planning for this transition has been going on for years and is being done very deliberately. She said the NOTAM modernization coalition has been working on this for over two years and third party providers are all at the table helping to figure out the requirements. This includes consideration of education and outreach. Jennifer reiterated that they are engaged with stakeholders on a regular basis and anyone who is interested should join their monthly NOTAM stakeholder meetings.

Northeast Corridor Atlantic Routes

Joey Tinsley, FAA/TETL1-ZTL, [briefed](#) on Northeast Corridor Atlantic Routes Project. This is a large-scale change to the National Airspace System (NAS). It is part of a transition to a Performance Based Navigation (PBN)-centric

NAS by adding/amending 39 Q and Y Routes to replace the current north-south high altitude route system along the east coast. These changes are being implemented incrementally on chart cycle effective dates that began 10/10/2020 and are planned to continue through 11/03/2022. Due to the impacts of COVID-19, the implementation dates have been extended because of an inability to conduct controller training.

Joey said the next big revision is the ZDC High Altitude sector change for 11/4/2021. See [slide 7](#) for the changes in 2021. [Slides 9-12](#) show some of the NOTAMs that have been or will be issued. He said most of the NOTAMs will be canceled on 2 December 2021, but some will not be canceled until 2022.

Doug Willey, ALPA, expressed concern about how long the NOTAMs will exist. Joey repeated some of them will be need to be effective until November 2022. Doug said there are too many NOTAMs that exist for too long. He asked if there are other ways to get this information to pilots. Joey agreed that it is unfortunate but this was the only way to get the project done. He said they hope to be able to accomplish it faster in the future. Valerie Watson, FAA/AJV-A250, agreed that publishing a regulatory route and then immediately issuing a NOTAM to NA it out for a year is indeed unfortunate in that it clutters the charts and the NAS with a large amount of totally unusable data for an extended period of time. She asked if it could have been pre-planned and could be avoided in the future. Joey explained that the goal was a 56-day NOTAM, but it hasn't worked out that way because of the time that it takes for rulemaking. Bennie Hutto, NATCA, said he agrees with Valerie's concerns, but he said that until there is a better and quicker way to amend procedures, NOTAMs will have to be utilized to accomplish this project.

Noise Abatement

Kent Duffy, FAA/APP-410, provided a [briefing](#) on noise abatement information contained in the Chart Supplement. He explained his team's plan to standardize noise abatement information in the Chart Supplement so that it can more easily be found and understood by pilots. He said this project intends to implement a best practices guidance document which will be used to develop new noise abatement remarks and to incrementally revise existing noise abatement remarks to ensure they use consistent terminology and structure.

Kent explained that a standardized taxonomy ([slide 6](#)) will be used to apply structure to the noise abatement instructions so they are conveyed to pilots in a repeatable way. The best practices document includes standardization of the following information: terminology and nomenclature, use of abbreviations, times in Zulu, altitudes in Mean Sea Level (MSL), and miles in Nautical Miles (NM). Redundant and excessive wording will be removed. Kent provided examples of existing noise abatement entries and showed how they would change when following the proposed best practices ([slides 8-13](#)).

Kent then explained more about the content of the best practices document. He said they want it to be a quick reference for airports to follow when drafting noise abatement entries. He said the content has been organized around common themes in noise abatement instructions so that airports can find the FAA-approved scenario that best applies to their situation and build their noise abatement entries around it. His team is briefing various airport organizations and hopes to have a draft of the best practices document ready for review in winter 2022.

Kevin Allen, American Airlines, applauded the work toward standardization, but stated there needs to be community outreach in order for these noise abatement standards to be accepted. Kent agreed and said that his

team understands the need for buy-in from the operational community. He said there they are working on an update to Advisory Circular 150, which will speak to the need for collaboration among all partners.

Scott Jerdan, FAA/AJV-A310, said AJV-A's expectation is that the Office of Airports will review all noise abatement instructions before they are submitted to the Aeronautical Information Portal for databasing and publication. Kent agreed and said that is the intent.

Rich Boll, NBAA, asked whether they have determined which noise abatement procedures currently published in the Chart Supplement are regulatory. Rich provided specific examples of older procedures that are regulatory. Kent said his team will research the regulatory aspect and said he will reach out to Rich about the specific cases he referenced after the meeting.

Joshua Fenwick, Garmin, asked whether some of these entries could be moved from the back of the Chart Supplement so they can be found more easily. Kent said he'd defer to AJV-A on the structure of the Chart Supplement and said coordination with AJV-A will be ongoing on the subject.

AIM Chapter 11 (UAS)

David Russell, FAA/AUS-430, [briefed](#) on the new Chapter 11 added to the Aeronautical Information Manual (AIM) focused on Unmanned Aircraft Systems (UAS). He said adding a chapter directed at UAS pilots will assist with the integration of UAS operators into the NAS. Currently UAS are mentioned in several places in the AIM, but are treated as impediments to aviation. The new chapter will be addressed to remote pilots, recreational flyers, as well as to manned airmen to foster more understanding of UAS operations. David then described the new sections covered in AIM chapter 11 ([slides 6-17](#)). He said the FAA was hoping for a December 2021 release, but it will more likely be released in June 2022.

Scott Jerdan, FAA/AJV-A310, asked about recent activity in Alaska to create airspace and routes for UAS. David said Congress directed that the FAA assist Alaska in setting up some test sites that could launch and operate UAS over the ocean. Scott asked if policy will be developed to support the Alaska initiative. He said he is looking for a connection between the AIM guidance and new policy. David said they are not creating new types of airspace or procedures, but are working to establish routes that will take UAS from designated launching facilities to testing sites. Scott said there are third party vendors that might be interested in supplying this information to their customers. Joshua Fenwick, Garmin, said that is exactly the sort of information Garmin would be interested in. He said they need to be part of the discussions so they will be ready to provide navigation database solutions. Valerie Watson, FAA/AJV-A250, said that if AJV-A will be expected to database and/or chart the routes, they will also need to be part of the discussion. David said he will take those responses back to his office.

Airports Data and Information Collection Program

Drew Goldsmith, FAA/AAS-120, gave an [update](#) on the Airports Data and Information Collection program. In response to the FAA Reauthorization Act of 2018, Section 314, the Office of Airports has updated their Airport Data and Information Portal (ADIP). They have simplified, consolidated, and streamlined the current disparate data entry and management into a single platform. This allows users to easily view and search airport/heliport data including the options to extract the data into a CSV file and to download Airport Master Record (5010) forms. Drew explained the variety of airport data collection applications available in ADIP.

Drew said that Section 314 requires the FAA to assess the availability of information regarding helicopter air ambulance operation data and reports. He said the Office of Airports has collaborated with government and industry stakeholders and is working to update and validate all heliport data in ADIP as well as working to make the data more accessible to the general public. Drew explained the new heliport data features that will be added ([slides 12-17](#)).

Drew explained that they are working to modernize the existing policy and forms and to streamline the workflow. Currently airport and heliport owners must use multiple applications to submit changes. With ongoing developments, all changes can be submitted and managed from ADIP. [Slides 20-28](#) show the workflow users will see in ADIP. Future enhancements include data for vertiports, droneports, and spaceports.

Joshua Fenwick, Garmin, said Garmin supports this initiative and is excited about the enhancements to the data. He asked if there is a plan to provide the extra information in the National Airspace System Resource (NASR) so it can be made available for public download. Drew said the Office of Airports is working collaboratively with Aeronautical Information Services (AJV-A) to determine how to parse and share the information with the public.

Scott Jerdan, FAA/AJV-A310, confirmed they are working with the Office of Airports to figure out what new NASR data fields should be created and what they will look like. He said changes will be reported in the subscriber files and in the National Flight Data Digest (NFDD). He said there may also be resulting Chart Supplement changes.

Mike Webb, FAA/AFS-420, said he would also like to be part of the discussions. He said in Flight Standards they have been working to update their methodology in order to provide more accurate data in ADIP.

