

AERONAUTICAL CHARTING MEETING (ACM)
MEETING 20-02 October 27, 2020
Virtual – Zoom platform

Instrument Procedures Group Meeting Minutes

1. **Opening Remarks:** Jeff Rawdon, FAA Flight Procedures and Airspace Group, welcomed the participants and provided an in-depth guide to how the virtual meeting would be managed. An attendance roster for the virtual meeting is [attached](#).

2. **Review of Minutes from Last Meeting, ACM 20-02:** Steve VanCamp, Digital iBiz, advised there were no comments, and the minutes were accepted.

3. **Informational Briefings:**

a. Jeff Rawdon, FAA Flight Procedures and Airspace Group, provided a status update of 8260-series orders and Order 7910.5:

(1) Order 7910.5E, Aeronautical Charting Meeting Briefed from attached [slide](#). The newest revision was published on 10/26/2020.

(2) Order 8260.3E, United States Standard for Terminal Instrument Procedures (TERPS) Briefed from attached [slide](#).

(3) Order 8260.19I, Flight Procedures and Airspace Briefed from attached [slide](#).

(4) Order 8260.42B, United States Standard for Helicopter Area Navigation (RNAV) Briefed from attached [slide](#).

(5) Order 8260.46G, Departure Procedure (DP) Program Briefed from attached [slide](#).

(6) Order 8260.58B, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design Briefed from attached [slide](#).

(7) Order 8260.61, Charted Visual Flight Procedures New order briefed from [Slide](#)

b. **ICAO Instrument Flight Procedures Panel (IFPP) Report:** Jeff briefed from the attached [slide](#).

4. **Old Business (Open Issues):**

a. **13-02-312: Equipment Requirement Notes on Instrument Approach Procedures:** Jeff Rawdon, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). Equipment notes requirements have been added to Order 8260.19I, which was published June 2020. Rich Boll, NBAA (proponent) and the group concurred with closing this issue, and agreed any new issues could be addressed with new recommendation documents (RDs).

Status: Item closed

b. 15-01-320: Common Sounding Fix Names: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). FPAG discussed internally the value of developing a document for the public and industry that would describe the procedure development process, and also the processes to report concerns with flight procedures, including common sounding fix names. FPAG determined there is value, and will move forward with developing one, but there is no timeline. This is a bigger project than just this specific issue of common sounding fix names, so FPAG intends to decouple the issue and pursue separately. Jeff said resolving or preventing common sounding fix names with automation is a challenge and discussed the MITRE automation tools, but reiterated there is no current way in automation to prevent this from happening. There is an existing process to raise issues through the FAA's Instrument Flight Procedures (IFP) Information Gateway when a problem with a procedure is identified. There are a finite number of five-letter identifiers, and pronunciation variances abound. Also, since some fix names are assigned late in the procedure development process, early coordination is not a viable solution. Gary McMullin (Southwest Airlines) discussed existing policies that compared fix names to the global fix name usage, and this can cause difficulties for developers. He questions this broad global review, suggesting the review should be regionally limited and said the National Flight Data Center (NFDC) had requested Southwest Airlines change a proposed fix name due to a conflict with a fix in South America. John Barry, FAA Aircraft Certification, discussed the ICAO standard for regional grouping for fixes as opposed to mileage limitations. Jeff suggested closing the present issue, and either revisiting at a later date or adding a new RD specific to concerns regarding regional vs. global review of fix names. The original presenter, Lev Prichard, Allied Pilots Association, restated the origins of the proposal. He pointed out the issue is not just similar sounding names or similar spelling (which are both a problem), but in the Dallas-Fort Worth area there were three fixes with only one or two letter differences. They brought these up as a safety concern through the established safety processes, but the local facility refused to change the fixes. Lev wants the issue to remain open, so when a problem is entered into the IFP Gateway system as a safety concern, there will be a process in place to ensure it will be addressed. Diane Adams-Maturo, FPAG, thinks this can be built into the existing requirements in Order 8260.19, adding facilities do not "own" the fixes as they are assigned and "owned" by NFDC. Lev agreed with this proposed approach. Doug Willey, Air Line Pilots Association, supports Lev's safety concerns on this subject. John Barry suggested the process should be elevated to a national level to dictate changes, possibly at NFDC. Rich Boll, NBAA, added that there should be requirements in Orders 8260.19 and 8260.3 regarding comments from industry through the IFP Gateway. Jeff said the issue will remain open, but should be reframed to address the specific concerns and issues regarding reporting of safety concerns via the IFP Gateway, but does not think Orders 8260.19 and 8260.3 are the place for this. Diane suggested a group or process could be identified to research the SMS process. She thought the checks could take place during IFP validation, and could be incorporated into the existing system. Lev added the SMS process is already in place with the FAA and industry. André Durocher suggested expanding the database to provide fix names with more letters, but Jeff said that would be a global change and well outside the scope of this group. Bennie Hutto, NATCA, agrees with Lev, adding when procedures are being developed no system identifies similar sounding fix names. Jeff said automation does not exist to identify similar sounding fix names, and the technology required to accomplish this is not feasible at this time. Dan Wacker, FPAG, suggested this is more of a regional Flight Procedures

Team and Instrument Flight Procedures Team issue, not a criteria issue, and those groups should be included in the discussions. Jeff agreed to reframe the issue to focus on discussions with FPAG and Aeronautical Information Services (AIS) to address concerns with submission of safety issues through the IFP Information Gateway.

