Government/Industry Aeronautical Charting Forum (ACF)
Meeting 17-02
Charting Group
October 25-27, 2017
AOPA
Frederick, MD 21701

CHARTING GROUP MINUTES

I. Opening Remarks

The Aeronautical Charting Forum (ACF) was hosted by the Aircraft Owners and Pilots Association (AOPA) at their National Aviation Community Center located in Frederick, MD. Valerie Watson, FAA/AJV-553, opened the Charting Group portion of the forum on Wednesday, October 25. Valerie acknowledged ACF Co-chair John Bordy, FAA/AFS-420, who presided over the Instrument Procedures Group (IPG) portion of the Forum the previous day. Valerie also expressed appreciation to AOPA and Rune Duke for hosting the 17-02 ACF.

II. Review Minutes of Last Meeting, ACF 16-02

The minutes from ACF 16-02 meeting were distributed electronically last fall via the Aeronautical Information Services (AIS) ACF website: http://www.faa.gov/air_traffic/flight_info/aeronav/acf/. The minutes were accepted as submitted with no changes or corrections.

Note: There are no minutes for ACF 17-01 due to its cancelation.

III. Agenda Approval

The agenda for the 17-02 meeting was accepted as presented.
IV. Presentations, ACF Working Group Reports and ACF Project Reports

Discontinuation of VOR Services

Leonixa Salcedo, FAA/AJM-324, briefed the issue. She reviewed the history, current timeline and accomplishments of the Very High Frequency Omnidirectional Range (VOR) Minimum Operation Network (MON) program. Leonixa stated that the final policy statement was published in the Federal Register in July of 2016. She also reported that a website (www.faa.gov/go/vormon) has been established to aid in communicating with the public on the progress of the program.

Leonixa reported that to date, 16 VORs have been discontinued. Seven more are planned for discontinuance in the next six months. She also reported that her office plans to publish a list of the VORs that will be retained.

Rune Duke, AOPA, asked what efforts are being made regarding the sustainability of existing VORs that are expected to remain in the system. Leonixa commented that a study is being conducted this year to assess what needs to be done to ensure the sustainability of existing VORs.

John Collins, GA Pilot, asked for clarification of the new Standard Service Volume (SSV) that will be used. Leonixa stated that establishing new VOR service volumes and the associated flight check activity is one of the next steps in the VOR MON program and that the expected values will be 70NM at or above 5000’ and 130NM above 18,000’ for high VORs. Valerie Watson, FAA/AJV-553, stated that the SSVs are published in the Chart Supplement and AIM. She pointed out that the descriptive text will have to be modified if and when changes to published standard service volumes are confirmed. Leonixa will inform AJV-5 when the new service volumes are confirmed so that the information in the Chart Supplement can be revised. Her offices will also work the relevant AIM changes.

Valerie then reviewed the publication/charting policy that has been established for DME facilities. She reminded the audience that when the VOR portion of an existing VOR/DME is decommissioned, the remaining DME at that location will retain the same name and location identifier, with the NAVAID type revised to DME.

ACTION: Leonixa Salcedo, FAA/AJM-324, will provide an update the next ACF.

Transitioning to Point to Point Navigation

Rune Duke, AOPA, briefed the issue. Rune stated that goal of this ACF Subcommittee is to look at the challenges to point-to-point navigation and present recommendations. He reviewed the actions taken since last ACF. The working group held several meetings, out of which, three issues were identified: Minimum IFR Altitude to pilots; Communication gaps along an airway; and Waypoint naming and organization. For the first item, a Recommendation Document (RD) was submitted which was briefed later in the ACF (Ref. ACF RD 17-02-316 Improving OROCA to Meet FAR 91.177 Requirements). The other items are still in discussion within the workgroup.
**Atlantic Coast Route Project (ACRP)**

Valerie Watson, FAA/AJV-553, reported that this issue has been put on hold indefinitely. This item will be removed from the agenda until this issue is resurrected by the proponent.

**NOTAM Briefing**

Lynette (Jamison) McSpadden, FAA/AJR-B11, provided a presentation on several items that US NOTAM office is involved in. She provided an update on the status of the US NOTAM System migration to the Federal NOTAM System, the goal of which is to create a single authoritative source for NOTAM entry and dissemination. She described some of the recent revisions which include NOTAM origination service for Temporary Flight Restrictions (TFRs). NOTAM Search is being updated to so that it can graphically display TFRs. Work is also being done on the automation of construction notices. Additionally, Lynette reported that there has been an increased standardization of NOTAMs, that 80% of NOTAMs are now available digitally and announced that there is now public, historical access to the past three years of archived NOTAMs.

Lynette then provided an update on the Take Off and Landing Performance Assessment (TALPA) Program. TALPA has been in place over a year and they are now looking for improvements. She stated that there will be no changes for this winter, but next year there will be policy and software changes as a result of pilot input. They will also be working on more outreach and education to the pilot community. Rich Boll, NBAA, stated that NBAA is in the process of putting out 5 training videos on how pilots can utilize TALPA. The videos will be available via the NBAA website and YouTube channel before the 2017/18 winter season starts.

Lynette then provided an update on the NOTAM Office involvement in the FAA/International Air Transport Association (IATA) meeting. She stated that her office provided a briefing on US NOTAMs and is interacting with IATA regarding international concerns.

Lynette then spoke about the Air Traffic Organization (ATO) Top 5 efforts. She stated that two of the top five safety initiatives pertain to NOTAM issues. In response, a task force has been created. One of the goals of that group is to work with stakeholders to look at reducing the number of NOTAMs.

**PRM Procedure/AAUP Changes**

John Blair, FAA/AFS-410, provided an update on FAA Order 8400.9 and stated that internal coordination is expected to be completed by the end of November 2017.

Joe Lintzenich, Contract Support, FAA/AFS-410, reviewed the changes being made regarding Precision Runway Monitor (PRM) procedures and Attention All Users Pages (AAUPs) (See Slides #2 and #3). Joe reported that a new slide presentation has been made that replaces the present PRM video. He emphasized that the training requirements have not changed, it has just been updated to the latest criteria. He also reported that the text on the AAUPs has been updated and shortened. He showed an example of the new format (See Slide #3).
CPDLC Briefing

Gregg Anderson, FAA/AJM-34, provided an update on the Controller Pilot Data Link Communication (CPDLC) program. Gregg stated that Phase 1, in which terminal CPDLC services were deployed to 55 towers, is now complete. In preparation for Phase 2, the individual airport-specific logons (for example, “KAUS”) will be changed to the universal nationwide logon of “KUSA”. This will happen within the next few weeks. Valerie Watson, FAA/AJV-553, stated that the current individual logons contained in the NASR database will be revised to KUSA and these revisions will appear published in the National Flight Data Digest (NFDD) and eNASR. She further stated that, for at least the short term, the logon KUSA will be retained in the Chart Supplement airport CPDLC entries. Once AIM guidance is published announcing the universal KUSA logon, AJV-5 will look into the possibility of removing the logon from the airport entries and adding explanatory text to the front of the Chart Supplement. Ted Thompson, Jeppesen, suggested that the KUSA logon information be retained in the database even though it may seem redundant. He stressed that this is especially important for data suppliers so they don’t have to hunt for the logon information. Joshua Fenwick, Garmin, echoed that he would like the logon information to be retained, at least in the database. Valerie thanked Ted and Joshua for their input and stated she would recommend AJV-5 to retain the information in NASR.

