I. Opening Remarks

The Aeronautical Charting Meeting (ACM) was hosted by the FAA, Aeronautical Information Services at the NOAA Science Center/Auditorium in Silver Spring, MD. Samer Massarueh, FAA/AJV-A221, opened the Charting Group portion of the meeting on Wednesday, October 23. Samer acknowledged John Bordy, FAA/AFS-420, Chair of the Instrument Procedures Group (IPG) portion of the meeting the previous day. Samer then provided a brief overview of his role as Facilitator for the Charting Group portion of the ACM. He recognized Valerie Watson, FAA/AJV-A250, for her continued role as Chair of the Charting Group.

II. Review Minutes of Last Meeting, ACM 19-01

The minutes from ACM 19-01 meeting were distributed electronically last fall via the Aeronautical Information Services (AIS) ACM website: http://www.faa.gov/air_traffic/flight_info/aeronav/acf/. The minutes were accepted as submitted with no changes or corrections.

III. Agenda Approval

The agenda for the 19-02 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-324, provided an update for the Very High Frequency Omnidirectional Range (VOR) Minimum Operational Network (MON) program. He stated that in Phase 1, 52 of the 74 VORs have been decommissioned. The total number of VORs targeted for discontinuance has decreased from 311 to 309, resulting from a Department of Defense request that two VORs identified for decommissioning be retained.

Ernesto briefly touched on the changes related to VOR Standard Service Volume (SSV) classes. Dale Courtney, FAA/AJW-292, provided a more detailed briefing on this topic. [See Briefing: NAVAID Service Volumes (DME, VOR and TACAN)]

Ernesto stated that the biggest challenge for the VOR MON Program is the mitigation of Instrument Flight Procedures affected by VOR that are decommissioned. The second biggest challenge the program has encountered has been securing flight inspections for the retained VORs to verify and implement the new SSVs. As a result of these challenges and the time needed to resolve them, the VOR MON Program Office plans to request an extension of the program beyond 2025 when they meet with the Joint Resources Council in March 2020 to discuss Phase 2.

Rune Duke, AOPA, expressed concern over the decommissioning process and the sustainability of the remaining NAVAIDs. He said there are many NOTAMs published for MON VORs that have been out of service for a long time. He said AOPA is also concerned about the lack of a public notification process regarding discontinuances. Ernesto reported that Leonixa Salcedo, FAA/AJM-324, is working these issues. Rune recommended that those concerns should be addressed in future ACM briefings, including a request for a briefing on the DME, VOR, TACAN Sustainability initiative.

Rich Boll, NBAA, agreed with Rune regarding how the discontinuances are being coordinated. He is concerned that suitable replacements for conventional procedures are not being put in place before the existing procedures are cancelled. Valerie Watson, FAA/AJV-A250, pointed out that this issue was brought up at the last ACM. Also previously discussed were gaps in airways (i.e., missing segments where an airway simply ends and then resumes at a later point as a result of VORs being decommissioned), problems with uncoordinated Military Training Routes, and Class Airspace. Valerie stated that both Ernesto and Deborah Lawrence, FAA/AJM-32, had assured the group that increased coordination would occur. Vince Massimini, MITRE, stated that there is no requirement that airways be continuous. Dave Stamos, NGA, stated that the discontinuation coordination as a whole occurs too late in the process for DoD to adequately handle the changes. Vince said more effort now is being put into pre-coordination. Ernesto asked the audience to send him specific locations where there are known issues.

John Collins, ForeFlight, asked if Preferred Routes are assessed when a VOR is slated for decommissioning. Vince replied that all dependences on the VOR selected for decommissioning are supposed to be reviewed. Scott Jerdan, FAA/AJV-A310, said the National Airspace System Resource (NASR) database identifies dependent resources, so if they haven’t been coordinated, AJV-A will see that and question it, but AJV-A will not run its dependent resources assessment until the VOR has been submitted for decommissioning. This is relatively late in the process for responsible coordination to occur.
NAVAID Service Volumes (DME, VOR and TACAN)

Dale Courtney, FAA/AJW-292, provided an update on upcoming changes to NAVAID service volumes. The VOR MON Program is in the process of implementing two new VOR standard service volumes (SSV) in order to achieve VOR service within 70 nautical miles versus 40 above 5,000 feet AGL. The new NAVAID codes are VOR Low (VL) and VOR High (VH). Along with that effort, the NextGen DME Program is going to implement two new DME NAVAID codes: Expanded Low (DL) and Expanded High (DH). The new NAVAID SSVs will be in addition to the Legacy SSVs of Terminal (T), Low (L) and High (H) that will continue to be maintained. (See Slides 6-8)

Dale said this effort is still in discussion and asked the audience for input. He wants to determine what challenges exist for the implementation of SSVs for collocated NAVAIDs. He also wants input on the best way to source the SSVs in the National Airspace System Resource (NASR) database.

Scott Jerdan, FAA/AJV-A310, asked if the two components of a collocated NAVAID, e.g., a VOR/DME, could potentially have two different SSVs. Dale replied that yes, a VOR/DME could have one SSV for the VOR portion and a different SSV for the DME portion. Scott said that significant changes to NASR will be necessary in order for SSVs to be assigned separately to each NAVAID component. This database change will require lead time to accomplish and AJV-A will need to know as soon as possible what exactly is necessary to support the change. Dale shared that discussions were still in process to determine the database requirements.

Valerie Watson, FAA/AJV-A250, asked Dale for timeline of these changes. Dale responded that they do not have a hard timeline. They are first working to ensure that Flight Management Systems will work correctly with the new service volumes. Once that is solved, they can begin work on NASR changes. Scott reiterated that NASR changes take a long time to implement and coordination still needs to be done to determine exactly what changes will be required.

NOTAM Briefing

Representatives from the NOTAM Governance and Operations Group were not in attendance and no briefing was provided.

Identification of Trauma Centers on Helicopter Route Charts

Valerie Watson, FAA/AJV-A250, reviewed the item. She stated that on current FAA-produced Helicopter Route Charts, Trauma Center Heliports and Hospital Heliports are identified. She said maintaining this information on the charts is difficult because there is not a source for these heliport designations. At ACM 19-01, it was confirmed that the identification of trauma centers is necessary and that FAA needed to work to define the requirement, clarify the definition and identify the source for the data.

Mike Webb, FAA/AFS-420, stated that since the last ACM, Nolan Crawford, FAA/AFS-420, queried the Air Medical Association helicopter pilots on this topic. Mike presented that overall, there was consensus that the
FAA does not need to specifically identify “trauma centers” on the helicopter charts. States determine which hospitals are designated as trauma centers and dispatchers tell the pilots where they need to go. Pilots are not looking at the charts for trauma center designations. It was suggested that the effort should concentrate on cleaning up the Airport Master Record, FAA Form 5010 data for hospitals with registered helipads and address charting from there.

Zac Noble, Helicopter Association International, concurred with Mike’s comments. He said he has reached out to his membership and they also agree. Things have changed since trauma centers were originally charted, and even if a pilot is not familiar with the local area, they will be given the information they need by dispatch and do not rely on the chart for that data.