V. New Charting Topics

[21-02-362 Graphic Circling Restrictions on Instrument Approach Procedures](#)

Rich Boll, NBAA, [presented](#) the new recommendation. NBAA proposes graphically representing circling restrictions on Instrument Approach Procedure (IAP) charts. He explained that circling restriction information is currently published as briefing strip notes and the notes are subject to varying interpretation. He pointed out the notes are not published in a consistent way, leading to more potential confusion.

Rich showed an example of a Canadian chart with a graphic depiction of a circling restriction and said other countries also provide the information in this way. He said graphically depicted circling restrictions are easier for pilots to interpret, brief, and quickly reference during the approach. A graphic depiction would also eliminate variations in the textual description of these areas and/or differences in interpretation of the textual descriptions. The change will benefit pilots and other users of the approach chart including air traffic controllers. This is not the first time this issue has come to the ACM ([see Issue 00-02-126](#)). Rich feels that it was not adequately discussed before it was withdrawn and that this issue should be revisited.

Lev Prichard, APA, and Michael Stromberg, UPS-IPA, expressed their support for the graphic depiction.

Joshua Fenwick, Garmin, said he thinks this is a great idea however he expressed concern for how to deal with conditional circling NA areas, such as NA at night. He said he would like to see changes to the way the notes for restrictions are worded today to better define the area in a way not so subject to differing interpretation. Rich said he thinks conditional circling areas should be part of the graphic, not part of the note. John Moore, Jeppesen, expressed his concern about the amount of white space that will be used if there are multiple graphics or variable conditional restrictions. He said the group will need to look at more complex examples before making any decisions.

Jeff Rawdon, FAA/AFS-420, would like to see an example with conditional circling restrictions. He said this recommendation is going to take a considerable amount of time and research and that there are a lot of things that would need to change as part of the work, e.g., FAA Orders, Aeronautical Information Manual, Instrument Procedures Handbook, charting specifications. He said it would also take a long time for all the IAP charts to be updated. Rich said he understands this would be a day forward implementation and doesn't see that as a problem. Valerie Watson, FAA/AJV-A250, agreed that most changes to terminal products are implemented on a day forward basis and that should not present issue. She also agreed that changes to guidance and explanatory matter would of course need to be addressed were this proposal to move forward.

Kevin Keszler, AFFSA, agrees this is a good idea, but also agrees there will be obstacles to overcome. He pointed out that the Canadian charts are formatted differently and that they have more room for the graphic depiction in the planview. He also suggests looking at what the Chart Modernization Working Group is doing before making decisions, since their work, such as standardizing where things go, might affect decisions about this recommendation. Rich isn't opposed to bringing this issue under the Chart Modernization Working Group, but doesn't want to make it a dependency. Valerie voiced that she does not believe this issue should be tied to or dependent on the Chart Modernization effort and should be considered independently.

Valerie summarized that there clearly seems to be audience consensus that a graphic depiction of circling restrictions is desirable and should be investigated, but there are concerns about how to depict conditional restrictions that could involve additional notes or the publication of multiple circling graphics. She said more investigation is definitely needed. She then pointed out that it is likely the language describing circling restrictions needs to be clarified regardless of where this recommendation goes. She stated that if the current guidance for circling NA text today results in the publication of notes of insufficient clarity that are misinterpreted by pilots, those notes will be undoubtedly be misinterpreted by chart producers attempting to create a graphic. She suggested the 8260.19 guidance for the publication of these notes be examined.

Bill Tuccio, Garmin, asked whether this recommendation includes circling not authorized to a runway, or is it just cardinal directions. Rich said he was originally not planning to include those and they would remain as a note. Bill said he would like to see a human factors study on this proposal.

Diane Adams-Maturo, FAA/AFS-420, asked if the problem that is causing confusion is really with the way that the notes are written. If so, she suggested that we start there and do some work to make the notes more understandable. Rich agrees that if we can improve the notes, that would help, however even if you improve the clarity of the notes, he believes a graphic depiction is preferable.

Jeff Rawdon said he would like to keep this recommendation within its original scope. He doesn't think it should be expanded to include the conditional circling notes. He also does not believe it should be tied in with the Chart

Modernization effort. He suggested that the issue remain on the agenda for the FAA to investigate the recommendation further and determine next steps.

Valerie said it would be helpful to look at a few complicated examples and develop prototypes for the next meeting to show how those instances might be depicted. Krystle Kime, FAA/AJV-A222, said she sees validity in this recommendation. She pointed out that with some of the more complex scenarios that were discussed, it is possible that they may have to remain as notes. Regardless, she said she can investigate the charting aspect and come back with suggestions. Rich said he would like to restrict the recommendation to circling restrictions within the maneuvering areas and the rest can remain as chart notes.

Jeff clarified that there will be an FAA review of the recommendation and the FAA will report back at the next ACM. Valerie asked whether Flight Procedures and Airspace Group is willing to look at standardization of the notes format guidance as Diane had suggested. Jeff said that will be part of the agency review.

STATUS: OPEN

ACTION: Jeff Rawdon, FAA/AFS-420 will report back on the FAA's review of graphic circling restrictions on Instrument Approach Procedure Charts.

[21-02-363 Simplification of Airport Sketch Final Bearing](#)

Kevin Carter, NGA, presented the new recommendation. He explained that simplification of the airport sketch final course bearing was previously discussed at the ACM ([Item 12-02-257](#)) and had widespread support, but was ultimately withdrawn because the National Geospatial-Intelligence Agency (NGA) did not concur. Since then NGA has had a change of direction and now advocates for this proposal. Kevin explained that, depending on the type of procedure, there are several different ways that the final approach track note is depicted in the airport sketch. Additionally, he said the military and FAA may have different presentations of the information. He said some of these distinctions can lead to pilot misinterpretations. NGA proposes the removal of all information with the exception of the final numerical bearing. This gives pilots a quick and easy way to determine how they can expect to be aligned with the intended landing runway. Kevin said this proposal is tied to the recommendations that are coming out of the Chart Modernization Workgroup, however if there is ACM support, he would like to move forward with the Interagency Air Committee (IAC) specification change regardless of the future outcome of the Chart Modernization endeavor.

Valerie Watson, FAA/AJV-A250, further explained that all of the information proposed to be removed from the final course text is clearly presented in the planview and/or the profile sections of the chart. Krystle Kime, FAA/AJV-A222, said Terminal Charting supports this recommendation.

Jeff Rawdon, FAA/AFS-420, asked to confirm that what is charted now is driven only by the IAC charting specification and that the information is not taken from the procedure source form. Krystle and Val confirmed that is correct and no changes to the forms are needed.

An ACM audience poll was conducted and there were no objections to the recommendation. Valerie said as this proposal was brought to the ACM by NGA, their representative can submit an IAC specification change. Kevin agreed to initiate this action.

STATUS: OPEN

ACTION: Kevin Carter, NGA, will submit an Interagency Air Committee (IAC) specification change for the simplification of the airport sketch final course bearing.

[21-02-364 Airport Sketch – Final Approach Track](#)

Rich Boll, NBAA, [presented](#) the new recommendation. This proposal ties in with Recommendation Document [21-02-363](#) and comes out of the Chart Modernization Workgroup. Rich explained that currently the charting specification requires the final approach track to be shown in the airport sketch box only when the missed approach point (MAP) lies inside the boundaries of the box. When the MAP is located prior to the airport sketch parameters, a final approach track is not shown. Pilot participants in the Chart Modernization workgroup generally agreed on the benefit of always depicting the final approach track in the airport sketch. Depicting the final approach track assists pilots in identifying the runway environment and their alignment to it during the transition from instrument to visual conditions. There was significant concern expressed by the charting community present in the workgroup that depicting the final approach track beyond the MAP could imply that the path is safe to fly beyond the MAP ([slide 6](#)).