Gregg then discussed Phase 2 of the program which is the implementation of enroute services. He stated that the initial testing is set to take place beginning in April of 2018. He briefed that a phased implementation of enroute CPDLC services is planned (see ppt). Gregg then discussed his charting recommendations for making the public aware that enroute CPDLC services are available within a given Air Route Traffic Control Center (ARTCC). He showed examples of how other countries have charted CPDLC information on their enroute charts (Slides #8 and #9). Valerie asked if there is an existing ICAO standard in place for charting CPDLC information. Gregg replied that there is no ICAO guidance.

Ted discussed the enroute charting implications, stating that there is a need for a coordinated effort between the FAA and chart producers. He proposed the formation of a workgroup to discuss the source and depiction of CPDLC information on enroute charts. He shared that Jeppesen already has a charting specification in place where the CPDCL information, including the logon information, is part of the center boundary label.

Valerie will put together a workgroup with Gregg Anderson’s assistance to address the expansion of CPDLC into the enroute arena and to discuss the databasing and charting portion of this recommendation.

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<tr>
<th>CPDLC Workgroup</th>
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ACTION: Gregg Anderson, FAA/AJM-34, will work on AIM guidance regarding the universal KUSA logon.

ACTION: Valerie Watson, FAA/AJV-553, will monitor AIM guidance publication and take action to add explanatory text to the front of the Chart Supplement to describe the new KUSA logon.

ACTION: Valerie Watson, FAA/AJV-553, and Gregg Anderson, FAA/AJM-34, will set up a working group to discuss the Enroute application of CPDLC.

ACTION: Scott Jerdan, FAA/AJV-533, will work to establish NASR population of ARTCC CPDLC information.

**FAA Chart User’s Guide Briefing**

Alex Rushton, Contract Support, FAA/AJV-553, *briefed* the audience on the release of the updated FAA Chart User’s Guide. The newly updated document is available in two formats, a website version and a PDF. The User’s Guide will be maintained as a live document with frequent updates released concurrently with future chart cycles as necessary to reflect the most recent charting specification changes. Alex highlighted a number of enhancements that have been applied to both formats. News of the release of the updated document was extremely well received by the ACF audience.

Charts User’s Guide Available online at:
https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/aero_guide/
V. Outstanding Charting Topics

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

Paul Gallant, FAA/AJV-113, was not in attendance. Valerie Watson, FAA/AJV-553, said that she will keep this item open and will coordinate with Paul to secure an update for the next ACF.

STATUS: OPEN

ACTION: Paul Gallant, FAA/AJV-113, to report back on updating airspace legal descriptions at the next ACF.

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

Valerie Watson, FAA/AJV-553, reviewed the topic and the past decision by the ACF that only non-standard Traffic Pattern Altitudes (TPAs) should be published in the source (NASR) database and in the Chart Supplement. She shared that the revisions to the TPA language that was agreed upon by the ACF is expected to be published in the 29 March 2018 version of the AIM.

Rick Mayhew, FAA/AJV-533, stated that after the revised and clarified AIM language has been published, the National Flight Data Center (NFDC) will remove all “standard” TPAs from the source database (NASR), which will in turn automatically remove them from the Chart Supplement airport entries (this attribute of the Supplement is pulled directly from NASR). Valerie asked how long the NASR cleanup is expected to take. Rick responded that it may take several cycles. Rick then shared that the NFDC’s source for TPA information is FAA 7480-1 Form, Notice of Landing Area Proposal.

Scott Jerdan, FAA/AJV-533, stated that he would like to see revisions to the FAA FORM 7480-1; first to indicate whether the TPA is standard or non-standard and second to accommodate multiple TPAs for different aircraft types. Rick and Scott committed to working with the Office of Airports to make changes to the form to ensure that either only non-standard TPAs are reported or that the form clearly indicates standard/non-standard, and that Box 4 of the form to be expanded to accommodate multiple TPAs for different kinds of aircraft.

STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-553, will report on the status of the publication of the revised AIM language and work to revise the Chart Supplement TPA explanatory text.

ACTION: Scott Jerdan, FAA/AJV-533, will coordinate a NASR cleanup to ensure that only non-standard TPAs are listed in the database. This cleanup can begin after the publication of the revised AIM language.

ACTION: Rick Mayhew and Scott Jerdan, FAA/AJV-533, will work with the Office of Airports to make changes to FAA Form 7480-1, Notice of Landing Area Proposal to clarify collection of TPA information.
13-01-270 Stepdown Fix Chart Notes

Valerie Watson, FAA/AJV-553, reviewed the topic and reported that after the last ACF this item was placed on hold by FAA/AFS-400 pending further coordination. John Bordy, FAA/AFS-420, said that this is no longer on hold and the (previously agreed-upon by the ACF) proposed changes to the AIM are now moving forward. Bruce Mc Gray, FAA/AFS-410, reported that the AIM guidance is expected to be published in the September 2018 update. John then stated that once the AIM guidance is in place, he will work updates to FAA Order 8260.19. Valerie asked if the proposed changes to the TPP Legend Profile View page could be published now. Rich Boll, NBAA, suggested that those changes also wait until after the AIM guidance is published so the new changes can be communicated to pilots.

STATUS: OPEN

ACTION: Bruce McGray, FAA/AFS-410 to report back on the status of the revised stepdown fix AIM guidance.

ACTION: Valerie Watson, FAA/AJV-553, will move forward with the specification change to update the TPP Legend Profile View page to clarify stepdown fix use after the new AIM language is published.

ACTION: John Bordy, FAA/AFS-420, to move forward with revised guidance in FAA Order 8260.19 after the new AIM language is published.

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

Rick Mayhew, FAA/AJV-533, reviewed the history of this issue. Rick reported that he has written confirmation from the FAA Non-Fed Weather Office that all AWOS systems that they submit to the National Flight Data Center (NFDC) are certified. He said that they now have confidence that the data that is received can be published on the charts. Valerie Watson, FAA/AJV-553, stated that based on this information she will move forward with the specification changes supporting the charting of off-airport AWOS/ASOS.

Valerie then asked about remote altimeter notes published on Instrument Approach Procedures (IAPs) that currently only refer to automated weather systems located on public-use airports. The notes refer to the remote systems by name only. Valerie stated that if, in the future, these stand-alone AWOS systems were utilized on IAPs, the chart would have to refer to the AWOS system only and not make reference to the airport on which they are located. She suggested that we may need to consider identifying these systems in such notes by identifier and possibly including the frequency to insure that users have the information.

Rich Boll, NBAA, asked if the FAA plans use these AWOS systems (not located on public-use airports) in the development of instrument approaches. Tony Lawson, FAA/AJV-553, responded that the FAA does not currently utilize these AWOS systems in the development of IAPs. John Bordy, FAA/AFS-420, agreed and stated that there is not currently a policy in place for using AWOS systems that are not located at public-use airports. Therefore, Valerie stated that the remote altimeter notes as they are published now do not need to be changed unless there is a change in the policy in the future.