Valerie stated that though a representative from the Office of Airports, FAA/AIS-100, was not present, she is of the understanding that they have agreed to collect “medical center” and “air ambulance” designations for heliports. She explained that AJV-A could use those designations for charting purposes. Scott Jerdan, FAA/AJV-A310, said he is pursuing the addition of National Airspace System Resource (NASR) database attributes for those designations so that when received from the Office of Airports the designations could be databased. Valerie said that an Interagency Air Committee (IAC) Specification change will need to be written to change the trauma center designation to medical helipad, making use of the “medical center” designation in NASR. She asked Scott if he knew what the timeline is for the Office of Airports to submit the new heliport designations to AJV-A. Scott responded that the plan for the initial population and maintenance of the data is still under discussion.

Rick Fecht, FAA/AJV-A214, commented that while the data is being sorted out, Visual Charting could request an IAC specification change to alter the symbol description on the Helicopter Route Chart legends from trauma center to medical center. Scott agreed and said Visual Charting can use the current NASR attribute of medical use for the medical center designation until NASR is updated. The audience agreed that this was an acceptable solution.

It was agreed that this briefing item will remain on the ACM agenda with an update next time from Scott Jerdan, FAA/AJV-A310, and Rick Fecht, FAA/AJV-A214 on progress made.

Reassessment of Part 95 Designated Mountain Areas

Briefer cancelled his appearance shortly prior to the meeting. No briefing was provided.

Chart Supplement Back Matter Changes Resulting from NOTAM Task Force

Jeff Lamphier, FAA/AJV-A240, presented a briefing on the FAA Airport Mapping Team’s intent to assess the content found in the Chart Supplement back matter, i.e., Notices and Associated Data sections. Jeff briefed that this activity was proposed as part of the FAA’s Aeronautical Information/Notices to Airmen (NOTAM) Modernization initiative. Portions of the initiative that impact the Chart Supplement are: 1. NOTAMs should only be published on the Federal NOTAM System (FNS); 2. Aeronautical Information should reside in an authoritative source and not be published by the agency in multiple venues. To further this initiative, Jeff’s team is examining
material published in the back matter of the Chart Supplement publications, categorizing it and assessing its adherence/non-adherence to the stated directives. They are also examining the overall purpose of the Chart Supplement and working to ensure the items published are within the scope of that purpose. Jeff stated that in the future, they will only be publishing sourced and verified information that is within the scope of the Chart Supplement. He stated that information published in another FAA product does not also need to be published in the Chart Supplement. Duplicative and unverified information will be targeted for removal. Jeff stated that the FAA would like to stand up a workgroup to help determine the categories of data that are within the scope of the Chart Supplement. He said the process of removal has already begun and a Charting Notice to announce the data being removed will be published on the Aeronautical Information Services Charting Notices website.

Rick Mayhew, FAA/AJV-A311, asked if/how the Chart Supplement data can be made searchable. Jeff replied that currently, many items are submitted and published as print-ready graphics and are thus not text searchable. With the reformatting effort that is currently underway, they will be searchable in the future.

John Barry, FAA/AIR-6B1, stated that the Chart Supplement is a single source for pilots to go to for information and asked how the FAA will ensure that pilots have everything they need in the cockpit if a lot of that information is going to be removed. Jeff replied that the FAA Air Traffic Organization has directed that they identify the source for all data and ensure it is only being published in one location. Users will have to be informed where to find the information they need. Valerie Watson, FAA/AJV-A250, stressed that the FAA will need to look at every item in the Chart Supplement carefully before deleting it and that the workgroup can voice the need to retain specific items. She pointed out that many NAS elements are indeed published in/on numerous products and that in certain cases that is necessary to sufficiently serve users. There was general audience concern expressed about the potential loss of valuable information.

John Collins, ForeFlight, asked what the timeframe is for the revised product. Jeff replied that he expects Charting Notices to begin shortly and continue through June 2020. His team will then begin to rebuild the revised product.

George Sempeles, FAA/AOV-110, suggested that some of the information being removed from the Chart Supplement could appear in US Aeronautical Information Publication (AIP) General Section.

Valerie asked if there is still time to prevent the deletion of information once a charting notice has been posted. Jeff responded that it is not too late as long as the submitter can show that the need is valid and a source for the information can be established. Derrick Savage, NGA, asked if the discussions regarding information to be removed will be open to others for comment. He would like to know what objections other users might be voicing.

Brian Murphy, FAA/AJV-A350, stated that users can subscribe to the Chart Notices website. He reassured the audience that there will be time to comment on the removal of information from the Chart Supplement.
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<th>Name</th>
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<tbody>
<tr>
<td>Richard Boll</td>
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<td>316-655-8856</td>
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V. New Charting Topics

19-02-336 Addition of PDC Note in Chart Supplement

John Collins, ForeFlight, briefed this new recommendation. He said that there are approximately 70 airports that provide Pre-Departure Clearance (PDC) services, however its availability is not published. Additionally, he explained that at some airports there appear to be exclusions to PDC for certain types of aircraft. John is recommending that the FAA publish the locations where PDC services exist and include any restrictions on its use in the Chart Supplement Airport/Facility Directory airport entries.

Rich Boll, NBAA, asked what types of aircraft are being excluded from access to PDC and why are they being excluded. John said that it seems to be a facility decision to not provide PDC clearances to piston or prop aircraft. He said an example is Dallas Love Field (DAL) where PDC is not issued to piston aircraft. Rich voiced concern and voiced that the system should be available to all aircraft types. Gary Fiske, FAA/AJV-82, Contract Support, agreed and asked John if he could provide him with a list of facilities that are not providing PDC to all aircraft types. John said that he does not have access to the individual facility operating documents on which the specifics are outlined. Gary said he would investigate why DAL has excluded piston aircraft from PDC access. Rich offered to take this issue to the FAA Data Communications Integration Team to try to determine which facilities are not issuing PDCs. [Post-meeting update: Rich reports that Jesse Wijntjes, in the FAA Data Communications Integration Team, states that there are “no restrictions on receiving PDCs. As long as the airport has a TDLS (which DAL does) and you have an arrangement with a service provider, you can get a PDC.”]

Samer Massarueh, FAA/AJV-A221, asked if, aside from the operational issues under discussion, there is ACM support for the recommendation to show PDC in the Chart Supplement. Rune Duke, AOPA, stated that there would definitely be a benefit to publishing the information. Rich suggested that PDC availability might also be useful if published on terminal charts. There was unanimous audience support for publication in the Chart Supplements. Valerie Watson, FAA/AJV-A250, said that the explanatory guidance in the Chart Supplement will need to be expanded to explain PDC.

Scott Jerdan, FAA/AJV-A310, said that a reliable source flow for the initial input and future maintenance of PDC data must be accomplished and said that he will reach out to the FAA Digital Communications Office to initiate communications to seek a data process. He said he would also begin work to enhance the National Airspace System Resource (NASR) database to accommodate PDC.

STATUS: OPEN

ACTION: Rich Boll, NBAA, will report on interaction with the FAA Data Communications Integration Team regarding facilities with TDLS issuing PDCs selectively.

ACTION: Gary Fiske, FAA/AJV-82 Contract Support, together with Rich Boll, NBAA, will investigate the operational issues with PDC and why certain facilities are issuing them selectively.