Rich brought this issue before the ACM to determine if it is desirable to revise the Interagency Air Committee (IAC) specifications so the final approach track is always charted on the airport sketch regardless of the location of the MAP in relation to the sketch boundary. He said this change does not include the current prohibition on depicting the final approach track on ILS Cat charts. He pointed out that NGA has filed an exception to the current IAC specification and the final approach track is depicted in the sketch on their charts regardless of MAP location.

Michael Stromberg, UPS-IPA, said he supports always depicting the final approach track because pilots use it for lining up to the runway regardless of where the missed approach point is.

Valerie Watson, FAA/AJV-A250, restated the concern that if the arrow is shown coming into the airport environment (see the bottom right example on [slide 7](#)), that's really not the angle the pilot will be flying at that point in his approach, so it may be deceptive. Rich said this helpful to pilots and it is something they can use to identify that there may be an offset. Valerie said perhaps the incoming track should be renamed "final approach track extended" to capture this idea.

Jeff Rawdon, FAA/AFS-420, asked if a safety review is done as part of the IAC specification change process. Valerie said Safety Management System (SMS) reviews are not done on IAC specification changes, so it would have to be done prior to that if deemed necessary. Jeff thinks valid safety concerns have been raised and that a safety review is necessary before moving forward with this recommendation.

Doug Willey, ALPA, does think the depiction is helpful for alignment to the runways and expressed support for this change. John Barry, FAA/AIR-622, agrees that it helps with alignment. He suggested it may be helpful to use a different line type for instances when the MAP occurs prior to the airport sketch boundary. Bill Tuccio, Garmin, expressed some concerns and said when the MAP is far away, showing the final approach track extended in the

sketch can be misleading. Rich said one of the purposes of the airport sketch is to transition the pilot from instrument to visual conditions. Having the final approach track aids in that orientation.

There was general support for this recommendation, but some concerns were voiced. Valerie stated that Jeff Rawdon's position is that we shouldn't move forward with this recommendation until a safety risk analysis is done. Jeff said he didn't know which group would be responsible conducting the analysis, but there will be an FAA review of the recommendation to determine the next steps.

STATUS: OPEN

ACTION: Jeff Rawdon, FAA/AFS-420 will report back on the FAA's review of the recommendation to show the final approach track extended in the airport sketch including a determination regarding the necessity of a Safety Management System (SMS) review.

[21-02-365 Add SSV Classification to IFR Low Altitude Enroute Charts](#)

John Collins, ForeFlight, presented the recommendation. He proposed that all NAVAID facility boxes on IFR Low Altitude Enroute charts include Standard Service Volumes (SSV) designations. The Interagency Air Committee (IAC) charting specification currently says that the SSV will only be shown on IFR Low Altitude Enroute charts when the SSV of the NAVAID as a whole or either component part of a combined NAVAID has been designated as "Terminal". John said that with the new types of SSV, it is important for a pilot to determine if the VOR they are using has an extended service volume, e.g., if a VOR is (L) or (VL), (H) or (VH). John pointed out that it will take a long time for all NAVAIDs to transition to the new SSVs so he is requesting they all be shown on the IFR Enroute Low Altitude charts.

Valerie Watson, FAA/AJV-A250, suggested, for the sake of simplicity and because it would be easier for chart automation, that all NAVAID SSV designations be shown on both the IFR Enroute Low and High Altitude charts. John agreed with that suggestion. Valerie asked the audience if there were any objection to charting all NAVAID SSV designations on both chart series. No objections were voiced. Valerie said she will begin work on an Interagency Air Committee (IAC) specification change.

STATUS: OPEN

ACTION: Valerie Watson, AVJ-A250, will process an Interagency Air Committee (IAC) specification change to depict all NAVAID Standard Service Volume (SSV) types on IFR Low and High Altitude Enroute charts.

[21-02-366 Chart Supplement Remarks in List Format](#)

Randy Collier, Aerologic, presented the new recommendation. He proposed that airport remarks in the Airport/Facility Directory (A/FD) section of the Chart Supplement be placed in list format rather than in the current wrap-around text format. Randy asserted this change in format would make the information easier to read and easier to find specific subject information more quickly. He provided [examples](#) in the current and proposed format.

Valerie Watson, FAA/AJV-A250, noted Takeoff Obstacle Notes in the Terminal Procedures Publication were similarly revised to one entry per line and the charting organization has received positive feedback from users on that change. Valerie asked whether audience participants supported this change to the A/FD entries.

Rich Boll, NBAA; Doug Willey, ALPA; and Mike Stromberg, UPS-IPA, all said they fully support this recommendation. Bill Tuccio, Garmin, said he also agrees, however he thinks user evaluations should be done first in order to get pilot feedback. John Collins, ForeFlight, also expressed support for the idea, but he would like to see a numbered list rather than a bulleted list. Randy agreed with numbering the data elements so they are easier to identify and discuss with others. John Barry, FAA/AIR-622, further suggested that if a numbered list was used, it would be helpful to include in parentheses to indicate how many items were listed in case the entry carries over to the next page.

Michael Betz, FAA/TCID1-ZID, would also like to see a standardized format for the order in which the notes are presented. Valerie said it is a legitimate request, however reordering the notes is beyond the scope of this recommendation she suggested that unless the Chart Supplement production team wished to look at that aspect, this proposal would be limited to listing the existing remarks one per line.

Jeffrey Lamphier, FAA/AJV-A240, supports the proposal as well and agrees that it does make the information easier to read. He cautioned that this will increase the size of the remarks section, particularly at larger airports. He also said it's important to still consider the paper users of the Chart Supplement because this change could potentially increase the size of the A/FD section by 25%. With regard to the comments regarding changing the order of the notes, Jeff said that would be a much more complicated change that would have to be worked as a separate recommendation. Entries are pulled directly from the National Airspace System Resource (NASR) database and as new information comes in, it is currently added to the end of the remarks list. Jeff said the next step for the Chart Supplement Team would be to evaluate what automation changes will be required to implement this change.

Jim McClay, AOPA, agrees it is a good idea. He also agrees that consideration needs to be given to the users still using the paper product. He said AOPA would be open to conducting a small survey of its members to get further input.

Valerie summarized the issue and emphasized that this recommendation is limited to changing the format of airport remarks to one remark per line, not reordering the remarks. Jeff and his team will look into this item in greater detail and determine the level of effort that would be required to make this change.

STATUS: OPEN

ACTION: Jeffrey Lamphier, FAA/AJV-A240, will investigate the level of effort required to revise the airport remarks in the A/FD section of the Chart Supplement to a list format and will report back at the next ACM.

[21-02-367 Improve NASR Storage of GCO Frequencies](#)

Steven Madigan, Garmin, presented the new recommendation. He said as of AIRAC 2109, there are approximately 220 Ground Communication Outlet (GCO) frequencies present in the National Airspace System

Resource (NASR) APT.txt subscriber file. Rather than being stored in the TWR.txt record, which is designed to hold communications frequencies of varying types, the GCOs are stored as textual airport remarks. Garmin recommends a NASR change that would house airport GCO frequencies within the established TWR.txt or other frequency-specific record type.

Scott Jerdan, FAA/AJV-A310, said he agrees with this change and said there is already a major rewrite planned for communications data in NASR. Brian Murphy, FAA/AJV-A350, said he can't give a specific timeline for when this change will be implemented, explaining this is a large ticket item encompassing a great deal of data, but holds a high priority. He said his team has captured the request for GCO frequencies so that it will be part of the rewrite. In the meantime, Brian suggested that Garmin look at the latest NASR subscriber files which include an FRQ.csv file. Using this file enables users to more easily ascertain communication frequencies. He understands that this is not a replacement for what is being asked but it may assist in the interim. Brian said they expect to start working the NASR communications rewrite next year with a potential release date in 2023.