STATUS: OPEN
**ACTION:** Valerie Watson, FAA/AJV-553, will move forward with the specification change to chart stand-alone AWOS.

### 14-02-282 VASI PAPI Differences

Tony Lawson, FAA/AJV-553, briefed the issue and showed the revised AIM wording published in the March 2017 edition that references both VASI and PAPI parameters in terms of nautical miles. There was agreement to close this item.

**STATUS:** CLOSED

### 15-01-293 STAR Terminus Point Standardization

John Bordy, FAA/AFS-420, reported that the new guidance has been published in FAA Order 8260.19H. Valerie Watson, FAA/AJV-553, reported that the IAC charting specification is in place and that there were no further action items outstanding. There was agreement to close this item.

**STATUS:** CLOSED

### 15-01-295 Charting of Airports for the MON

Scott Jerdan, FAA/AJV-533, provided an update on progress made since last ACF. Scott stated that a request has been submitted for a National Airspace System Resource (NASR) update to accommodate the MON Airport designation. Brian Murphy, FAA/AJV-562, stated that the NASR enhancement request is expected to be complete Spring 2018. Once in place, Scott reported his team will populate NASR from the list that has been provided by the MON Program Office.

Scott expressed his concerns over the long-term ownership and maintenance of the MON Airport data after the MON Program Office sunsets in 2025. Tony Lawson, FAA/AJV-553, stated that ownership of the MON Airport Data would likely transition to the FAA Service Centers. Scott said that he would like to see that responsibility documented in an FAA order. Tony said that it has not yet been finalized how the MON airports or procedures will be tracked. Dale Courtney, FAA/AJW-292, stated that after 2025, the list of MON airports or procedures will only change if there is a procedure change and he believes the Flight Procedures Teams or the Instrument Flight Procedures group will need to take responsibility for the list. Tony stated that these issues are still being discussed.

Valerie Watson, FAA/AJV-553, shared the published AIM language with the audience. She said that comments received at the prior ACF had not yet been incorporated. Leonixa Salcedo, FAA/AJM-324, stated that the AIM guidance is expected to undergo update. Valerie asked that the audience take another look at the AIM language (to be posted on the ACF website) and provide comments to Leonixa so she can consider updates.
STATUS: OPEN

**ACTION:** Tony Lawson, FAA/AJV-553, will report on discussions regarding the long term maintenance of the MON Airport list after the MON Program Office closes in 2025.

**ACTION:** Valerie Watson, FAA/AJV-553, will post the existing AIM language on the ACF website to allow comment to the MON Program Office.

**ACTION:** Scott Jordan, FAA/AJV-533, will work on NASR and NFDC Portal updates to accommodate the MON Airport designation. Once in place, he will populate NASR initially from the list provided by the MON Program Office.

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**15-02-296 Charting of Unmanned Free Balloon Activities and Amateur Rocket Activity Areas**

Valerie Watson, FAA/AJV-553, reported that Paul Gallant, FAA/AJV-11, requested that this recommendation, originally submitted by his office, be withdrawn. If this issue becomes a priority again in the future a follow-up recommendation will be submitted.

**STATUS:** CLOSED

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**15-02-297 Charting of HILPT Maximum Holding Altitude**

Valerie Watson, FAA/AJV-553 reviewed the topic. Valerie showed the audience the prototype chart and reported that the charting specification is in place. John Bordy, FAA/AFS-420, reported that the new guidance was published in FAA Order 8260.19H. There were no further actions required and it was agreed that the topic could be closed.

**STATUS:** CLOSED

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

Valerie Watson, FAA/AJV-553, reviewed the issue and the request supported by the ACF to designate the first fix along the final approach course extended within the service volume of the GLS signal with a “(DMAX)” annotation, allowing the user to know when he can switch to approach mode. Joel Dickenson, FAA/AFS-470, reported that since the last ACF, AFS-470 had made a counter decision to resolve this issue by adding the service volume for the GLS to the Chart Supplement airport entry. He showed the entry that had been published for Houston in the Chart Supplement.

Ron Renk, United Airlines, responded to Joel’s proposed solution stating that it does not meet the intent of his original request. Ron said that pilots don’t have the Chart Supplement with them in the cockpit. He also emphasized that more GLS airports are coming online, so the problems pilots are experiencing are going to
He reiterated that pilots would like to see a clear graphic indication on the planview of the approach chart.

Michael Stromberg, UPS, echoed Ron’s comments, emphasizing that the service volume needs to be where the pilots can find the information easily. Lev Prichard, APA, expressed his full support of the original charting solution. Gary McMullen, Southwest Airlines, agreed and stated the he also supports the original “(DMAX)” charting solution.

Dale Courtney, FAA/AJW-292, commented that there are technical changes going on that will make GLS act more like an ILS. Joel echoed that and stated that AFS-420 wants GLS to be like ILS in that they both have a standard service volume (SSV) and that pilots can be taught that standard. He would prefer not to teach new symbology that only exists at a few locations and that may only be necessary temporarily. Michael Stromberg disagreed with that and stated that it is not easy to look at the chart and know where that point is even if you know what the SSV is. A pilot would have to manually add up the distances on the chart to determine if he was within signal coverage.

Valerie stated that, based on the strong support from the pilot audience for the charting solution, she would like to move forward with the original proposal to chart “(DMAX)” . She indicated that if and when a better solution is found, that solution could be pursued. She asked for a show of hands for those still in support of the charting solution. The following pilots indicated support:

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<tr>
<th>Rich Boll</th>
<th>NBAA</th>
<th>Ron Renk</th>
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<tr>
<td>Lev Prichard</td>
<td>APA</td>
<td>Michael Stromberg</td>
<td>UPS</td>
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<tr>
<td>Christopher Collins</td>
<td>Delta Air Lines</td>
<td>John Collins</td>
<td>GA/Foreflight</td>
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<tr>
<td>Gary McMullen</td>
<td>Southwest Airlines</td>
<td>Chris Neidhardt</td>
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<tr>
<td>Gerry O'Sullivan</td>
<td>ALPA Safety</td>
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<td>Charles Wade</td>
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<td>Brian Townsend</td>
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<td>Steve Woodbury</td>
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<td>Chris Zimmerman</td>
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<tr>
<td>Ethan Quastler</td>
<td>Southwest Airlines</td>
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John Bordy, FAA/AFS-420, suggested that he and Joel take the sentiments of the ACF pilot audience to their management to continue to try to find a workable solution. Joel agreed and stated that he would continue the discussion offline with those in the audience with specific concerns.

**STATUS: OPEN**

**ACTION:** John Bordy, FAA/AFS-420, and Joel Dickenson, FAA/AFS-470, will take the ACF pilot consensus to their management to continue to try to find a workable solution.