ACTION: Rick Mayhew, FAA/AJV-A311, will reach out to the FAA Digital Communications Office to secure a source for PDC data and work to enhance NASR to accommodate it.
19-02-337 Chart Supplement: Make Special Notices Text Searchable

John Collins, ForeFlight, briefed the new topic. John explained that VFR Departure Procedures published in the Chart Supplement Special Notices section are not easy to find when searching the online version of the Supplement. John recommended several actions that might solve this problem. First, he suggested that all graphic notices should include text so that they can be searchable by name or location. Second, he recommended that the title of the procedure should be included in the Chart Supplement Table of Contents. He also suggested that the note in the Airport/Facility Directory (A/FD) airport entry alerting users to the presence of a Special Notice be hyperlinked to the graphic or notice.

Jeff Lamphier, FAA/AJV-A240, explained that the A/FD section of the Chart Supplement is digitally searchable. His department is aware that the inability to digitally search the rest of the Chart Supplement hampers users in locating specific entries or items. Jeff explained that the graphics are published as submitted from the proponent and do not contain text that is searchable. He explained that future revision of the Chart Supplement will ensure that the whole Chart Supplement is digitally searchable.

Rich Boll, NBAA, commented that not all airport entries contain a reference to a notice or graphic that pertains to the subject airport. He asked if there is a standard for when the reference is included and stated that he believes a reference should always be published in the airport entry, for both notices and graphics so that users know the notices/graphics exist. Jeff replied that there is not currently a requirement for references for graphics and agreed that this is a topic that can be brought to the newly formed Chart Supplement Workgroup.

There was audience consensus, as well as the proponent’s agreement, that the issues raised during the discussion can be handled through the Chart Supplement Workgroup and that this proposed enhancement to the Chart Supplement may be closed and worked in that arena.

STATUS: CLOSED

19-02-338 Publish DP (SID/ODP) and STAR Chart Notes in Machine Readable Form

John Collins, ForeFlight, briefed the new item. John recommended that the notes that appear on Departure Procedures (DPs) and Standard Terminal Arrival (STAR) charts be published in a machine-readable format. He stated this would allow 3rd party vendors the capability to supply the notes in an Electronic Flight Bag (EFB) so pilots can more easily filter available procedures based on aircraft type and equipment requirements. John showed an example of the KILNS FOUR DEPARTURE, highlighting the notes that are not machine-readable. He noted that some charts specify that the procedure is designed for use by a specific category of aircraft, e.g., For turbojets only.

Rich Boll, NBAA, commented that there are also many DPs and STARs that are assigned by ATC only and there is currently no way to filter out those procedures. He said that having the notes easily assessable would be useful for flight planning purposes.
Scott Jerdan, FAA/AJV-A310, stated that automation has not yet been built to produce electronic procedure source forms for DPs and STARs in the way it has been done for Instrument Approach Procedures (IAPs). The FAA is currently working toward that goal, but it is going to be some time before it will be accomplished. Digital notes will not be possible until the source forms are fully electronic. Valerie Watson, FAA/AJV-A250, stated that, in the meantime, pilots will need to continue to refer to the published chart for the notes.

Aaron Jacobson, Jeppesen, commented that it is difficult to define the logic for notes. Having a note in a digital format is one thing, but defining the metadata for what kind of note is more difficult.

John asked what the timeline is for the FAA to provide the notes electronically. Brian Murphy, FAA/AJV-A350, said that there is no timeline yet available, but unfortunately he does not anticipate they will be available soon. Dave Teffeteller, FAA/AJV-A433, suggested that this issue be left open and he could take the action to investigate the FAA’s plan for making the source available digitally.

**STATUS: OPEN**

**ACTION:** Dave Teffeteller, FAA/AJV-A433, will investigate the FAA’s timeline for digital procedure source forms for DPs and STARs.

### 19-02-339 LAHSO Rejected Landing Procedures

Rich Boll, NBAA, briefed the new topic. Rich explained that Aeronautical Information Manual (AIM) paragraph 4.3.11 describes pilot responsibilities when conducting Land and Hold Short Operations (LAHSO). Part of that description is what to do if a Rejected Landing Procedure becomes necessary, however, the AIM does not provide guidance to point the pilot to the location of such procedures. Rich showed an example of a LAHSO Rejected Landing Procedure at Boston-Logan Airport (KBOS) that is published in the Special Notices section of the Chart Supplement. Rich recommended a review of the AIM language for consistency with FAA Order 8900.1 and that it be expanded to include guidance for Rejected Landing Procedures. Rich emphasized that FAR Part 91 (Subpart K), 135 and 121 requires OpSpec approval for LAHSO. For FAR Part 91 operations, the only reference pilots have is the information provided in the AIM, which he believes is inadequate. Additionally, Rich recommended publishing Rejected Landing Procedures in the current LAHSO tables in the Terminal Procedures Publication (TPP) where they would be easily seen by users planning to execute a LAHSO.

Joe Lintzenich, FAA/AFS-410, Contract Support, stated that the Flight Operations Group is planning to look into this issue further. He said that the Order that governs Rejected Landing Procedures states that they are designed for use by Part 121, Air Carriers. They are not designed for general aviation and perhaps should not be published in the Chart Supplement at all.

Gary Fiske, FAA/AJV-82, Contract Support, stated that LAHSO participants are determined by Air Traffic Control (ATC) for each location, therefore this information does not need to be in the AIM because ATC will assign it based on the category of aircraft. Gary also stated that he does not believe that the publication of a Rejected Landing Procedure in the Chart Supplement or TPP is appropriate. Rich argued that pilots are trained to look at the information ahead of time to determine if they can accept the clearance. There was
general audience agreement that pilots need to see the LAHSO information, but not the Rejected Landing Procedures.

Rich suggested the formation of a workgroup to address the concerns discussed. He offered to chair the group.

Jeff Lamphier, FAA/AJV-A240, commented that the publication of LAHSO in the Chart Supplement is currently under review because it is a duplication of the LAHSO table published in the TPP. There was agreement that if it is concluded that Rejected Landing Procedures are only for air carriers, this information can be removed from the Chart Supplement.

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<tr>
<th>LAHSO Workgroup</th>
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<tbody>
<tr>
<td>Jeff Gingras</td>
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<tr>
<td>Al Michaels</td>
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<td>John Blair</td>
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<td>Jason Hewes</td>
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<td>Andrew Lewis</td>
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<td>Mike Barrett</td>
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**STATUS: OPEN**

**ACTION:** Rich Boll, NBAA, will report on the LAHSO Workgroup discussions.

**ACTION:** Joe Lintzenich, FAA/AFS-410, Contract Support, will investigate the definition and use of LAHSO and Rejected Landing Procedures and look at the guidance published FAA Order 8900.1 and the AIM to determine if it is sufficient.

**19-02-340 Publication of Height Group Category of VGSI**

Christopher Gottwald, UPS & IPA, briefed the new recommendation. He stated that the different height group categories of Visual Glide Slope Indicators (VGSIs) should be made available because the height differences can result in a safety concern for large aircraft. The height category is based on the most prevalent aircraft type utilizing the runway and customizes the VGSIs so that the threshold crossing height (TCH) serves that sized aircraft. Christopher stated that at UPS, when pilots of larger aircraft follow the ILS glideslope to the TCH, they don’t have an issue. However, following the VGSIs can result in as much as a 32 foot difference in the published crossing height and the height at which the wheels actually cross the runway. For this reason, Christopher is recommending that all height group categories of VGSIs be published in the Chart Supplement or on the approach plate.