Valerie Watson, FAA/AJV-A250, asked if it was possible to work the GCO piece separately, without waiting for the larger NASR update. Brian said he thinks it would be better to wait for the larger release. Jon Gdowik, FAA/AJV-A313, agrees with the enhancement, but doesn't think it belongs under the tower record. He thinks it might be better as part of the airport record since GCO frequencies are airport specific and many are located at non-towered airports. Steven said he agrees with Jon's suggestion. He also said he had spent some time evaluating the FRQ.csv file and conceded that it is helpful in the interim.

Valerie summarized the discussion. She said the Aeronautical Data Team concurs that GCO frequencies should be in a frequency field, probably best situated in the airport record. She said AJV-A will investigate this further to determine how it will be implemented, but it will likely need to wait to be part of the bigger NASR communications rewrite. In the meantime, the FRQ.csv file included in the NASR subscriber files should provide the information Garmin is looking for.

STATUS: OPEN

ACTION: Brian Murphy, FAA/AJV-A350, will report back on AJV-A's plan to provide airport GCO frequencies in a dedicated field in in the NASR database.

VI. Outstanding Charting Topics

[15-02-298 Charting GLS DMax \(Service Volume\)](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. At the last ACM, Joel Dickinson, FAA/AFS-410 said the Flight Operations Branch does not support a charted depiction of GLS service volume and proposed closure of this item based on the guidance that has been published in the Aeronautical Information Manual (AIM). Valerie Watson, FAA/AJV-A250, said she has spoken with the original proponent of this issue, Ron Renk, United Airlines, and notified him of AFS's lack of support for the proposal. Ron agreed with closing the issue.

STATUS: CLOSED

[16-02-310 Inclusion of MSA Info for ODPs, SIDs & STARs](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Sue Walker, FAA/AFS-420, reported that FAA Order 8260.46H has been published and includes the criteria for Minimum Safe Altitudes (MSAs) on graphic Departure Procedures. She said software improvements are needed before implementation can occur so a memo was issued delaying implementation until as late as fall 2022. Sue said she doesn't expect to see MSA information on charts until spring 2023, however it could happen earlier. Valerie Watson, FAA/AJV-A250, recommended closure of this item since the both the criteria and the charting specifications are in place. There was agreement to close.

STATUS: CLOSED

[17-02-311 TFR Charting: Recommendations of the RTCA Tactical Operations Committee](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Katie Murphy, FAA/AJV-A214, reported that as of the 12 August 2021 effective date, all National Defense Airspace Temporary Flight Restrictions (TFRs) designated by the FAA System Operations Security office are depicted on the VFR charts. Scott Jerdan, FAA/AJV-A310, said his team reached out to the System Operations Security office regarding whether the DC SFRA should qualify and be charted as a National Defense Airspace TFR Area. He reported no response has yet been received. John Collins, ForeFlight, agreed to close this recommendation and will consider submitting a separate recommendation regarding the charting of the DC SFRA.

STATUS: CLOSED

[17-02-312 Standardized Communications on DPs and STARs](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. The ACM supported the automatic depiction of ATIS and APP CON on Standard Terminal Arrival (STAR) charts and DEP CON on Departure Procedures (DPs). Other communication types will be depicted only when specifically requested on the procedure source document prefaced with the command word "CHART." For STARs, FAA Order 8260.19 has been published with the revised guidance, the Interagency Air Committee (IAC) Specification change has been signed and changes are already being applied to procedures as they are amended. For DPs, Sue Walker, FAA/AFS-420, reported that FAA Order 8260.46H was updated and published in June 2021. Valerie Watson, FAA/AJV-A250, reported that the IAC specification change for DPs has been approved and the targeted implementation date is 19 May 2022. She emphasized that, as with Arrivals, the change will only be applied to procedures as they are formally amended (upnumbered), affording procedure proponents the opportunity to request communication types in addition to the standard. Valerie said that since the criteria and charting specifications changes are now complete and an implementation plan is in place, she proposed closure of this item. There were no objections.

STATUS: CLOSED

[17-02-314 Charting of ILS Classification System for Category I ILS Approaches](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Joe Lintzenich, FAA/AFS-410, reiterated this is a complicated issue and reported it is still under discussion within the Flight Operations Branch. He reminded the

group the FAA publishes an [ILS Procedures & Components List](#) that contains a full list of ILS procedures and related components.

Matt Harmon, FAA/AFS-410, reported that Mike Melssen, FAA/AFS-410, is still working on adding Category I Autoland guidance to AC 120-118. He said they are also still considering the publication of a Safety Alert for Operators (SAFO).

Rich Boll, NBAA, asked if the information that is included in the [ILS Procedures & Components List](#) can be added to the Aeronautical Information Manual (AIM). Valerie said the link is on the AJV-A website, but adding a reference in the AIM was beyond her authority. Matt said there is also a link to the spreadsheet on the Flight Operations Group section of the FAA website. He believes a change request was opened to add the link to the AIM, but will confirm.

STATUS: OPEN

ACTION: Mike Melssen, FAA/AFS-410, will report on the effort to publish Category I Autoland guidance in AC 120-118. He will also report on the publication of a Safety Alert for Operators (SAFO) and the addition of a link in the AIM to the [ILS Procedures & Components List](#).

[17-02-318 Charting of Helicopter Routes per RNP NAVSPEC 0.3](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Mike Webb, FAA/AFS-420, reported that since the last ACM there have been difficulties with converting what will become TK routes from specials to public use. He said they are awaiting environmental approval. The FAA is continuing to develop the route structure so they will be ready to be converted to public use, but all routes will continue to be processed as specials at this time. Mike said it is likely to be some time before any public use RNP NAVSPEC 0.3 routes are published.

Valerie Watson, FAA/AJV-A250, summarized the issue. She said FAA Form 8260-16 has been updated to include an RNP field, the National Airspace System Resource (NASR) database has been updated to add an RNP attribute to the airway resource, and the Interagency Air Committee (IAC) specifications to support the depiction of RNP values on TK Routes on IFR Enroute Low Altitude charts are in place. As a result, when the first public use RNP NAVSPEC 0.3 route is ready, publication can occur. Valerie proposed closing this item. There was no objection.

STATUS: CLOSED

[18-01-323 Standardizing the Labeling of Parking Areas on Airport Diagrams](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Jim McClay, AOPA, [briefed](#) that AOPA's airports team is encouraging the voluntary adoption of the ACM-supported airport diagram labels. Of the airports they have contacted, about 80 have or are in the process of updating their labels to comply. Jim showed examples of the three airport diagrams that have incorporated the new terms. He said though there is general consensus on use of the terms, there is not agreement that FAA can or should impose use of them as a standard. He said the Office of Airports wants to first make sure there is industry concurrence on the new terms and that there is widespread use of the terms before they move forward with sanctioning them. In the meantime, AOPA will continue to encourage voluntary adoption. Jim would like to keep the recommendation open at least until the

April meeting to see if any progress can be made with the Office of Airports. Valerie Watson, FAA/AJV-A250, agreed that this recommendation can remain open until the next ACM.

STATUS: OPEN

ACTION: Jim McClay, AOPA, will continue to coordinate with industry and the Office of Airports to sanction use of the proposed terms and update their relevant guidance/documents. He will report back at the next ACM.

18-02-327 IAP Chart Modernization

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Rich Boll [reported](#) on the progress of the Chart Modernization Working Group. He said there have been multiple meetings since the last ACM and the workgroup has developed a set of [recommended changes](#) to Instrument Approach Procedure (IAP) charts. The workgroup also met with FAA/AFS-420 in August to discuss future criteria changes that will be necessary if the proposal is to be implemented. It is expected that a formal Safety Risk Management (SRM) review of these proposed changes is going to be necessary and the hope is that the workgroup's recommendation document will assist with that review.

Rich then summarized the recommended changes. He pointed out that the workgroup recommends that all changes be implemented concurrently since they are interrelated and codependent.