**ACTION:** Joel Dickenson, FAA/AFS-470, will continue to work with the proponent and others invested in this issue to address their concerns.
16-01-301 RVR Locations in FAA Documentation

Brain Murphy, FAA/AJV-562, provided an update on the progress made since the last ACF. Brian stated that his office has produced a NASR-generated report that contains the majority of the information that was contained in the original discontinued ILS Components List previously made available by AFS410. A sample report was presented to the audience and Brian asked for feedback to determine if this would fulfill user’s needs. Brain stated that once the comments have been received and the spreadsheet has been finalized, it can be generated and made available by AJV-5 every 28 days.

Ted Thompson, Jeppesen, said that he will take the spreadsheet back so they can take a closer look at it and would provide feedback after the ACF. He said he is particularly interested in RVR availability and use. He wants to know where RVRs are authorized for use or “borrowed” at differing runway ends and at parallel runways.

Dale Courtney, FAA/AJW-292, stated that ATC doesn’t know what RVRs are shared or not. He believes that it does not matter if it is listed as available for use on multiple runways.

Valerie Watson, FAA/AJV-553, said that she will email and post on the ACF website the prototype spreadsheet for the ACF audience to review. Interested parties should review the sample report and provide feedback via email to Valerie Watson, Valerie.s.watson@faa.gov, who will then consolidate all the comments received and forward them to Brian Murphy and John Blair, FAA/AFS-410.

STATUS: OPEN

ACTION: Brian Murphy, FAA/AJV-562 and John Blair, FAA/AFS-410 to review ACF input regarding the NASR generated ILS Components List, work on suggested modifications, and report back at the next ACF.

16-01-302 Cold Temperature Restricted Airport SIAP Segment Depiction

Valerie Watson, FAA/AJV-553, reviewed the issue. Valerie stated that the Terminal Procedures Publication (TPP) explanatory front matter text has been revised to include the single temperature correction method for applying cold temperature altitude corrections as well as direction to the Notice to Airman Publication (NTAP) for segment correction. She reminded the audience that pilots who wish correct for procedure segments must continue to consult the NTAP. Valerie also reported that the Fahrenheit temperatures are in the process of being removed from notes on Instrument Approach Procedures.

Valerie then asked about the status of the request for cold weather information to be included on the 8260 procedure source documents rather than disseminated via NFDD airport remark. Users had previously made this request for the following reasons:

1.) All current approach notes (except this one) are sourced via 8260 and not NFDD remark.
2.) The corrections would be procedure specific and not applied (perhaps incorrectly) to all procedures at an airport.
3.) Temperature changes/deletions/additions could be published via NOTAM.
Tony Lawson, FAA/AJV-553, re-stated his previous position that publication of cold temperature correction information is not a TERPs issue. He further stated that the additional workload to the Instrument Flight Procedures Group would be extremely burdensome.

Rune Duke, AOPA, responded that this is a safety of flight issue because the notes cannot be revised via NOTAM unless they are on the procedure source form. Rich Boll, NBAA, added that the note should be part of the procedure source because the assessment should be part of the individual procedure’s analysis. It may be determined as part of that analysis that the correction may not apply to all approaches at an airport, resulting in a reduction of the number of procedures that require a correction. Rich also added that he would like to see the segment specific information removed from the NTAP.

Valerie commented that for the time being, the NTAP is the only place where segment specific cold temperature correction information is published. Rich said that it was his understanding that the segments were to be kept in the NTAP for one year to allow Part 121 carriers to train their crews. Christopher Collins, Delta Air Lines, expressed concern, stating that Delta was not aware of such an agreement and emphasized that Part 121 operators still need the cold weather segment correction information.

Lynette (Jamison) McSpadden, FAA/AJR-B11, announced to the audience that an FAA safety panel has started work on the process of phasing out the NTAP. The panel will determine where current NTAP information can be published in the future.

In light of this development, the subject of where cold weather information should be published was discussed. Many operators stressed that they still need segment specific temperatures and the depiction of this information on approach charts was reintroduced. Valerie voiced that if the temperatures were to be procedure-specific and depicted on the approach charts, the only likely conduit to source this would be the 8260 procedure source document. After a lengthy discussion, Al Herndon, MITRE, suggested that that this issue should be taken back to the PARC Navigation Working Group.

Valerie summarized and stated that all of the original action items for this issue have been accomplished. In light of the remaining procedural and segment-specific issues, it is recommended that this item be submitted to the FAA PARC Navigation Working Group for further discussion. Rich agreed and volunteered to take this item to that group. If further recommendations arise, they can be resubmitted to the ACF as new proposals. Valerie suggested that this agenda item be closed in the Charting Group portion of the ACF and the audience agreed.

**STATUS: CLOSED**

**16-01-303 Terminal Area Charts (TAC) and Charting IFR Arrival/Departure Routes**

Rich Fecht, FAA/AJV-5223, reviewed the issue. Rick stated that the Visual Charting Team has been in touch with the various air traffic facilities regarding the addition of new VFR Flyway Charts and the six TACs that do not currently have IFR arrival/departure routes charted. As a result, a new VFR Flyway Planning Chart was added effective 25 May 2017 to the New Orleans Terminal Area Chart. Boston and Memphis are still taking the recommendation under consideration. The remaining six Centers declined.
As far as the addition of IFR Arrival/Departure Routes, five ATC Centers requested that the routes be added to their TACs. Two Centers, Denver and Memphis are still taking the recommendation under consideration. (Details provided in Presentation, Slide #2).

Rick suggested that future updates can be provided as a quick briefing and he moved for the item to be closed. The audience agreed.

**STATUS: CLOSED**

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

Jeff Black, FAA/AJR-B6, reviewed the issue and provided updates on progress made on Part I of the implementation since the last ACF. He reported that ATC phone numbers for 656 airports have been databased in NASR and published in the Chart Supplement. He also reported that the AIM is in the process of being updated regarding the use of clearance delivery phone numbers. He added that the FAA Joint Order 7210.3 guidance has also been updated to ensure the proper submission and maintenance of the data.

Valerie Watson, FAA/AJV-553, commented that explanatory text should be added to the Chart Supplement to describe the intent and the use of the phone numbers. Jeff said he would coordinate with her on that language.

Jeff stated that work has now begun on Part II which is to move the telephone relay of all remaining IFR clearance functions from Flight Service to ATC. He reported that 25 approach control facilities responded resulting in over 200 additional airports that will be updated to include a clearance delivery phone number. These additional numbers are expected to be submitted for publication in late spring 2018. He then reported that for all other uncontrolled airports, pilots will obtain a clearance by calling the overlying ARTCC Flight Data Unit. He recommends that these numbers be published in the back portion of the Chart Supplement.

Rune Duke, AOPA, expressed his concern over the maintenance of the phone numbers. Valerie expressed concern that pilots will not look for the phone numbers in the back of the Chart Supplement. Rune agreed and suggested that a phone number be published for all airports in the airport entry. Rich Boll, NBAA, agreed and stated that in today’s data driven world, the information needs to be sourced at the airport. Jeff voiced that he believes that would be ideal. Scott Jerdan, FAA/AJV-533, said that he would pursue the recommendation within his NASR data publication group. He stated that if publication of ARTCC clearance phone numbers to all affected airports were to be accomplished, it would likely take several chart cycles.