Rich Boll, NBAA, asked how pilots would use that information. He stated that the difference between the VGSIs and the TCH is already published on the chart. Christopher said that they need to know the height group category so pilots know if they can use the published difference.
Joe Lintzenich, FAA/AFS-410, Contract Support, stated that knowing the value of the TCH is more valuable than knowing the category and that value is already published on the chart. John Bordy, FAA/AFS-420, stated that according to FAA Order 8260.19, if the difference between the electronic glidepath/glideslope TCH and the VGSI TCH is more than 3 feet, guidance dictates a note be placed in the chart profile to show the difference. Rich pointed out that this is a relatively new change so not all procedures have it depicted, but believes this is sufficient.

It was concluded that the “VGSI and ILS glidepath not coincident” note is sufficient and Christopher agreed with closing this item.

**STATUS: CLOSED**

**19-02-341 Review of Mountain Passes on VFR Charts**

Rune Duke, AOPA, briefed the new recommendation. He explained that flying Visual Flight Rules (VFR) through mountain passes in Alaska is very common. Despite this, there is very little FAA guidance published regarding the mountain passes that are deemed safe to fly. There are mountain passes charted on the VFR charts, however they were charted using USGS quadrangle maps and were charted based on the topography and not based on flight safety. Rune pointed out that in some cases, there are passes charted that are too dangerous to fly and that other safer passes are not charted. Rune discussed the history of this issue and pointed out an effort made through the Aeronautical Charting Meeting in the early 2000s for charting entry and exit points of mountain routes and an another effort to develop separate mountain pass graphics. These efforts were not successful. Rune then reviewed the language found in FAA Joint Order 7210.3 regarding the use of RNAV Waypoints to identify mountain passes/routes. Rune emphasized that the FAA has yet to apply this language to enhance safety.

Rune recommended that the FAA form a workgroup to review charted mountain passes in Alaska. The goals will be to remove unsafe mountain passes from the charts, identify mountain passes that should be charted, and establish VFR waypoints to improve identification of mountain passes.

Rick Fecht, FAA/AJV-A214, agreed that this is a valid concern and said that VFR Charting will participate in the workgroup. He pointed out that VFR Charting can depict the mountain passes/routes that FAA Flight Standards approves for charting.

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<th>Mountain Pass Workgroup</th>
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<tbody>
<tr>
<td>Rich Fecht</td>
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<td>Jason Hewes</td>
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<td>Andrew Lewis</td>
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<td>Valerie Watson</td>
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<td>Rune Duke</td>
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**STATUS: OPEN**
**ACTION:** Rune Duke, AOPA, will report on progress of the Mountain Pass Workgroup.

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**19-02-342 Depiction of Profile Procedure Track for NPA Procedures**

Krystle Kime, FAA/AJV-A222, briefed the new recommendation. Krystle explained how guidance in the Interagency Air Committee (IAC) Specifications predates new rules that have been implemented in flight procedures with regard to the depiction of the profile for Non-Precision Approach (NPA) procedures. Current specifications require that such procedures be charted with a horizontal “level-off” segment from the Visual Decent Point (VDP) or Minimum Descent Altitude (MDA) when a VDP is published or, if the VDP is not published, but the angle/threshold crossing height (TCH) is published. Due to changes in criteria, there are now situations where flight inspection has directed the removal of the angle/TCH and VDP because the visual segment is not clear of obstacles. In such cases, Terminal Charting is depicting a continuous descent to the threshold. This seem counterintuitive since a continuous descent could imply that the segment is clear of obstacles. Krystle is recommending that the specification be revised for all NPA straight-in procedures to ensure the profile depicts a horizontal level-off segment.

John Barry, FAA/AIR-6B1, asked why the VDPs are being removed from the charts. Dale Courtney, FAA/AJW-292, stated that a VDP comes off a chart as a result of a flight inspection determination. Its removal is either because of obstacles in the visual segment or 20:1 penetrations at night.

There was audience concurrence for moving forward with IAC specification changes, as outlined by Krystle, in support of this proposal.

**STATUS: OPEN**

**ACTION:** Valerie Watson, FAA/AJV-A250, to draft an Interagency Air Committee (IAC) specification change to provide guidance that all NPA straight-in charts will depict the horizontal level-off segment in the profile.

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**19-02-343 Enable Easy Access to CNOTAMS**

Andrew Lewis, Garmin, presented the new recommendation. He explained that the FAA issues a Chart Correction NOTAM (CNOTAM) when there is an error on a chart. He said that under the current process, Garmin has to manually check the NOTAM website for CNOTAMs each day to see if anything new has been issued. Andrew is requesting that the FAA grant access to the email distribution list for CNOTAMs.

Krystle Kime, FAA/AJV-A222, stated that there is only an internal FAA email distribution list for CNOTAMs, and this list cannot be expanded to include entities outside of the FAA.

Scott Jerdan, FAA/AJV-A310, explained that there is a process that can be used on the FAA NOTAM Search website to search for all current Chart Correction NOTAMs. He suggested that Garmin reach out to the FAA System Wide Information Management (SWIM) Program Office to inquire about subscription capabilities. He
emphasized that Garmin needs to go to the NOTAM system as their source for the information. Scott will provide a point of contact information for the NOTAM Office or the SWIM Program Office to the proponent.

It was agreed that this item could be closed.

**STATUS: CLOSED**

**19-02-344 Add RLLS Lighting Systems Diagram to Approach Plate**

Jason Hewes, Garmin, briefed the new recommendation. He explained that the only indication on an Instrument Approach Procedure (IAP) chart that an airport has a Runway Lead-in Lighting System (RLLS) is as part of the textual list of runway lighting systems within the airport sketch box. He stated that Garmin is recommending that the existence of RLLSs should be added to the briefing strip in the same way other approach lighting systems are shown.

Krystle Kime, FAA/AJV-A222, stated that, if there is support, Terminal Charting could chart the existence of RLLS, but added that it would appear as text only, with no symbol as Runway Lead-in Light system configurations are not standard.

Dale Courtney, FAA/AJW-292, said that lead-in lights are just visual cues. He does not think that they should be classified as approach lighting. Vince Massimini, MITRE, agreed and said that it could be more confusing to add them to the briefing strip. Lev Prichard, APA, stated his agreement. Andrew Lewis, Garmin, pointed out that the AIM needs to be revised to clarify that RLLS is not an approach lighting system.

Rich Boll, NBAA, suggested that since the topic of the relocation of lighting information is already under discussion in the Chart Modernization Workgroup, this item could be discussed there as well. There was agreement that this was appropriate and that the new issue could be closed in the ACM arena.