- Airport Diagram ([slides 7-9](#)) – Every airport with a public use IAP will have an Airport Diagram. The content will be expanded to include selected information from the current IAP chart Airport Sketch. Principle changes include the addition of runway and approach lighting information and the addition of Pilot Controlled Lighting (PCL) information. See the slides for benefits and negatives. There are no identified hazards or mitigations.
- Expanded Profile View ([slides 10-11](#)) – The Profile view box will be expanded with the Airport Sketch preferably located on the right side of the profile. See the slides for benefits and negatives. There are no identified hazards or mitigations.
- Simplified Airport Sketch ([slides 12-18](#)) –A simplified, smaller Airport Sketch will be shown that will only include runways, runway numbers, runway length, final approach course and bearing (when the final approach course is within the scale of the sketch box), the declared distance icon if applicable, and helipad symbol (if applicable, scaled to 50%). See the slides for further discussion regarding the principle changes. [Slides 16-18](#) identify hazards and mitigations.
- Landing Minimums ([slides 19-21](#)) – Inoperative Component minima will be incorporated into the Landing Minima Box. See the slides for benefits and negatives. There are no identified hazards or mitigations.
- Time/Distance Table ([slides 22-23](#)) – The Time/Distance Table will be slightly smaller and repositioned to the top of the Airport Sketch box. See the slides for benefits and negatives. There are no identified hazards or mitigations.
- Briefing Strip Lighting Box ([slides 24-26](#)) – A Briefing Strip Lighting Box will be shown to include VGSI and ALS lighting information for the primary runway associated with a straight-in IAP. See the slides for

further discussion regarding the principle changes and for benefits and negatives. There are no identified hazards or mitigations.

Diane Adams-Maturo, FAA/AFS-420, asked whether displaced thresholds would be included in the simplified airport sketch. Rich said displaced thresholds will not be included but are depicted on the Airport Diagram.

Jeff Rawdon, FAA/AFS-420, asked if the implementation will be day-forward. Rich said yes. Jeff said the charting changes will take a long time to implement. Rich agreed and said the FAA Forms and processes will have to be changed and once the implementation begins, the charts will slowly be updated to the new format. Valerie Watson, FAA/AJV-A250, pointed out that updates to the charts will depend on the existence/creation of a full sized airport diagram for each location and assured that would be coordinated internally.

Jeff then asked if Remote Altimeter Setting Source (RASS) minima will remain as briefing strip notes. Rich confirmed that RASS minima will remain as notes.

Bill Tuccio, Garmin, said that he would like to see human factors testing added to the implementation roadmap to ensure wider aviation community acceptance. Rich asked Jeff whether the Flight Operations Branch will do that kind of testing as part of the SRM process. Jeff said that will need to be determined but that there are resources available to the FAA for that kind of testing.

Rich asked if there is ACM consensus on the workgroup recommendations so they can be presented to the Flight Procedures and Airspace Group for consideration. An informal poll was conducted and there was ACM consensus to move forward with the recommendations. Jeff said Rich can send him the document and his office will begin their review.

STATUS: OPEN

ACTION: Jeff Rawdon, FAA/AFS-420, will report on the Flight Procedures and Airspace Branch review of the IAP Chart Modernization Working Group Recommendations.

[19-01-331 Hotspot Information on Departure/Arrival Charts](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Rich Boll, NBAA, reported that the FAA is still considering conducting a Safety Risk Management Panel (SRMP) to determine if there is appreciable safety risk associated with the RUUDY DEPARTURE at Teterboro Airport (TEB). He reported he is not aware of progress since the last report. Rich said the risk analysis must be completed before it can be determined if this an ongoing issue and whether or not an Alert Notice or Departure Attention All Users Page (AAUP) is warranted to mitigate that risk. Valerie Watson, FAA/AJV-A250, expressed concerns that this issue has stalled.

Rune Duke, FAA/AFS-001, said it is his understanding that that this issue is still being worked by Air Traffic Safety and that they are close to finalizing the safety study. Bobbie Kahklen, FAA/AJI-151, said that she recently received an email update on this issue that she will share the information she received with Rich and Valerie. Valerie said they will look at the update and if it appears that this issue still has momentum, it will remain on the agenda.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will investigate the status of the FAA Safety Management Group's risk analysis of the RUUDY DEPARTURE at Teterboro Airport (TEB) and determine whether to leave this issue open.

[19-01-332 Charting Waypoints with Both Fly-Over and Fly-By Functions](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Joel Dickinson, FAA/AFS-410, reported he submitted the Document Change Proposal for the Aeronautical Information Manual (AIM) with the correction agreed upon at the last ACM and it will be published in the 2 December 2021 edition. Valerie Watson, FAA/AJV-A250, said this issue will remain open until AIM publication is verified.

STATUS: OPEN

ACTION: Joel Dickinson, FAA/AFS-410, will report on the publication status of the revised language in the Aeronautical Information Manual (AIM).

[19-01-333 LED Lighting at Airfields](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Matt Harmon, FAA/AFS-410, reported that there is no status change and the Flight Operations Branch is continuing to work with the Office of Airports to have LED lighting systems added to FAA Form 5010, Airport Master Record, so LED lighting information can be collected and submitted for publication.

Drew Goldsmith, FAA/AAS-120, confirmed the Office of Airports is working on updating the 5010 and the Airport Data and Information Portal (ADIP) to collect LED lighting information.

Jon Gdowik, FAA/AJV-A313, stated it will take time for the National Airspace System Resource (NASR) database to be enhanced to accept LED lighting requirements. The Aeronautical Data Team needs to fully understand the source flow/process and what the data publication requirements are before they can begin to making changes to NASR. Jon said his team would like to begin this work as soon as possible. Valerie Watson, FAA/AJV-A250, asked if this topic is being discussed at the monthly meetings between AJV-A and AAS-100. Jon said he doesn't recall if LED lighting is on that agenda, but said he will ensure it is discussed at future meetings.

STATUS: OPEN

ACTION: Matt Harmon, FAA/AFS-410, will continue to work with the Office of Airports, FAA/AAS-100, to secure a source for the LED data and will report back at the next ACM.

ACTION: Jon Gdowik, FAA/AJV-A313, will report on the status of enhancements to the National Airspace System Resource (NASR) database for LED lighting information.

19-01-335 Charting of Unusable Airway Segments

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Jeff Rawdon, FAA/AFS-420, explained unusable means just that and there are no exceptions. He said pilots should not file or accept a clearance for an unusable route. He said ATC can clear to fly point-to-point where there is an unusable route. He said that the problem at hand is the charted notes that do not meet criteria and the problems created by the 224 day NOTAM requirement. Jeff said the Flight Procedures and Airspace Group (FPAG) is continuing to investigating these issues.

John Collins, ForeFlight, pointed out that there is nothing in ERAM that blocks an unusable airway segment from being filed. Jeff agreed that is a problem and that issue also needs further investigation. Scott Jerdan, FAA/AJV-A310, explained these routes can be filed because ERAM gets its airway information from the National Airspace System Resource (NASR) database. Scott suggested the only way to keep unusable segments from being used is to remove the unusable segments from the NASR database. This would result in their removal from the charts and from ERAM. Gary Fiske, FAA/AJV-P310, said that is not realistic and taking the segments out of the databases would impact the entire system. Controllers need to know if a segment is unusable. Valerie Watson, FAA/AJV-A250, stated that unusable routes or route segments should not be removed from NASR as long as they exist as regulatory entities. Gary agreed and said removing them would require rulemaking. Paul Gallant, FAA/AJV-P210, said Part 71 rulemaking does not specify unusable segments because that status can change over time. Scott suggested that further discussion is needed to investigate how the handling the data can help solve this problem.

Pat Mulqueen, FAA/AJV-A440, brought the conversation back to the charted notes that do not meet criteria. He said the terminology used in the verbiage in the NOTAMs comes from the NOTAM Order and that the notes should never have made it to the charts. He said many of the currently charted notes are only relevant if there are Global Navigation Satellite Systems (GNSS) MEAs on the segments. Jeff Rawdon said that one of the reasons this came up is that pilots were interpreting the publication of a GNSS MEA to mean they can fly the route with GPS. Jeff said NOTAMs cannot be used as authorization to fly unusable segments even if the NOTAM includes a GNSS MEA.