Jeff then stated that he has noticed that some of the phone numbers in the Chart Supplement airport entries are not placed in a consistent location. He said that he would work to identify those discrepancies and submit them to AJV-5 for further research. Scott committed to standardizing the information location within NASR which would in turn standardize its publication position within the Supplements.

**STATUS: OPEN**
**ACTION:** Jeff Black, FAA/AJR-B6, will coordinate with Valerie Watson, FAA/AJV-553 on explanatory text for the Chart Supplement to describe the intent and the use of the CLNC DEL phone numbers.

**ACTION:** Jeff Black, FAA/AJR-B6, will identify discrepancies in the Chart Supplement entries and submit them to Scott Jerdan, FAA/AJV-533, for further research.

**ACTION:** Scott Jerdan, FAA/AJV-533, will coordinate with Jeff Black, FAA/AJR-B6, to enter 200 additional airports CLNC DEL phone numbers into NASR. Expected late spring 2018.

**ACTION:** Scott Jerdan, FAA/AJV-533, will look into the feasibility of entering an ARTCC phone number in NASR for all other uncontrolled airports.

**ACTION:** Scott Jerdan, FAA/AJV-533, will standardize the NASR location for the phone numbers and revise non-compliant entries.

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

John Bordy, FAA/AFS-420, stated this item has been taken to the US-IFPP, however it has not been given a high priority within that arena. He anticipates that they will address the issue at the next meeting which is scheduled to take place in January 2018. John will provide an update at the next ACF.

**STATUS: OPEN**

**ACTION:** John Bordy, FAA/AFS-420, will report on discussions that take place at the January 2018 meeting of the US-IFPP.
VI. New Charting Topics

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

Rune Duke, AOPA, briefed the new item. Rune said that there has been a big push from the Radio Technical Commission for Aeronautics (RTCA) on this issue. Rune stressed that making Temporary Flight Restriction (TFR) information easily accessible to pilots is very important. He stated that VFR pilots are suffering more violations because of a lack of easily accessible and timely TFR information. The RTCA Tactical Operations Committee has 8 recommendations for ways to improve how TFRs are communicated:

- Recommendation 1 – “Long-term TFRs” should be charted on Sectionals and TACs
- Recommendation 2 – “Long-term TFRs” should be identified using standardized criteria
- Recommendation 3 – Retain NOTAMs for “Long-term TFRs” even after charting
- Recommendation 4 – Standardize TFR charting depiction
- Recommendation 5 – 56-day chart cycles for Sectionals and TACs
- Recommendations 6 – Add sporting event 3 NM rings to controller charts and RVMs
- Recommendations 7, 8 – Add sporting event 3 NM rings and “Long-term TFRs” to radar video maps (RVMs)

Rune went over Recommendations 1 and 2 by briefing TFRs that are charted today on the VFR Charts and introducing the additional TFRs that are being recommended for charting. He recommended standard criteria that could be used to identify TFRs for charting (Slide #5). Rick Fecht, FAA/AJV-5223, said that he would have to take the request back for further study and discussion. He would have to investigate the definition of a long-term TFR and look at ways to identify those that meet charting criteria. Valerie Watson, FAA/AJV-553, mentioned that the NOTAM office might help with identification of “long-term TFRs” by encouraging the proponents of those areas to publish 12-month NOTAMs describing the areas. Otherwise, Valerie voiced her doubt that these areas will be able to be definitively identified as “long-term”, explaining the difficulty of adding lifespans of NOTAMs that could potentially add up to 12 months. Lynette (Jamison) McSpadden, FAA/AJR-B11, will consider how to approach that idea. It was also suggested that perhaps these long-term TFRs could be handled the same way that Special Use Areas (SUAs) are today. Valerie took the action to reach out to the Airspace and Rules office to investigate that possibility.

Rune then talked about the lack of standardization in the charting of TFRs. He feels it is important that they all be charted in exactly the same way so that pilots always know what to look for. Valerie explained that there are very specific categories of TFRs and they charted differently because they are different, particularly in the degree of consequence if they are violated. She explained that there are much graver consequences for violating the Camp David TFR when active than for violating a stadium TFR.

Ted Thompson, Jeppesen, pointed out that when certain TFRs are masked or made more prominent it gives the user the impression that that information is more important than other information, such as Special Use Areas, that are in that vicinity.

Rich Boll, NBAA, suggested that, once decided, the charting criteria would need to be explained in the AIM so users can understand why some TFRs are charted and others are not.
Discussion then shifted to Recommendation 3 regarding NOTAMs. The recommendation is that FAA retain the issuance for long-term TFR NOTAMs even after they have been charted. Lynette said that TFR NOTAMs could potentially remain active in the NOTAM system even if charted, but that she would need to investigate that policy further and report back.

Rick Fecht, FAA/AJV-5223, provided a response to Recommendation 5 regarding moving to a 56-day chart cycle for VFR Charts. Rick stated that there is no timeline yet for that change, but that this is one of AJV-5 objectives. He made clear that a 56-day VFR chart cycle would not happen until after the Visual charts have been fully automated and shared that the automation process is in its beginning stages.

Valerie commented on Recommendations 6, 7, 8 regarding adding sporting venues and TFR information to controller charts. She stated that the controller charts specifications are not under the purview of AJV-5, but under the authority of ATC. If ATC requests the addition of the data, AJV-5 can and will chart it. Bennie Hutto, NATCA, said that he would talk to the RTCA ATC representative and get more information about what this request would entail. Regarding the addition of data to Radar Video Maps (RVM), Valerie shared that these products are custom created by AJV-5, are unique for each facility and are compiled as per specific guidance from local ATC. If an ATC facility asks for the 3NM stadiums, for instance, to be added to their maps, AJV-5 will add them, all the facilities have to do is send in the request per their normal process for revisions to their maps. Bennie will communicate this to ATC.

Scott Jerdan, FAA/AJV-533, reported that he is part of an internal working group formed to respond to the RTCA recommendations which totaled over 50. He suggested that actions in the ACF should ensure that they are working in-line with this established working group.

**STATUS: OPEN**

**ACTION:** Rick Fecht, FAA/AJV-5223, will investigate “long-term” TFR definition and ways to identify those that meet charting criteria.

**ACTION:** Lynette (Jamison) McSpadden, FAA/AJR-B11, to investigate the possibility for “long-term TFRs” to be published as 12 month NOTAMs so that they can be identified as “long-term”. Lynette also will research NOTAM policy to determine if NOTAMs on “long-term TFRs” can remain active after the TFR has been charted.

**ACTION:** Valerie Watson, FAA/AJV-553 will reach out to the Airspace and Rules office regarding the possibility of publishing and charting “long-term TFRs” as SUAs.

**ACTION:** Rick Fecht, FAA/AJV-5223, will look at the various depictions of currently charted TFRs and report back on possible standardization if it is believed that is prudent.