**STATUS: CLOSED**

### VI. Outstanding Charting Topics

**13-01-270 Stepdown Fix Chart Notes**

Samer Massarueh, FAA/AJV-A221, reviewed the issue. John Bordy, FAA/AFS-420, stated that the revised guidance for the removal of stepdown fix altitude notes is in draft FAA Order 8260.19 version I, which is expected to be published in December 2019. He said that the suggested change regarding VDP notes is still under discussion with FAA/AFS-400 and has not yet been taken to the U.S. Instrument Flight Procedures Panel (US-IFPP) for consideration. He said that he agrees with the proposal and will continue to circulate it. Valerie Watson, FAA/AJV-A250, said that she will move forward with the Interagency Air Committee (IAC) Specification change to update the TPP Legend Profile View page to clarify stepdown fix altitude use after the revised guidance has been published in FAA Order 8260.19. She said she will wait to update the guidance for VDPs until that piece has been approved and written into the Order.
STATUS: OPEN

**ACTION:** John Bordy, FAA/AFS-420, will take the suggested change regarding VDPs to the US-IFPP for discussion, and if approved, incorporate the necessary changes into FAA Order 8260.19.


**ACTION:** Valerie Watson, FAA/AJV-A250, to work an Interagency Air Committee (IAC) Specification change to update the TPP Legend Profile View page to clarify stepdown fix altitude use after the revised guidance has been published in FAA Order 8260.19.

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**15-01-295 Charting of Airports for the Minimum Operational Network (MON)**

Samer Massarueh, FAA/AJV-A221, reviewed the issue. Scott Jerdan, FAA/AJV-A310, stated that all actions are now complete. The MON Airports are now in NASR and the MON designations are published on the Enroute charts and in the Chart Supplements, both in individual airport entries and in a consolidated list format.

Jeffrey Lamphier, FAA/AJV-A240, reiterated that, in the Chart Supplement, MON Airports are now identified in the Airport/Facility Directory entry, as well as published as a MON Airport list in the back of the Supplement. He stated this is a duplication of information and recommends that the MON Airport list be considered for removal.

Vince Massimini, MITRE, stated that the list makes it easier to find a MON Airport for flight planning purposes. He thinks that the publication of the list is essential. Rune Dike, AOPA, agreed that the list is important, but suggested that this topic could be discussed further in the Chart Supplement Workgroup to see if it could be published in another location. Rich Boll, NBAA, also agreed that the list is important for pilots. Jeff agreed that the listing will remain in the Chart Supplements and that its proposed removal will be discussed within the Chart Supplement Workgroup.

There was agreement to close this item since all actions are now complete.

**STATUS: CLOSED**

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

Samer Massarueh, FAA/AJV-A221, reviewed the history of this issue. Valerie Watson, FAA/AJV-A250, stated that at the last meeting it was determined that the Flight Operations Group will not support a graphic depiction on GLS procedures to indicate the first fix on the final approach course from which lateral guidance from the GLS antenna can be received. That office’s position is that graphic depiction is unnecessary because the standard approach service volume (ASV) guidance has been published in the Aeronautical Information Manual (AIM).
Ron Renk, United Airlines, the original proponent of the Recommendation Document (RD), stated that he does not agree with the position that the guidance in the AIM is sufficient and he does not agree to close this item. He also said he plans to submit a new RD at the next meeting to propose a charted indication of service volume on all precision approaches.

Valerie stated that this discussion needs to be limited to the GLS issue and a proposal related to other service volume depictions would have to be discussed as part of a new recommendation.

Joel Dickinson, FAA/AFS-410, restated that, at this time, the Flight Operations Group is not in support of charting GLS ASV and again recommended closure. He also stated that the Flight Operations Group is considering the need for a charted indication for when there is a required NAVAID change. He will report on developments of those discussions at the next meeting, which may or may not impact GLS approaches.

**STATUS: OPEN**

**ACTION:** Joel Dickinson, FAA/AFS-410, will report on discussions regarding a charting indication for required NAVAID changes and any relevance to solution of the GLS issue.

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

Samer Massarueh, FAA/AJV-A221, reviewed the issue. Bob Carlson, FAA/AJV-A241, reported that the publication of clearance delivery phone numbers in the Chart Supplement is complete.

Valerie Watson, FAA/AJV-A250, asked about the national clearance delivery phone number that is published in the back of the Chart Supplement. Bob said that he is still working through changes to those phone numbers with Jeff Black, FAA/AJR-B6, and that will be resolved before the end of the year.

Valerie also shared that ARTCC clearance delivery phone numbers were published in the 10 Oct 2019 editions of the Chart Supplements for use when the published Ground Communication Outlet (GCO) conduit or published a phone number is either unpublished or inaccessible.

There was agreement that all actions have been fulfilled and this item could be closed.

**STATUS: CLOSED**

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

Samer Massarueh, FAA/AJV-A221, reviewed the issue. John Bordy, FAA/AFS-420 reported that the issue was discussed at the U.S. Instrument Flight Procedures Panel (US-IFPP) and there was support for adding Minimum Sector Altitudes (MSAs) to Departure Procedures (DPs). Revised guidance is being drafted for FAA Orders 8260.46H and 8260.3E to support that change. Publication in the Orders is expected in 2020.

Valerie Watson, FAA/AJV-A250, said she will take action to write a draft Interagency Air Committee (IAC) Specification change for the addition of MSAs on DPs in anticipation of the reported Order revisions.
Rich Boll, NBAA, asked if there would be a change how the MSA is computed for DPs to allow for sectorization of RNAV MSAs. John said those changes could be discussed in the future, but for now, MSAs for DPs will be computed the same way as they are for Instrument Approach Procedures.

**STATUS: OPEN**

**ACTION:** John Bordy, FAA/AFS-420, will report on the status of revised guidance for the addition of MSAs on Departure Procedures in FAA Orders 8260.46 and 8260.3.

**ACTION:** Valerie Watson, FAA/AJV-A250, will submit an Interagency Air Committee (IAC) Specification change for the depiction of MSAs on Departure Procedures, to be implemented after the revised guidance has been published in FAA Orders 8260.46 and 8260.3.

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

Scott Jerdan, FAA/AJV-A310 reviewed the issue. He stated that the charting specification for publication of National Defense Airspace TFR Areas on VFR charts is in place and publication is awaiting updates to the NOTAM Order. The revised Order will document the System Operations Security Office’s obligation to serve as the authoritative source for these areas. Publication of the revised Order is expected in January 2020. Scott reported that he has already received the list of TFRs requested for charting, so implementation can follow quickly after the Order is effective.

**STATUS: OPEN**

**ACTION:** Scott Jerdan, FAA/AJV-A310, to provide an update on publication of the NOTAM Order and subsequent charting implementation of National Defense Airspace TFRs on VFR Charts.

**17-02-312 Standardized Communications on DPs and STARs**

Samer Massarueh, FAA/AJV-A221, reviewed the issue. John Bordy, FAA/AFS-420, stated that since the last ACM, his office has been working on revised guidance for standardized communications on STARs (ATIS and APP CON) and DPs (DEP CON) in FAA Orders 8260.19 and 8260.46. The revised guidance will support that the above-mentioned communications will always be published when sourced in the authoritative database (currently NASR) and that any additional communications types must be requested on the procedure source document, preceded by the command word “CHART”. It is anticipated that changes to the 8260.19 will be published in December 2019 and changes to the 8260.46 will be published in June 2020.