Valerie Watson, FAA/AJV-A250, spoke to the issue of the notes appearing on the charts versus only published by NOTAM. She explained that currently, right or wrong, these notes are published on the 8260-16 airway forms. All such notes are added to NASR and subsequently charted and included in 14 CFR Part 95. If the intent is not to chart the notes or include them in 14 CFR Part 95, they need to be removed from the 8260-16 forms. She suggested the guidance in the 8260.19 Order for how to handle these situations with respect to NOTAM and/or 8260-16 airway form actions may need to be examined for clarity.

Rich Boll, NBAA, asked Paul Gallant whether there are requirements in the CFR to depict airways on charts. Paul said the CFR does not address charting. AJV-A charts based on Part 71 and FAA Forms 8260-16 and 8260-2. Rich asked why these routes/segments must be charted when designated unusable. Valerie said the charting specifications state that the entire route will be charted, with portions designated unusable overlain with the zigzag symbology. She said if those unusable segments were removed from NASR, they would be removed from the charts, but cautioned if it would be wise to remove regulatory routes or sections of such routes from NASR when they still legally exist in the NAS. Rich then asked whether there is anything that requires publication in NASR. Brian Murphy, FAA/AJV-A350, said these are legal routes. He said if we removed them from NASR, then

they would also be removed from other legal documents, e.g., 14 CFR Part 95. The Flight Operations Branch would need to make that determination.

Valerie said she believes the Flight Procedures and Airspace Group needs to continue to investigate aspects related to this issue. Jeff agreed and said that work will continue.

STATUS: OPEN

ACTION: Jeff Rawdon, FAA/AFS-420, will report on investigation and discussions between the Flight Procedures and Airspace Group (FPAG) and Aeronautical Information Services (FAA/AJV-A) to resolve existing issues related to unusable airway segments/routes and investigate potential criteria and pilot guidance updates.

[19-02-336 Addition of PDC Note in Chart Supplement](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. John Collins, ForeFlight, said the original request to publish PDC capability in Chart Supplement airport entries has been accomplished and this item can now be closed. He said the related actions regarding inconsistent PDC availability at select facilities has not yet been accomplished, but can be pursued outside of the ACM arena.

STATUS: CLOSED

[19-02-341 Review of Mountain Passes on VFR Charts](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Tom George, AOPA, presented an [update](#) from the Mountain Pass Working Group. Tom reviewed the workgroup is focused on (1) removing unsafe/unused mountain passes from the VFR charts, (2) identifying mountain passes that should be charted, and (3) establishing collocated checkpoints/VFR waypoints that will improve identification/location of mountain passes. Tom said most of the effort has been focused on establishing VFR waypoints. Since the last ACM, Flight Standards held a Safety Risk Management panel to discuss three Document Change Proposals (DCPs). The DCPs will revise Joint Order 7210.3 for the application of VFR Waypoints with respect to mountain passes and revise the Aeronautical Information Manual (AIM) and Aeronautical Information Publication (AIP) regarding the use of VFR waypoints and checkpoints associated with mountain passes.

Tom reported that VFR Charting has added elevations to approximately 50 charted mountain passes on the Alaska VFR Sectional charts. Also, one new mountain pass proposal was submitted to the Board of Geographic Names for consideration in the central Brooks Range, Alaska. If adopted, that pass can be charted.

Lev Prichard, APA, asked if the new VFR points will be actual waypoints that will appear in Flight Management Systems (FMS) and that a pilot can use for navigation. Tom responded yes. Lev also asked if these VFR waypoints would be in the lower 48 states as well as Alaska. Tom answered that yes, this use of VFR waypoints will be a national policy change.

Tom stated the workgroup activities will continue and he will continue to report progress.

STATUS: OPEN

ACTION: Tom George, AOPA, will report on progress of the Mountain Pass Working Group at the next ACM.

20-02-345 Wrong Surface Hot Spots

The proponent of this agenda item was not in attendance. Discussion was tabled until the April 22-01 meeting. Prior to the ACM, Giovanni Dipierro, FAA/AJI-141, provided the following Safety Risk Management Documents for ACM review: [Arrival Alerts Page](#) and [Hot Spot Symbolology Standardization](#).

STATUS: OPEN

ACTION: Giovanni Dipierro, FAA/AJI-141, will provide an update on the proposal to publish Wrong Surface Hot Spots and Arrival Alert pages.

20-02-348 NASR Improvements for ARTCC/RCAG Frequencies

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Colleen Kubont, FAA/AJV-A350, said the National Airspace System Resource (NASR) improvements to accommodate this request will be included in a large database revision that will likely be released in 2023. In the meantime, the Aeronautical Data Team (ADT) created an FRQ.csv file, which consolidates all NASR frequency information from the subscriber files. The file is available now with the [subscriber files](#) (see the “Frequency Data” section) and provides some of the information requested. Users can provide feedback in the [Aeronautical Information Portal](#).

Doug Willey, ALPA, asked whether the ADT routinely reaches out to air traffic facilities to ensure they do not submit inaccurate or incomplete frequency information. Valerie Watson, FAA/AJV-A250, said AJV-A does not solicit data; however, ADT does reach out if a specific concern is brought to their attention or if an error or omission is obvious. Jon Gdowik, FAA/AJV-A313, agreed and suggested concerns about specific frequencies be sent as an inquiry to the Portal. These concerns will then be routed to the appropriate specialist for investigation and resolution.

Scott Jerdan, FAA/AJV-A310, summarized that ADT has come up with a temporary and partial solution with the FRQ.csv file, but the ultimate solution is the large NASR communications update that is planned for 2023.

STATUS: OPEN

ACTION: Brian Murphy, FAA/AJV-A350, will report on the status of the request to improve the databasing of Air Route Traffic Control Center (ARTCC) frequencies in the National Airspace System Resource (NASR) database.

[21-01-350 Holding Pattern Leg Lengths on Terminal Charts](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Jeff Rawdon, FAA/AFS-420, said the Flight Procedures and Airspace Group (FPAG) hasn't had an opportunity to fully investigate this issue so he would like to hold it open for an update at the next ACM.

Scott Jerdan, FAA/AJV-A310, said the Aeronautical Data Team recently completed a multi-year project to review all the holding pattern information in the National Airspace System Resource (NASR) database and compare it against the FAA Form 8260-2s and what is on the charts. He said they are working to resolve the discrepancies discovered. Valerie Watson, FAA/AJV-A250, suggested this information should also be shared with FPAG, so they can see where the discrepancies exist, how they occurred, and to better understand the difficulties in determining source.

Bill Tuccio, Garmin, said Garmin would appreciate seeing the discrepancies. Scott said he does not believe the information can be shared externally, but assured the group that his team is working to solve the discrepancies. Valerie pointed out that the report identifies the discrepancies, but not how to solve them or which source is correct. Krystle Kime, FAA/AJV-A222, added that in the meantime when there are discrepancies, Terminal Charting uses FAA Forms 8260-15 and -17 as the source for conventional graphic Departures (DPs) and Standard Terminal Arrivals (STARs). For Instrument Approach Procedures (IAPs) and RNAV DPs and STARs, the source is FAA Form 8260-2.

Daniel Wacker, FAA/AFS-420, said sometimes a holding pattern is not part of a procedure route/segment description and the information is only sourced on the 8260-2. He asked how that information gets loaded into the Flight Management System (FMS). Valerie said a lot of fixes have more than one holding pattern predicated on them. The particulars of each holding pattern are on the 8260-2, but that information is not captured in NASR and won't go into the FMS. Joshua Fenwick, Garmin, said the primary source from their suppliers is NASR with information supplemented by the 8260-2. He said the biggest issue is with the source for the holding pattern leg length. Valerie reminded everyone that at the last ACM, Terminal Charting, the Instrument Flight Procedures Group and Garmin all agreed that it would be preferable to have the holding pattern leg lengths documented the procedure source documents.