**ACTION:** Bennie Hutto, NATCA, will talk to the RTCA ATC representative and get more information about what they are looking for regarding the addition of sporting venues and TFR information to controller charts. He will also communicate that 3NM stadium rings may be added to RVMs upon ATC request.
17-02-312 Standardized Communications on DPs and STARs

Krystal (Behrns) Kime, FAA/AJV-5613, briefed the issue. She stated that she was seeking ACF pilot audience input on the specific communication information that pilots need to see charted on Departure Procedures (DPs) and Standard Terminal Arrivals (STARs). She explained that between what is requested on procedure source forms, what is in the authoritative database (NASR) for frequencies and what the charting specifications outline, it is often confusing for chart producers to know what to chart. She is seeking simplification of the requirements from pilot users of the charts in order to standardize the depictions and insure that the FAA is charting only those frequencies that are necessary. (Refer to Presentation for examples; Slides #1-#4 DPs and Slides #5-#8 STARs)

The discussion opened with communications on STARs. Krystle asked the audience if providing APP CON and ATIS on the chart is sufficient. Rich Boll, NBAA commented that ATIS is probably the most important frequency on STARs followed, by Approach Control (APP CON) and, in some cases, Center frequencies. Krystal stated that one of the issues chart compilers face is that Center frequency information is difficult to determine in the source database (NASR). Terminal charting is currently working with the National Flight Data Center (NFDC) on that particular issue. Ted Thompson, Jeppesen, agreed and stated that the procedure-specific frequency issue in NASR has been solved for DPs, but for STARs it is difficult to determine which frequencies to show on a specific chart, particularly when the frequencies are sectorized. Valerie Watson, FAA/AJV-553, suggested that the specification be written to always chart ATIS and APP CON when available in the source database and to only chart Center frequencies when specified for charting on the procedure source document. John Bordy, FAA/AFS-420, agreed, but emphasized that the specific numerical frequencies themselves will not be published on the procedure source document, only the request to chart the Center frequencies. Further coordination with NFDC will be needed to ensure the frequencies are databased clearly and correctly.

Krystle then brought up the same issue with regard to DPs. She asked the audience if ATIS, CLNC DEL, and DEP CON would be sufficient. Rich stated that CLNC DEL is not needed because it is on the Instrument Approach Procedure. He thinks pilots only need DEP CON charted. Gary McMullin, Southwest, suggested that ALL frequencies could be removed from DPs and STARs because what is issued by ATC is often differs from what is printed on the chart. Rich agreed with Gary with regards to ATIS, however disagreed on the DEP CON frequency, voicing that pilots use them at secondary airports if they don’t get clearance on the ground. Rich asked that the FAA retain DEP CON. Several pilots in the audience agreed. Valerie asked if there was general support to only chart DEP CON on DPs, unless other frequencies are specifically requested on the procedure source form. There was agreement from the pilot audience. John Bordy, FAA/AFS-420, voiced that revisions to support this would need to be made to the Arrival portion of the 8260.19 Order and the 8260.46 Departure Order. He stated that there is no frequency documentation guidance in FAA Order 8260.46, only examples. Valerie suggested that based on this discussion, Krystle put together a working group to draft a proposal for the next ACF with specific recommended changes to the charting specifications and to FAA Orders 8260.19 and 8260.46.

**STATUS: OPEN**

**ACTION:** Krystal (Behrns) Kime, FAA/AJV-5613, will coordinate a working group to draft a proposal of specification and order changes necessary to standardize the communications for DPs and STARs.
**ACTION:** Krystal (Behrns) Kime, FAA/AJV-5613, will continue to coordinate with Scott Jerdan, FAA/AJV-533, to ensure Center frequencies for STARs are databased clearly and correctly.

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**17-02-313 Publish Standard Proposed Flight Plan Deletion Times in the Chart Supplement**

Valerie Watson, FAA/AJV-553, briefed the issue. Valerie commented that she reached out to the proponent by email and shared with her that the Chart Supplement is not the appropriate place for the publication of flight plan deletion times. She explained that there is no flight plan guidance in the Supplements and there would thus be no expectation by pilots to find this narrow aspect of flight plan information in that publication. She suggested to the proponent that such information should appear in the AIM and possibly on the FAA Flight Planning Information website. The proponent was not in attendance. There was agreement to close this item.

**STATUS: CLOSED**

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

Michael Stromberg, UPS, and Chris Zimmerman, UPS, briefed the issue. Michael described a problem that has been encountered by pilots under Part 121 operations when attempting to fly autoland procedures on ILS approaches. In order to be able to evaluate if autoland procedures can be used, the flight crews need to know and understand the ILS classification code for the facility. Currently, ILS classification codes are only published in the Chart Supplement airport entries. There is also some explanatory language in the Chart Supplement front matter pages. Michael emphasized that pilots do not have access to such information in-flight. He recommends that ILS classification codes be included on Instrument Approach Charts.

Michael added that currently there is nothing in the AIM that informs pilots about autoland procedures or ILS classification codes. He suggested that language be added and he showed the audience his suggested AIM changes (Slides #9 and #10).

Rich Boll, NBAA, acknowledged Michael’s points, however he pointed out that UPS uses tailored charts and perhaps that is the best way to communicate this type of information to the flight crews. He asked of what use the ILS classification codes on the chart would be to pilots who cannot use autoland. He stated that this would be adding information to the charts that is not for general use.

Ted Thompson, Jeppesen, said that this is the first request he has heard for the depiction of this information. In terms of charting, he said that it could either be shown as an equipment note or it could be included as part of the NAVAID box. He emphasized that pilots are always asking for the charts to be less cluttered and this would be adding something to the chart which has limited applicability. He also pointed out that he doesn’t know if Jeppesen currently captures ILS classification codes in their database.

John Johnson, FAA/AJV-5332, commented that ILS classification codes are part of the NASR subscriber file. He suggested that the data can be obtained online via eNASR, downloaded as text field file and then imported into a spreadsheet.
Consensus of the audience was that this information should not be placed on the charts. It was agreed that language should be added to the AIM and the Instrument Procedure Handbook (IPH).

**STATUS: OPEN**

**ACTION:** Michael Stromberg, UPS, will coordinate with John Blair, FAA/AFS-410, and Rich Boll, NBAA, on the publication of explanatory text for the AIM and IPH.

**ACTION:** Valerie Watson, FAA/AJV-553, will track the publication of AIM changes in order to make corresponding updates to the chart supplement explanatory text if necessary.

**ACTION:** Scott Jerdan, FAA/AJV-533, will work toward a NASR update to add the full set of classification codes that includes the letter designation (E is currently included as a remark) to the ILS Category dropdown.

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

Tony Lawson, FAA, AJV-553, introduced the issue. He briefed that he is making an effort to harmonize the values in the Comparable Values of RVR and Visibility table that is published in the Legend of the TPP with the values that are published in FAA Order 8260.3C. The current Table in the TPP does not contain all of the values used in TERPS so sometimes the next higher RVR value has to be used to determine the visibility that is published on the chart. This can result in visibility values that are unnecessarily high. Tony would like to resolve this problem by adding the missing RVR values to the table in the TPP in addition to modifying the Visibility for RVR 6000 from 1 ¼ to 1 ⅛ to agree with 8260.3C.