Valerie Watson, FAA/AJV-250, reiterated that communication revisions to charts will not be made until procedures are formally amended (up numbered), giving the local facility a chance to revise the document to request communications outside the standard for charting.

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

**ACTION:** Valerie Watson, FAA/AJV-A250, will submit an Interagency Air Committee (IAC) Specification change for standardized communications on DPs and STARs after the revised guidance has been published in FAA Orders 8260.19 and 8260.46.

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

Samer Massarueh, FAA/AJV-A221, reviewed the issue. Valerie Watson, FAA/AJV-250, briefed that at the last ACM, the request to add ILS facility performance classification code explanatory language to Advisory Circular (AC) 121-118 had been placed on hold as Doug Dixon, FAA/AFS-410, explained that Flight Standards was in the process of re-examining autoland issues.

Joe Lintzenich, FAA/AFS-410, Contract Support, reported that there is a currently study underway involving ICAO and the FAA regarding glideslope multipath. Until that study is completed, his office cannot move forward on this issue. Joe stated he was hopeful the study will be completed in early 2020, at which time his office can reassess this request.

Christopher Gottwald, UPS & IPA, reiterated the original request to have ILS facility performance classification codes language added to the Aeronautical Information Manual (AIM). He stated that until guidance is published for pilots, Category I Autoland operations should be stopped. Joe stated that the Flight Operations Group has already decided that they will not publish new guidance in the AIM, but that they have agreed to look into expanded guidance AC 121-118. He also referred Christopher to the ILS Components List that is published on the Aeronautical Information Services website (URL: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/reports/). Joe said he would take Christopher’s concerns regarding the continued use of Category I Autoland back for consideration. Christopher emphasized that the risk needs to be communicated to pilots.

**STATUS: OPEN**

**ACTION:** Joe Lintzenich, FAA/AFS-410, Contract Support, will take the concerns raised regarding the safety of continued use of Category I Autoland back to the Flight Operations Group for discussion

**ACTION:** Joe Lintzenich, FAA/AFS-410, Contract Support, will report on the outcome of the Multipath ILS Glideslope Study and how it pertains to the effort to publish Category I Autoland guidance in AC 121-118.

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

Samer Massarueh, FAA/AJV-A221, reviewed the issue. Joel Dickinson, FAA/AFS-410, provided an update. He stated that his office does not believe that OROCA can be used to satisfy FAR Part 91.177. They are however,
working to revise the Instrument Procedures Handbook (IPH) and Aeronautical Information Manual (AIM) guidance for how pilots can use OROCA. He said they expect the new guidance to be published by the next ACM.

Rune Duke, AOPA, stated that though this is a compromise to what was originally requested, he agrees that this course will likely lead to a solution that will work. He supported Joel in that the wording of the OROCA language is still under discussion.

Gary Fiske, FAA/AJV-82 Contract Support, expressed his concern for Air Traffic Control (ATC) to know what the minimum altitude is that they can assign. Rune responded that the limits will be clear and the work being done will not change ATCs processes or change how pilots file flight plans.

Valerie Watson, FAA/AJV-A250, stated that the OROCA guidance published on the FAA Enroute Low Charts will also need to be revised along with the AIM and IPH. Joel and Rune agreed that the charted definition of OROCA and its use will be addressed.

**STATUS: OPEN**

**ACTION:** Joel Dickinson, FAA/AFS-410, will report on the status of revised OROCA guidance to be published in the Instrument Procedures Handbook (IPH), Aeronautical Information Manual (AIM), and on the FAA Enroute Low Charts.

**17-02-318 Charting of Helicopter Routes per RNP NAVSPEC 0.3**

Mike Webb, FAA/AFS-420, reviewed the history of the issue. He reported that he does not yet have a publication date for Required Navigation Performance (RNP) 0.3 values to be assigned to and charted on IFR Low Altitude RNAV Helicopter (TK) routes. He said they are beginning work on the route from Maine to Boston, but anticipated publication of a required RNP value is at least a year in the future.

Gary Fiske, FAA/AJV-82 Contract Support, asked if existing routes will be changed to RNP 0.3. Mike responded that they will be changed to RNP 0.3 where needed, however the majority of routes will remain RNAV 2.

Scott Jerdan, FAA/AJV-A310, reported that the National Airspace System Resource (NASR) database enhancement that is needed to accommodate RNP airway values is still in progress.

Valerie Watson, FAA/AJV-A250, stated that the Interagency Air Committee (IAC) Specifications to support depiction of RNP values on TK Routes on IFR Enroute Low Altitude charts has been drafted. She showed the audience how the new RNP values will appear on the charted routes and on the legend of IFR Enroute Low Charts.

**STATUS: OPEN**
**ACTION:** Mike Webb, FAA/AFS-410, will provide an update on anticipated publication dates for addition of RNP 0.3 values to TK routes.

**ACTION:** Scott Jerdan, FAA/AJV-A310, and Brian Murphy, FAA/AJV-A350, will report on progress to add an RNP attribute in the airway resource in NASR and to update the CIFP.

**ACTION:** Valerie Watson, FAA/AJV-A250, will submit an IAC specification change to support depiction of RNP values on TK Routes on IFR Enroute Low Altitude charts.

### 18-01-322 Recognize Specific PERM NOTAMs as Authoritative Source

Scott Jerdan, FAA/AJV-A310, reviewed the issue. He commented that he had been working with Lynette McSpadden on this issue, but she has since taken a new position within the Agency and is no longer with the NOTAM Office. He said that this effort has been rolled into the broader NOTAM Modernization effort and seems to have been put on the backburner since Lynette left. He said he will reach out to the NOTAM Office to try to reinvigorate this effort.

Scott said the first step is to determine if the FAA can cancel PERM NOTAMs on behalf of an airport and who within the FAA has the authority to do so. He said the NOTAM Office is still looking into this and emphasized that this recommendation cannot move forward until that action is resolved. He said that if it is determined that the FAA has the authority to cancel NOTAMs, resolution of what airport-specific NOTAM types could be accepted as source to initiate a National Airspace System Resource (NASR) revision and subsequent chart change will be established.

Rune Duke, AOPA, stated that there is a new initiative underway regarding the cancellation of PERM NOTAMs. He suggested that Scott work with Jerry Torres, FAA/AJR-B3, on the effort.

**STATUS:** OPEN

**ACTION:** Scott Jerdan, FAA/AJV-A310, will work with Jerry Torres, FAA/AJR-B3, to continue to investigate how the FAA can cancel PERM NOTAMs on behalf of an airport and who within the FAA has the authority to do so.

**ACTION:** Scott Jerdan, FAA/AJV-A310, will report on progress of identifying types of PERM NOTAMs that can be accepted as source to initiate a NASR/chart changes.

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

Rune Duke, AOPA, provided an update. He said that AOPA has recently met with the American Association of Airport Executives (AAAE) and Airports Council International-North America (ACI-NA) regarding standardized terms for parking/ramp areas on airport diagrams. He said he is awaiting their written concurrence. Once written documentation of their support has been obtained, AOPA will again meet with the FAA Office of Airports to further the issue.
STATUS: OPEN

**ACTION:** Rune Duke, AOPA, will continue to coordinate with the Office of Airports to sanction use of the proposed terms and update their relevant guidance/documents.