Steven Madigan, Garmin, said to a certain degree, this problem has roots in the abbreviated amendment process for STARs and DPs. He said commonly a new 8260-2 may be published before an old procedure form is updated and this can result in a discrepancy.

STATUS: OPEN

ACTION: Jeff Rawdon, FAA/AFS-420, and the Flight Procedures and Airspace Group will investigate the documentation of holding pattern leg lengths and report back at the next ACM.

[21-01-351 Non Air Carrier Runways in the Chart Supplement](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Chris Criswell, FAA/AAS-120, reported that the proposed changes to FAA Form 5010, Airport Master Record identifying whether a runway is available for air carrier use have been agreed upon and it was determined that there is no negative effect on end users to the addition of

this runway attribute. The FAA Office of Airports will continue working toward the addition of this data element. He said additional discussions are needed with AJV-A to discuss publication in the Chart Supplement. He also said the working group will continue to meet.

Michael Stromberg, UPS-IPA, pointed out that he doesn't know of any air carriers that use the Chart Supplement. Chris said he understands that issue and explained that this is simply a data element attached to runways that don't meet Part 139 runway requirements and that this information is really for data providers, not for end users. He said the Office of Airports is at the ACM to let people know this data is being collected and to ask what FAA product(s) it would best be published in.

Valerie asked whether this attribute is intended to replace the information that is now carried as a remark in the Chart Supplement. Chris said he does not think the remarks will be removed, but that is still part of the discussion. Valerie said, per pilot input at the last meeting, it would be helpful if the information in the remarks is still available.

Joshua Fenwick, Garmin, asked if there would be a new National Airspace System Resource (NASR) field created for this attribute. Scott Jerdan, FAA/AJV-A310, said he will participate in the workgroup so he can assist with the development of the data requirements.

Jim Deuvall, CAVU Companies, said he is on the working group and they had discussed adding a yes/no flag for each runway. He also said the discussion went beyond flight planning issues to concerns that aircraft would land on runways they weren't approved for. He also said the group is working on the possibility of adding an indication on Airport Diagrams. He shared there was discussion on the workgroup to remove the textual remarks once the new data field is added.

Brian Murphy, FAA/AJV-A350; Scott Jerdan, FAA/AJV-A310; Jon Gdowik, FAA/AJV-A313; Michael Stromberg, UPS-IPA; and Josh Fenwick, Garmin, would all like to be added to the workgroup.

STATUS: OPEN

ACTION: Alberto Rodriguez, FAA/AAS-300, and Chris Criswell, FAA/AAS-120, will report on the progress of the Non-Air Carrier Runways Working Group.

[21-01-353 Airport and Runway Lighting in the Chart Supplement](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Jeff Lamphier, FAA/AJV-A240, reported that the Chart Supplement Team has begun investigating the recommendation to consolidate all runway and airport lighting in a single LIGHTING section of airport entries. He explained that there are four principle types of lighting information in the Chart Supplement and a specific purpose for the location of each. He explained that the information is parsed from various locations in the National Airspace System Resource (NASR) database. He said implementing this recommendation would be a significant change, with over 4,000 airports affected. He said this also would need a larger investigation to consider other factors such as pilot training, human factors implications, the impact on air traffic, etc. Jeff said he would like to poll the audience to determine the level of support before proceeding.

Rich Boll, NBAA, summarized that the issue arose because current airport lighting information is inconsistent and scattered throughout the different subsections of the Airport/Facility Directory (A/FD) entries. His recommendation for the creation of a discreet lighting section in the A/FD entries where all lighting information would be consolidated was received at the last ACM with overwhelming pilot support. For more information, see Rich's ACM 21-01 [presentation](#).

Michael Stromberg, UPS-IPA, said new items get added to the products over time and are not always placed in the most appropriate location. He said this is an opportunity to better organize this information and he agrees with proceeding with an in-depth investigation. Doug Willey, ALPA, said the way the information is organized now, a pilot has to read the entire A/FD entry to make sure they get all of the information. He said that is a safety concern. Lev Prichard, APA, said the organization efforts are needed and he supports this effort.

Participants voted in an informal poll and there was audience agreement that the FAA should definitely pursue this recommendation. Based on this level of support, Jeff agreed to continue to investigate the feasibility of implementing the proposal.

STATUS: OPEN

ACTION: Jeff Lamphier, FAA/AJV-A240, will initiate a larger agency investigation into the consolidation of lighting information under a single lighting section in the Chart Supplement and report back at the next ACM.

[21-01-354 Concurrent Operations with RF/TF Legs on IAPs](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Rich Boll, NBAA, [briefed](#) the audience on the workgroup activities since the last ACM. He said they reviewed various options for depicting both Radius-to-Fix (RF) and Track-to-Fix (TF) legs documented as part of a single Instrument Approach Procedure (IAP). One idea was to use a chart inset. This option was rejected because it would result in too much chart clutter and because insets are already used on IAPs for other purposes. The ghosting method was preferable to insets but also has drawbacks ([slide 4](#)). The group then looked at creating two IAP charts. This option would use one FAA Form 8260 to create two procedure charts – one depicting the RF legs and one depicting the TF legs. The charted procedure titles would include “(RF)” and “(TF)” and would follow the current standard for ILS CAT I and CAT II charting from a single 8260 procedure source document. The workgroup found this to be the best option. See [slide 8](#) for IAP chart examples.

Mike Cramer, MITRE, asked whether the workgroup recommendations will include a mechanism to ensure the database or chart providers only provides the version of the chart that the pilot is capable of flying. If that is the case, he questioned why (RF) and (TF) need to be included in the charted titles. Rich said both charts would need to be included in the Terminal Publications Procedure (TPP) and for that reason, the title discriminators are necessary. He said commercial chart providers will be able to exclude the non-compatible charts.

Rich then discussed the changes to FAA Order 8260.19 and FAA Form 8260-3 that will be necessary ([slide 9](#)).

Joshua Fenwick, Garmin, explained ARINC 424 Navigation database changes that will be necessary to separately identify the two route types. He showed examples ([slides 11-13](#)) of how the data would be sorted and provided.

He explained the intent is Flight Management Systems (FMS) will only carry the procedure version that the aircraft is capable of flying.

Rich then discussed how NOTAMs would be written. If both charts are generated from a single form, then the NOTAM must address the published regulatory procedure document. Whether the NOTAM affects both charts or not, the Amendment number would be updated in the P-NOTAM and the effective date would be revised on both charts. Rich then provided an example of a T-NOTAM ([slides 16-17](#)). Jeff Rawdon, FAA/AFS-420, asked if there was a scenario where the whole TF portion of the procedure could be NA. He asked if the NOTAM would be clear enough that pilots would know the RF version could still be used. Rich suggested this question be taken back to the workgroup.

Bruce McGray, FAA/AFS-420, thinks it would be better to handle these as two separate procedures so they don't get confused in the system. Valerie Watson, FAA/AJV-A250, reminded the group that decision had been previously made and this issue came to the ACM with direction to figure out how to chart the RF/TF information from a single procedure source form.

Rich emphasized that this is not a unique concept. This is the same way ILS Cat I and II charts are handled today and that the (RF) and (TF) portion of the title will not be verbalized by ATC. Gary Fiske, FAA/AJV-P310, agreed and said ATC is fine with the titling and with the overall concept. He said it is understood that the two leg types will result in slightly different tracks, but any issues will be handled with local ATC training. Mike Cramer said they did some simulations of these tracks and they are so similar the difference is not detectable on radar.