Rich Boll, NBAA, stated that though in concept he approves of this idea, the table that is published in the TPP is governed by what is published in 14 CFR Part 91.175(h). He explained that regulations require pilots to use the table that is published in the CFR. John Bordy, FAA/AFS-420, agreed and stated that the TPP conversion table must harmonize with that in the CFR. He believes that if the value in Tony’s proposed table for RVR 6000 were revised to agree with that in the CFR (1 ¼), the proposal to add interim RVR values could likely be determined to be in compliance with the CFR. He said the FAA could also pursue revision of the CFR to accomplish the reduced RVR 6000 visibility, but acknowledged that would likely be a lengthy process and could be difficult to achieve.

Steve Woodbury, Flight Safety International, voiced that if and when these changes are implemented, explanatory language would be needed to explain the added RVR values and the reasons for there being more RVR values listed in the TPP table than are listed in the CFR.

Valerie Watson, FAA/AJV-553, asked why RVR 1800 is not listed in the revised table. Tony said that they could add that too. Valerie said that if all possible RVR values seen on approach charts were added to the table, the rounding requirement could be removed.
Rich agreed and suggested Tony should add all possible RVR values to the table and change the visibility for RVR 6000 to 1¼ to agree with the CFR. This revised table could then be vetted through General Council to ask if it is consistent with the CFR. If approved, the new table could be published in the TPP.

John Blair, FAA/AFS-410, said that he will work on rulemaking to update the CFR and that in the interim he would take the revised table to General Counsel and see if he can obtain a legal determination that the expanded table complies with the CFR. Tony said he would provide John with the revised table.

**STATUS: OPEN**

**ACTION:** Tony Lawson, FAA/AJV-553, will draft revised Comparable Values of RVR and Visibility tables and work with John Blair, FAA/AFS-410, and John Bordy, FAA/AFS-420, on compliance and rulemaking for its implementation.

**ACTION:** John Blair, FAA/AFS-410, will begin work on rulemaking changes to 14 CFR Part 91.175(h) to harmonize it with FAA Order 8260.3C (expanded RVR values so no interpolation is required and *revised* RVR 6000 value of 1 ¼).

**ACTION:** John Blair, FAA/AFS-410, will take the revised Comparable Values of RVR and Visibility table (expanded RVR values so no interpolation is required but *retaining* RVR 6000 value of 1 ¼ per current CFR) through the FAA’s Office of General Council to see if it complies with 14 CFR Part 91.175(h).

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

Rune Duke, AOPA, [presented this recommendation](#). Rune explained that with the ongoing transition to a Performance Based Navigation (PBN) National Airspace System (NAS) where much of the ground-based route structure is being removed, there is a going to be an increasing need for off-route safe altitudes. He described the FAR 91.177 requirements and stated that there is a need to address the gap between those requirements and what is being provided to pilots. Rune’s Point-to-Point Navigation working group has been meeting since the last ACF and in talking about this issue, they are pursuing the use of Off Route Obstruction Clearance Altitudes (OROCA) for use as minimum flight altitudes. However, in order for OROCA to be used for navigation, several issues must first be addressed. Rune then went over his specific recommendations with regard to OROCA.

1. Continuous evaluation of OROCA values via the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) program.
2. A NOTAM policy must be developed for off-cycle OROCA changes.
3. The Alaska OROCA grid size (currently 2°x 2°) should be changed to be the same as the CONUS (1°x 1°).
4. The FAA should update the AIM and Instrument Procedures Handbook to inform pilots that OROCA values assure compliance with FAR 91.177 but are not an altitude to which ATC will clear an aircraft to fly except incidentally.
Valerie Watson, FAA/AJV-553, stated that the Enroute charting group has investigated changing the grid size in Alaska to be the same as the CONUS and have determined that it can be accomplished. She said that they will continue to work this initiative and will advise when it can be implemented.

Rich Boll, NBAA, commented that under current regulations and operations, the pilot is legally responsible for off-route navigation, however he points out that the FAA is not providing NOTAMs for temporary obstacles. John Bordy, FAA/AFS-420, explained that there is an obstacle reporting requirement through the OE/AAA process so the FAA does have the obstacles, temporary and permanent, but only evaluates them for their effect on flight procedures and airways, not OROCA. He believes that FAA Order 7400.2 would have to be modified if it is necessary that all obstacles affecting OROCA are to be published via NOTAM.

Valerie pointed out that AJV-5 currently runs a tool every 56 days to determine changes to the published OROCA values on FAA Enroute charts. She suggested that her organization could look into the possibility of running that program daily. It was pointed out that the OROCA program currently used does not account for temporary obstructions. Valerie suggested that AJV-5 look into how Minimum IFR Altitude (MIA) and Minimum Vectoring Altitude (MVA) values are calculated for ATC use and determine whether the same pool of obstacles could be used for a daily AJV-5 assessment of OROCA values. Rune agreed that if the same process could be used for the calculation of OROCA as is currently used for MIA and MVA assessment, that would be sufficient. There was general agreement by the audience.

NOTAM authority and the process for publication of OROCA changes occurring between chart cycles was then discussed. Lynette (Jamison) McSpadden, FAA/AJR-B11, said that if these were published as FDC NOTAMs, they would be promulgated by Oklahoma City. If they are determined to be Center-driven, then they would be initiated by the Operation Support Groups (OSGs). Valerie said that her offices would work with the NOTAM office to determine a process for the publication of OROCA NOTAMs.

Valerie then mentioned that the Enroute chart legend panels contain a textual description of OROCA and that if that text is to be changed, AJV-5 would need to receive revised descriptive text from appropriate authority.

**STATUS: OPEN**

**ACTION:** Brian Murphy, FAA/AJV-562, will investigate how MIA and MVA assessment is done (using what obstacles) and determine if the same can be applied to the AJV-5 OROCA assessment.

**ACTION:** Brian Murphy, FAA/AJV-562, will investigate the feasibility/possibility of running the modified OROCA tool on a daily basis vs every 56-days.

**ACTION:** Valerie Watson, FAA/AJV-553, will work with the Lynette (Jamison) McSpadden, FAA/AJR-B11, to determine what would potentially be the process for publication of NOTAMs for OROCA changes.

**ACTION:** Valerie Watson, FAA/AJV-553, will draft a specification change to accommodate revision of the existing Alaska grid size to match CONUS (1° x 1°).
17-02-317 Nome Selection Panel Extension

Marshall Severson, Private Pilot, presented this new recommendation. Marshall stated that the discontinuation of WAC CC-8 has resulted in the loss of easy access to VFR navigation information in the Russian areas bordering Alaska. He also pointed out that it is very difficult to obtain Russian VFR charts and said that they are not updated regularly. His recommendation is that the NOME VFR Sectional chart be extended two panels to the west in order to provide coverage for the areas lost due to the WAC discontinuance. If this is not possible, he asked that the Sectional at least be extended as far as the first airport of entry in the Russian Far East.