**ACTION:** Valerie Watson, FAA/AJV-A250, and Rune Duke, AOPA, will submit the new parking area definitions for publication in the Pilot/Controller Glossary (PCG) of the Aeronautical Information Manual (AIM) after the Office of Airports has updated their documentation to support them.

**ACTION:** Valerie Watson, FAA/AJV-A250, will revise the Interagency Air Committee (IAC) Specifications and the Chart User’s Guide after the new parking area definitions have been published in the Pilot/Controller Glossary (PCG) of the Aeronautical Information Manual (AIM).

**ACTION:** The Airport Mapping Team, FAA/AJV-A240, will research possible outreach to airport proponents in collecting the standardized airport diagram parking area terms after the above steps have been accomplished.

**18-02-327 IAP Chart Modernization**

Rich Boll, NBAA, provided an update on progress of the IAP Chart Modernization Workgroup. He stated that one of the outstanding issues that must be resolved before the proposal can move forward is to determine if Department of Defense (DoD) will agree to removal of the military ceiling and visibility minimums. Kevin Keszler, AFFSA, at this point in the discussion, said that he has been coordinating with the branches of the military to see if they will support the removal, but he does not yet have consensus. There was a lengthy discussion, during which military audience members expressed their concerns with removing the charted military minimums.

Rich then moved on to discuss ACM concurrence for the remaining chart changes that could still be accomplished even if the military minimums must be retained. First, he showed the proposal to replace current airport sketch with a skeletonized thumbnail sketch. He made a point to stress that every airport with a public-use IAP will have a full-sized Airport Diagram published in the Terminal Procedures Publication (TPP). Second, he showed the expanded profile and minima table. Third, he showed the incorporation of Remote Altimeter Setting Source (RASS) as a separate line of minima and their removal from the briefing strip notes box. Fourth, he showed how the Time/Distance Table will be smaller and moved to the planview. Fifth, he showed how the VGSI symbols will be moved to the briefing strip lighting box. [See Slides 5-9]

Rich then pointed out the changes from the original proposal that must await the removal of the military ceiling and visibility minimums. This includes the incorporation of inoperative components into the minima table and the accompanying removal of those notes from the briefing strip notes box.

Rich said that there are two options. One is to take the agreed upon items and move forward with the changes that can be accomplished while retaining the military minima. The second option is to wait until the military moves forward with the decision to remove military minima and then make all the changes...
together. Rich prefers the second option because of his concerns with moving forward with partial changes without the significant benefit of incorporating inoperative minima. Several people agreed with Rich. Krystle Kime, FAA/AJV-A222, agreed and added that these changes will take a long time for Terminal Charting to implement so it would be better to wait for approval and work on all the changes at once.

Toward the end of the discussion, Kevin announced that during the course of Rich’s presentation, he had been in communication with military representatives and was told that DoD requires that the military ceiling and visibility minimums remain on the chart.

Rich reported that in previous discussions with the military, it was agreed that in most cases only the military ceiling need be depicted. It was agreed that the military visibility when expressed in statute miles need not be depicted as it is a repetition of the standard (non-military) visibility. In cases when the visibility is reported as an RVR (runway visual range) value, a visibility in statute miles WILL be reported with the military ceiling. Rich then said that work would continue with the above changes that have ACM concurrence and with retention of the military minima in the manner agreed upon in previous discussions.

Mike Webb, FAA/AFS-420, expressed concern for helicopter pilots over the removal of the full airport sketch, noting that most helicopter operations are single pilot and having to flip pages can be difficult. Mike requested the opportunity to take the concepts discussed during the ACM to helicopter community to verify their support of this proposal. Valerie pointed out that this item has been under discussion at the ACM for some time and if there is not agreement for removal of the sketch, none of the other changes can be accomplished. Mike agreed to expedite his vetting of the sketch to thumbnail to the helicopter community.

Rich stated that in light of this discussion, he would reconvene the workgroup to determine if this proposal is still worth pursuing. Rich will report back on developments at the next meeting.

**STATUS: OPEN**

**ACTION:** Mike Webb, FAA/AFS-420 will verify support from the helicopter community regarding the proposed removal of the airport sketch and replacement with a skeletonized thumbnail and will report back at the next ACM.

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

19-01-330 Updating Terminal Procedure Publication (TPP) Inop Components or Visual Aids Table

Valerie Watson, FAA/AJV-A250, stated that since the last ACM, the Interagency Air Committee (IAC) Specification change to update the Inoperative Components or Visual Aids Table was approved. The update adds the text “Full Operation Exception: For ALSF 1 & 2 operated as SSALR, or when the sequenced flashing lights are inoperative, there is no effect on visibility for ILS lines of minima.” The text will be added to the explanatory text of the table in the TPP for the 5 December 2019 effective date. There was agreement that this item could be closed.

**STATUS: CLOSED**
19-01-331 Hotspot Information on Departure/Arrival Charts

Rich Boll, NBAA, reviewed the history of this item. He reported that since the last ACM he has formed a workgroup to look into this issue and has been in discussion with the Flight Operations Group regarding a proposed Attention All Users Page (AAUP) for the RUUDY DEPARTURE at Teterboro Airport (TEB). Rich said that the Flight Operations Group has expressed concern with widening the use of AAUPs which are currently only used for a very specific criteria. The office has expressed they would prefer to pursue other options to mitigate the issues at TEB.

Rich then showed the audience how an Alert Notice is being used at Seattle/Tacoma International (SEA) to make pilots aware of the potential danger of misidentifying a taxiway located in between three runways. He pointed out that the information regarding the Alert Notice is published directly on the FAA 8260-3 Form. John Bordy, FAA/AFS-420, commented that there is no criteria for Alert Notices in FAA Order 8260.19. He voiced that the Seattle case appears to be a “one-off” that does not follow currently published procedure development guidance. Valerie Watson, FAA/AJV-A250, pointed out that there is also no Interagency Air Committee (IAC) Specification guidance for publication of Alert Notices.

Rich said that the FAA Safety Office is examining the origins, intent and effectiveness of the SEA Alert Notice. If it is determined that it has been effective at increasing safety at SEA, that could justify the publication of another such notice at TEB.

Joel Dickinson, FAA/AFS-410, commented that if there is a procedure with a high rate of deviations, the FAA should first look at a redesign of the procedure. Dave Teffeteller, FAA/AJV-A433, agreed that the first step is to look at the procedure(s) in question and make an attempt to remedy the situation by revising the procedure(s). He also said that before another Alert Notice is considered, criteria would need to be established for when the publication of an Alert Notice is indicated. Rich explained that the RUUDY DEPARTURE is a particularly difficult procedure to fly given the complexities of the airspace constraints around New York. He said there is not a lot that can be done procedurally to fix the issues at this location and that numerous attempts to do so had been made to little effect in the past.

Gary McMullin, Southwest Airlines, suggested that the FAA could do a safety risk management review to look at the particular issues causing problems at TEB. That could help to identify the problems, and help find ways to mitigate them.