Joshua explained how the FMS will be loaded. He said if you have a mixed fleet with a shared database where only some aircraft are capable of flying RF legs, you will likely end up with the TF version in the database because only one version can be included. Mike Cramer doesn't think this is the case and thinks it will be more FMS-specific than fleet-specific. Joshua said it will depend on the database provider. Mike said the working group studied this at the PARC and the determination was made it wouldn't happen often enough to be of concern. Other participants also expressed concerns about not getting the RF version in their database. Rich emphasized that nothing is lost if an aircraft cannot get the RF version, the procedure can still be flown.

An informal poll was conducted to gauge support for the two chart solution. There was ACM support.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will report on the progress of the RF/TF Procedure Working Group recommendation.

[21-01-355 Procedure Turn Limit on IAPs](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Valerie Watson, FAA/AJV-A250, said the Interagency Air Committee (IAC) specifications and the [Chart Users' Guide](#) have been updated to support showing the procedure turn barb to scale whenever possible. Changes will be implemented on the Instrument Approach Procedure charts on a day forward basis. All actions are complete and there was agreement to close this issue.

STATUS: CLOSED

21-01-357 Single Direction Airways

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Rich Boll, NBAA, [briefed](#) the recommendation and discussed the workgroup activities that have taken place since the last ACM.

The workgroup determined that there are no “regulatory” Single Direction (SLD) airways in the U.S. National Airspace System (NAS) and no criteria that allows the FAA to document a single directional airway in FAA Order 8260.19. SLD airways in the U.S. are “Preferred Routes” and published in the NASR/NFDD Preferred Route database. Coded Instrument Flight Procedure (CIFP) records do not show the directional restrictions. Rich said Air Traffic Control (ATC) assigns flights in accordance with the charted directional restriction, however airways *can* be assigned in an opposite direction and ATC wishes to retain that option. Rich then discussed how single direction routes are handled internationally ([slides 7-8](#)).

The workgroup agreed that the U.S. SLD routes are preferred and not directionally restricted so they should continue to be documented in the Preferred Route database. The question is how to communicate to database providers that the Preferred Route data is not directionally restricted so that flight may be filed in the opposite direction. The workgroup is still attempting to determine if the directional arrows should remain on the charts.

John Barry, FAA/AIR-622, asked whether we need to change our charting standards to differentiate between a mandatory and recommended direction. Valerie Watson, FAA/AJV-A250, said the U.S. does not have any mandatory restricted airways. We only have preferred routes and their directionality is depicted with a solid arrow symbol. She said the arrow is clearly defined on the chart legend as a preferred direction.

Diane Adams-Maturo, FAA/AFS-420, said she is part of an airway working group. She offered to take this issue before that group and get ATC feedback.

Scott Jerdan, FAA/AJV-A310, said the CIFP file is in large part built from the NASR subscriber files. He said the decision could be made to not code directionality. Valerie said if the airways are directionally indicated, but ATC wants to use them in the opposite direction, they should remain as “preferred”. If ATC wants to restrict a route to a single direction 100% of the time without exception, the directionality should be part of the airway record and be documented on the FAA Form 8260-16.

Doug Willey, ALPA, said the core foundation for a chart is to show the legal, regulatory airways, not to show preferences. If the directionality is preferred, he does not think it should be shown on the chart. Valerie again stated the preferred meaning of the charted arrow is clearly defined on the chart legend and said depiction of the arrow serves ATC in that it dissuades pilots from attempting to file in the opposite direction. She voiced ATC input would be needed before considering removing the arrows from the charts. Rich agreed.

Bennie Hutto, NATCA, said there are letters of agreement between ATC facilities about how aircraft enter and exit each other’s airspace. He said the direction is based on traffic. ATC wants pilots to file in the preferred direction of the route. It creates extra work when a route is filed for a different direction. Showing preferred directional arrows on the charts prevents filings in directions ATC does not want aircraft to fly. Michael Stromberg, UPS-IPA, said the problem is the airway direction is a preference and is not mandatory, so database providers should not be *coding* them as single direction. Bennie agreed they should not be coded only in one direction, but does think the arrow should remain on the charts.

Gary Fiske, FAA/AJV-P310, said preferred routes establish a flow for the busier times of the day. ATC will decide how they are going to clear airplanes based on what is needed at the time. The only problem that needs resolution is that the coding restricts the use of an airway in another direction.

There was some discussion regarding the impact on data driven charting. Rich said the working group still has work to do. He said he would like to get enroute ATC participation. Bennie said he can provide Rich with an enroute ATC contact.

Valerie said she knows the work is still ongoing and that they still need a definitive position from ATC, but at this point, the group has established that these are preferred directional routes. She asked if work can begin now to fix the data so the routes aren't published in the database with directional restrictions. Rich said the workgroup is currently working on a README file that would be distributed with the NASR preferred route database to explain what information should be flagged in the record.

Gary asked if the U.S. has filed a difference with ICAO Annex 4 regarding the depiction of the direction of traffic flow. Valerie said she'll look into that since she's responsible for filing U.S. differences to Annex 4.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will report on the progress of the Single Direction Airway Working Group at the next ACM.

ACTION: Valerie Watson, FAA/AJV-A250, will research if the U.S. should file a difference to ICAO Annex 4 with regard to the charting of preferred directionality.

[21-01-360 Controlled Airspace Effective Hours on VFR Charts](#)

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Katie Murphy, FAA/AJV-A214, reported that her team has evaluated every part-time airspace effective hour notation on the VFR charts. Katie said they found a number of charting inconsistencies and have made approximately 30 corrections. Steve Seibel, the proponent of this issue, said he is satisfied with the results. He then described one lingering issue with the legal description at Wilkes-Barre Scranton International Airport. Valerie Watson, FAA/AJV-A250, said the Airspace Rules division would first need to modify the legal description before the chart can be updated.

Paul Gallant, FAA/AJV-P210, said it does sound like there is an error and it should be looked at by the FAA Eastern Service Center. He said the Airspace Rules division is currently working on updating CFR Part 71 to address confusion regarding extensions and the relationship to surface areas. Paul said Steve can contact him directly about his specific concern.

All action are complete and there was agreement to close this issue.

STATUS: CLOSED

21-01-361 Alternate Minimums in the TPP

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Krystle Kime, FAA/AJV-A222, reported that at the April ACM, the decision was made that the “A NA” notation needs to remain on the approach charts. Krystle said Terminal Charting does not want to duplicate the “A NA” in the Alternate Minimums section of the Terminal Publications Procedure (TPP), however they would like to add some additional clarifying [text](#) to the alternate minimum explanatory text. Krystle also said there are over 3,000 charts with the “A-NA” notation so if there is a need to add those entries to the alternate minimums section, that would have to wait until there is an automated solution.

Doug Willey, ALPA, stated that the original request was that any procedure that carries an “A” or an “A NA” should be listed in the Alternate Minimums section. He said that would still be preferable, but he understands if that cannot be accomplished at this time. Joshua Fenwick, Garmin, agreed that the additional language is helpful but is not a solution to the original request. Krystle agreed and committed to adding this to the list of changes that will be made when automation from procedure source is possible.

There was some discussion about the specific wording used in the revised text for the TPP description. Those changes have been captured in the linked document.

Bill Tuccio, Garmin, suggested that heliports should be added to the description. Valerie Watson, FAA/AJV-A250, said she will forward the proposed text to Joel Dickinson, FAA/AFS-410, and include the question regarding heliports.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-A250, will process an Interagency Air Committee (IAC) specification change for the revised IFR Alternate Airport Minimums explanatory guidance.

VII. Closing Remarks

Samer Massarueh, FAA/AJV-A223, and Valerie Watson, FAA/AJV-A250, thanked the attendees for their participation and input to the issues discussed.

Notices of the official minutes will be announced via email and provided via the ACM website. 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/acfi/pg/

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 Jennifer Hendi), 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.

VIII. Next Meetings

ACM 22-01 is scheduled for April 25-28, 2022, location TBD (likely virtual).

ACM 22-02 is scheduled for October 24-27, 2022, location TBD.

IX. Attachments

- a. [21-02 Attendee Roster](#)
- b. [Office of Primary Responsibility \(OPR\)](#)