Action Items:

- Flight Procedures and Airspace Group will approach AIS regarding discussions to address concerns with submission of safety issues through the IFP Information Gateway.
- Flight Procedures and Airspace Group and AJV-A will lead the review of the existing processes and policies for any gaps regarding common sounding fix names.

Status: Item open

c. 15-02-323: Depiction of Low, Close-in Obstacles on SIDs & ODPs: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Dan Wacker, FPAG, said the Departure Working Group is working on a document to compliment the safety management review completed last year, and is circulating it now for comments. He has briefed the Air Force and can brief other branches if requested, and said he will brief any group on the low close-in obstacle documentation changes if requested. They have some concepts they are circulating, and a copy of the document to show the current proposed revision will be an attachment to these minutes. There is no expected date at this time for incorporation in criteria; this will be set after the initial concept work is completed. Doug Willey, Air Line Pilots Association, requested the briefing from Dan and will coordinate directly with Dan.

Action Items:

- Flight Procedures and Airspace Group will brief status of the Departure Working Group progress at ACM 21-01.

Status: Item open

d. 16-01-325: Priority of Terminal Procedure Amendments: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Jeff showed language added in Order 8260.19I for STARs. In addition, Jeff discussed related P-NOTAM working group activities from ACM IPG issue 19-02-345. There are concerns about creating unintended consequences, such as more P-NOTAMs for the pilot to review and up-numbering issues with STARs and SIDs. The names of IFPs remain the same with an amendment, but the name of STARs and ODPs change in the databases with the change in number. AJV-A is working to define a method to address this concern. Work is ongoing on this, but no method has been decided on. In addition, Jeff showed slides and discussed considerations and factors in IFP prioritization. Rich Boll, NBAA, recapped the history of the issue, and hopes the P-NOTAM process will help resolve the process. Jeff advised the item will stay open, and Susan Walker, FPAG, advised she is working with AJV-A on this. STARs already have an abbreviated amended process which is working well.

- Flight Procedures and Airspace Group will brief P-NOTAM status at ACM IPG 21-01.

Status: Item open

e. 16-02-327: Arrival Holding Patterns Required for Approach Entry: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Language was added in Order 8260.19I, and an example note was added and sent to Rich Boll, NBAA. Aeronautical Information Manual (AIM) revisions were drafted and forwarded to Doug Dixon, FAA Flight Operations Group (FOG), agreed to by the working group, and will be included in AIM paragraph 5-4-6. A DCP is in process with a target of summer 2021. Dan Wacker, FPAG, inquired if the Instrument Procedures Handbook (IPH) will need any updates, and Rich said yes, adding the Instrument Flying Handbook (IFH) would also need to be reviewed for potential changes. Doug Phifer, FOG, advised he is the point-of-contact for both. Rich added that ATC is open to the changes. Bruce Williams, Flight Instructor and FAAST Team Member, suggested the Chart Users Guide might also require a revision, and Jeff asked Doug Dixon and Doug Phifer to consider this also.

Action Items:

- Flight Operations Group (Doug Dixon) will report on status of AIM changes.
- Flight Operations Group (Doug Phifer) will advise on IPH and IFH updates and any necessary revisions to the Chart User's Guide.

Status: Item open

f. 16-02-328: Increasing Complexity of Speed Restriction Notes on SIDs & STARs: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Lev Prichard, Allied Pilots Association, thinks this result failed to accomplish the goal, and he will send examples to Susan Walker, FPAG and include Gary McMullin, Southwest Airlines. Jeff said Order 8260.19I Section 4-5 has speed notes for STARs, and Order 8260.46 contains the criteria for SIDs. Lev said these notes need to match; any identified issues should be coordinated with Diane Adams-Maturo, FPAG. Dan Wacker, FPAG, said the issue of chart notes for SIDs is being looked at in the Departure Working Group in an effort to reduce note clutter, but actual changes on charts could take many years to propagate. Gary agreed saying these speeds are on the charts as notes rather than it being a database issue, and those notes tell the pilot to do what they will do anyway and can be missed.

Action Items:

- Lev Prichard and Gary McMullin will send examples to and work with Diane Adams-Maturo and Susan Walker, Flight Procedures and Airspace Group for notes in Orders 8260.19 and 8260.46 notes.
- FAA Flight Procedures and Airspace Group will ensure changes in Order 8260.19 are consistent with work the Departure Working Group is doing with SIDs.