Discussion then shifted to a debate between AAUP or Alert Notice and which would better serve. Joel commented that the criteria will have to be modified to accomplish either one of those as a solution. Valerie stated that the first choice should be an AAUP rather than an Alert Notice as there is already criteria and specifications in place for RNAV Departure AAUPs and it is likely easier to expand the existing guidelines for an AAUP rather than creating new guidance for an Alert Notice. She added that the FAA is looking into removing the published Alert Notice at SEA because it is not supported by either current procedure design criteria or charting specifications. Valerie asked John Bordy, FAA/AFS-420, if he could start looking into these issues from a criteria standpoint. John said that he would be part of Rich’s workgroup going forward.
STATUS: OPEN

**ACTION:** Rich Boll, NBAA, will report on progress of the workgroup regarding the addition of criteria for the use of an Alert Notice or Departure AAUP for Teterboro Airport (TEB).

**ACTION:** Rich Boll, NBAA, will report on the results of the FAA Safety Office’s examination of the origins, intent and effectiveness of the SEA Alert Notice.

**19-01-332 Charting Waypoints with Both Fly-Over and Fly-By Functions**

Valerie Watson, FAA/AJV-A250, reviewed this issue. She first showed the audience the language changes that are being worked for FAA Order 8260.19 (See Slide 2). John Bordy, FAA/AFS-420, stated that the 8260.19 has been updated for missed approach holding patterns, but he still needs to scrub the text to ensure that the charting of all holding pattern waypoints are clearly described the same way.

Valerie then showed the audience the proposed updates to the Aeronautical Information Manual (AIM) (See Slide 4). There was audience support for the updates. Joel Dickinson, FAA/AFS-410, said that he would take the action to process the AIM revision.

Valerie then showed the proposed change to the Interagency Air Committee (IAC) Specifications. Kevin stated that Department of Defense (DoD) will take an exception to the specifications. He said military charts will continue to depict the holding waypoint as Fly-over unless it is used as Fly-by in another part of the procedure, which is opposite to the FAA standard. Valerie expressed her concern with not charting them the same way. She voiced a need for further discussions regarding adherence of both FAA and DoD to the charting specifications. She said she would take this discussion to the IAC and or IAC Point of Contact meetings.

STATUS: OPEN

**ACTION:** John Bordy, FAA/AFS-420, to update FAA Order 8260.19 to ensure all the guidance agrees with the current charting standard.

**ACTION:** Joel Dickinson, FAA/AFS-410, will submit the proposed updates to the Aeronautical Information Manual (AIM).

**ACTION:** Valerie Watson, FAA/AJV-A250, will bring the discussion of a standard waypoint depiction to the IAC to ensure the FAA and DoD concur on the charting standard for the depiction of Fly-over and Fly-by waypoints.

**19-01-333 LED Lighting at Airfields**

Joe Lintzenich, FAA/AFS-410, Contract Support, provided an update. He stated that the Flight Operations Group is continuing to work with the Office Airports to get LED lighting systems added to FAA Form 5010,
Airport Master Record. Once a reliable source for LED lighting system locations is established, then the charting offices will investigate the best way to communicate this information to users.

**STATUS: OPEN**

**ACTION:** Joe Lintzenich, FAA/AFS-410, Contract Support, will continue to work with the Office of Airports, FAA/AAS-100, to secure a source for the LED data.

**19-01-334 Deletion of VFR Waypoint Tabulations from VFR Products**

Rick Fecht, FAA/AJV-A214, provided an update. He said the ACM-approved removal of the VFR Waypoint tables will begin with a day-forward implementation on the 27 February 2020 publication date. Users will then see the tables removed as each chart is updated. He added that a Charting Notice has been posted regarding the removal of the tables to alert users to this change which includes notification of where users can find VFR Waypoint geographic coordinates. There was agreement that this item can be closed.

**STATUS: CLOSED**

**19-01-335 Charting of Unusable Airway Segments**

Jennifer Hendi, FAA/AJV-A250, provided an update on the changes made in the Chart User’s Guide for the 15 August 2019 edition. Language approved by the Flight Operations Group and submitted to AJV-A by Joel Dickinson, FAA/AFS-410, was added to the Chart User’s Guide to describe how Unusable Segments can and cannot be used. Jennifer then asked Joel if he plans to also update the Aeronautical Information Manual (AIM) on how Unusable Airway Segments are defined and may be used. Joel said he is still looking into AIM updates.

Gary Fiske, FAA/AJV-82, Contract Support, asked if it is permissible to substitute RNAV to fly an unusable route. If that is the case, he agreed that needs to be explained further in the pilot guidance.

Dave Stamos, NGA, said that there are instances where the unusable symbol was not added to a number of charted conventional routes because the 8260-16 airway source form said that the routes are unusable except for aircraft equipped with RNAV. As a result, a note was added to the chart, e.g. ISO R-055 to PEARS unusable except aircraft equipped with suitable RNAV. John Bordy, FAA/AFS-420, said he is not aware of any policy to support that. Dave Teffeteller, FAA/AJV-A433, said he will look into the reasons why the note was added to the source.

Rune Duke, AOPA, pointed out that FAA JO 7110.65 states if any part of the route is unusable, Air Traffic Control will clear aircraft by other means. Valerie Watson, FAA, AJV-A250, stated that it appeared to her that there is a disconnect between the 7110.65 and the language supplied by the Flight Operations Group and published in the Chart User’s Guide. Joel said they are different because the 7110.65 is referring to a route and the Chart User’s Guide is referring to flying RNAV point-to-point. Gary said he will look at the 7110.65 and ensure that there is no disconnect with the pilot guidance in the AIM and Chart User’s Guide.
STATUS: OPEN

**ACTION:** Joel Dickinson, FAA/AFS-410, will consider updates to the Aeronautical Information Manual (AIM) regarding the definition and use of Unusable Airway Segments.

**ACTION:** Dave Teffeteller, FAA/AJV-A433, will investigate the source documentation for the addition of the unusable note to the routes Dave Stamos cited.

**ACTION:** Gary Fiske, FAA/AJV-82, Contract Support, will look at FAA JO 7110.65 to ensure there is no disconnect with the pilot guidance in the Aeronautical Information Manual and Chart User’s Guide.
VII. Closing Remarks

Samer Massarueh, FAA/AJV-A221, thanked the attendees for their participation.

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


Please note the attached Office of Primary Responsibility (OPR) listing for action items. It is requested that all OPRs be prepared to provide verbal input at the next meeting or provide the Chair, Valerie Watson (with an informational copy to Alex Rushton, Contract Support), a written status update. These status reports will be used to compile the minutes of the meeting and will serve as a documented statement of your presentation.

Appreciation to Jennifer Hendi, FAA/AJV-A250, and Alex Rushton, FAA/AJV-A250, Contract Support, for presentation assistance, pre- and post-conference support, and assistance with drafting the final Charting Group meeting minutes.

VIII. Next Meetings

ACM 20-01 is scheduled for April 14-16, 2020, hosted by FAA in the NOAA Science Center Auditorium, Silver Spring, MD.

ACM 20-02 is scheduled for October 27-29, 2020, hosted by FAA in the NOAA Science Center Auditorium, Silver Spring, MD.

IX. Attachments

a. 19-02 Attendee Roster
b. Office of Primary Responsibility (OPR)
c. List of Abbreviations Used in Minutes