Rick Fecht, FAA/AJV-5223, responded and said that it is very difficult and expensive to reformat the charts and extending the Section two panels would exceed the size that the printer can support. He added that the FAA is not under any obligation to chart foreign airspace. Scott Jerdan, FAA/AJV-533, commented that on all charts where foreign coverage is depicted, there is a note on the chart to alert the user to secure and use the foreign data. Rick pointed out that an exception was made in the Caribbean area when certain Sectional charts were modified in response to the WAC discontinuance. That action was accommodated because of a high level of use and user demand. Rick asked if there is a high level of use in this Russian airspace to justify the expansion of the Nome chart. He suggested a possible solution is for pilots to use the Alaskan Wall Planning Chart and confirmed that the two Russian airports of entry could be added to that product. Rick also suggested that pilots could use NGAs Tactical Pilotage Charts (TPC) to fill in the coverage gaps.

Marshall commented that the detail level on the WAC charts was much higher than that found on the TPCs. Marshall then displayed what appears on a ForeFlight display in this region. John Collins, ForeFlight, stated that the TPCs provide navigation information, limited terrain, cities and some features in this area. Rick asked if ForeFlight could add the TPCs to their digital depictions in this area. John said that he could take that suggestion to ForeFlight.

Tim Long, NGA, stated that TPCs are available, however he voiced he was unsure of their timely maintenance. He also said that they do not have all of the aeronautical detail that the WACs depicted.

Rune Duke, AOPA, commented on this unforeseen consequence of the discontinuance of the WAC series. He stated that their user group had been impacted by this loss of coverage and valuable flight information. He said that AOPA fully supports this recommendation and does not think that a strictly digital solution is sufficient. He stated that AOPA supports extension of the Sectional chart to cover the area lost by the WAC discontinuance.

Rick stated that he will investigate this recommendation further, seek guidance from AJV-5 upper management and will report at the next ACF.

STATUS: OPEN

ACTION: Rick Fecht, FAA/AJV-5223, will work with NGA to investigate the use of Tactical Pilotage Charts for the gaps in sectional coverage.

ACTION: Rick Fecht, FAA/AJV-5223, will report on internal AJV-5 discussions regarding the possibility of extending the Sectional chart coverage or of creating an inset to include the requested area.
**ACTION:** John Collins, ForeFlight, will inquire about the possibility of incorporating TPCs into ForeFlight and report at the next ACF.

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

Mike Webb, FAA/AFS-420, *briefed the issue*. Mike stated that in the recent publication of Advisory Circular 90-105A a new Navigation Specification (NAVSPEC) was defined for helicopters. It will be applied solely to helicopters using GPS and with avionics capable of RNP 0.3 accuracy. Mike is recommending that for the enroute application, an RNP 0.3 indicator be added to low altitude helicopter TK routes where applicable. He pointed out that there is already a field for RNP values on FAA Airway Form 8260.16.

Ted Thompson, Jeppesen, stated that internationally, they have charted RNP values on airway identifiers. It was determined that this was insufficient and that they should be charting them on waypoints at the beginnings and ends of the relevant segments. This resulted in pilot confusion. They then decided to take them off the charts entirely and only store the NAVSPEC in the database. Ted did acknowledge that there is a need to label the narrowing of the airway and he suggested the possibility of depicting the NAVSPEC as an equipment note for the airway.

John Moore, Jeppesen, asked if all TK routes will be RNP 0.3. Mike said that the 0.3 would be an exception to the standard. He suggested a charting option to explain the standard RNP value for TK routes on chart legends and in the AIM and then chart on routes only those that are an exception. A potential confusion was voiced that this may become very complicated if the RNP values vary by segment. Mike stated that if a route is RNP 0.3, it is RNP 0.3 for the entire extent of the route and would not vary by segment.

Rich Boll, NBAA, asked if an RNP 0.3 route will be stripped from the aircraft’s database if they don’t have the capability to fly it. If it’s not extractable from the database this doesn’t work. John Collins, Foreflight, stated that the flight plan can be used to exclude a pilot from flying a procedure they aren’t capable of. Rune Duke, AOPA, added that you could be cleared to fly a route that you did not file for. He asked if the controller would be aware that a given aircraft could not fly that route. Bennie Hutto, NATCA, said ATC does not know what the aircraft is qualified for. Rune said that in that case, he believes that RNP values need to be charted.

Joshua Fenwick, Garmin, voiced that ARINC 424 has not yet added in NAVSPECS for airways.

Mike, in response to the discussion and feedback from the audience, proposed that a workgroup be convened that he is willing to chair to investigate the issue further.

**STATUS: OPEN**

**ACTION:** Mike Webb, FAA/AFS-420, will report on progress of the Helicopter RNP Values Workgroup.

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<th>FAA/AFS-420</th>
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17-02-319 Addition of VFR and Visual Flight Segments on Copter Approach & Departure Procedures

Mike Webb, FAA/AFS-420 briefed the issue. Mike stated that in the near future numerous public-use Copter Departures will be published. In the process of developing charting specifications for these procedures, it was discovered that there are currently copter procedures published that have a Visual segment and there are some that have a VFR segment. These have always been depicted in the same manner on the charts, but they have major differences. Visual segments have been assessed for obstacles and are defined by a course that may be flown using the bearing and distance provided. VFR segments have not been assessed for obstacles, there is no specific route to fly, and the pilot is responsible for avoiding obstacles. Although a reference bearing and distance may be supplied for VFR segments, this is not a course the aircraft is intended to follow. It is recommended that a new charting specification be put into place for the two distinct types of segments. Mike would like input on the proposed depiction options.

Mike displayed examples of how the segments are shown today, and examples of his recommendations for the depiction of visual segments and VFR segments. He is recommending that for visual segments, the current depiction of the heavy dashed line should remain. For VFR segments, he proposed two different depictions. The first is a thin solid line with the reference bearing and distance included on the line (Slides #8 and #9). The second is with no line depicted but the inclusion of the reference bearing and distance information located in proximity to the landing point.

Pilots in the room concurred with depiction of the visual segment with the heavy dashed line.

In regard to the proposed depiction of VFR segments, Tim Long, NGA, commented that if you show a line on a chart with a bearing and distance, a pilot will fly that line. This is dangerous as the line is not intended to be the course the pilot is to follow. Rich Boll, NBAA, agreed. There was concurrence from the pilots in the room for not showing a line on VFR segments as it could easily be mistakenly interpreted as a course to fly. There was no voiced support for depiction of linework on VFR segments.

Mike stated that he will work with Valerie Watson, FAA/AJV-553, on the specification changes. He also said he would work on socializing this change with the helicopter community.
STATUS: OPEN

ACTION: Valerie Watson, FAA/AJV-553, will draft a specification change for the depiction of VFR segments without the reference bearing depicted as a line.

VII. Closing Remarks

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

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

- Charting Group – http://www.faa.gov/air_traffic/flight_info/aeronav/acf/

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

Appreciation to Jennifer Hendi, FAA/AJV-553, for presentation assistance for the CG portion of the forum, conference support pre- and post-conference, and to Alex Rushton, Contract Support to FAA/AJV-553, for taking the minutes and conference support pre- and post-conference.

VIII. Next Meeting

ACF 18-01 is scheduled for April 24-26, 2018, host MITRE, McLean, VA.

ACF 18-02 is scheduled for October 23-25, 2018, host TBD

IX. Attachments

a. 17-02 Attendee Roster
b. Office of Primary Responsibility (OPR)