Status: Item open

g. 17-02-329: Need for CNF at Terminus of Dead Reckoning (heading) Segment: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Jeff said the US-IFPP decided the benefit was not warranted, and wants to close the issue. Dan Wacker, FPAG, advised he has seen CNFs used on some departures to replace fixes when a navigation facility loss has caused the loss of a fix and asked if criteria should allow this. Jeff said this came up on STARs, and restrictions were added in

Order 8260.3E to prohibit dead reckoning segments for conventional STARs. Rich Boll, NBAA, said it should be considered that pilots fly almost everything with RNAV substitution up to the FAF. He then briefed pilot issues from [slides](#). NBAA wants CNF fixes on dead reckoning legs. John Moore, Jeppesen, discussed avionics capabilities between different aircraft with Rich Boll, and coding issues with some equipment. John also inquired about modifying the NAS for a minority of cases. Joel Dickinson, FAA Flight Operations Group (FOG), said there is no mandate for FAA to code conventional procedures, but some data houses do code those procedures. If the FAA mandates the inclusion of a CNF fix on a conventional procedure, then it could disenfranchise users not using RNAV/RNAV substitution as a navigational technique, which could add an unwanted PBN requirement to a conventional procedure. Jeff added the FAA provides source documentation, not coding. Rich said if the different data houses code their own CNF fixes, then there will be differences in named fixes. Mike Stromberg, Independent Pilot Association, said there are thousands of small aircraft upgrading their equipment and this would help them, adding again the possibility of name confusion since controllers will not know what the pilot is talking about. John Collins, GA pilot, expressed that a majority of aircraft are affected by this. Joshua Fenwick, Garmin, said they can create waypoints, but standardization issues exist, and asked if coordinates could be published. Joel said this introduces a PBN leg to the conventional procedure, and would therefore have an equipment requirement and a requirement for a PBN notes box. Jeff said he understands the interest surrounding this issue, but it was presented to the US-IFPP, and the decision was made to not pursue this. Rich discussed there may be AIM guidance that will require changes with this decision. FPAG and FOG will look into any required actions regarding AIM guidance.

Action:

- Flight Procedures and Airspace Group and Flight Operations Group will determine if changes are required to the AIM to remove information regarding CNFs.

Status: Item closed

h. 17-02-330: Climb Gradients for Standard Instrument Departures: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Lev Prichard, Allied Pilots Association, advised he had not forwarded any SID issues, or worked with Gary McMullin, Southwest Airlines on this particular issue. Dan Wacker, FPAG, said this original topic can be closed based on changes in Order 8260.46G, and confirmed that consideration of ATC requested climb gradients is an ongoing separate topic in the Departure Working Group (DWG). This new issue is being tracked in the US-IFPP and the DWG is providing updates. Gary and Lev concurred with closing the issue.

Status: Item closed

i. 17-02-331: Visibility/Climb Gradient Requirements for Takeoff: Jeff Rawdon, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). With revisions to Orders 8260.19I, and a confirmation that the Orders 8260.19 and 8260.46 have consistent requirements, Jeff suggested closure of the issue, and Gary McMullin, Southwest Airlines, concurred. Gary Fiske, FAA ATC Procedures (Terminal) Team, inquired if the specific procedures listed had been revised, and Gary McMullin said revisions are in progress.

Status: Item closed

j. 18-01-334: Charting PBN Requirement Box on RNAV DPs and STARs: Jeff Rawdon, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). Requirements have been added to Orders 8260.19I and 8260.46H, with Order 8260.46H still in coordination.

Action Items:

- Flight Procedures and Airspace Group will report on the status of Order 8260.46H

Status: Item open

k. 18-02-336: Add Multiple Identifier to Certain HI Procedures: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). The revised language was published in Order 8260.3E, and this should resolve the issue. Andrew Lewis, Garmin, likes the add-on language. Dan Wacker, FPAG, inquired about the original focus of the issue, and Jeff said that was fixed earlier, adding this was an additional issue that had arisen.

Status: Item closed

l. 18-02-337: Improve Remote Altimeter Airport Notes: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). These changes did not make it into Order 8260.19I, but will be slated for an upcoming revision. Valerie Watson, FAA Aeronautical Information Services, said no charting specification changes were needed. Dan Wacker, FPAG, asked if any Aeronautical Information Manual (AIM) or Instrument Procedures Handbook (IPH) changes will be necessary. Doug Dixon, FAA Flight Operations Group (FOG), will check but thinks no changes will be necessary in the AIM. Joel Dickinson, FOG, will look at the IPH for any necessary changes. They both advised they will work any identified changes.

Action Items:

- Flight Procedures and Airspace Group will report on status of issue.
- Doug Dixon and Joel Dickinson, Flight Operations Group, will report on necessity of AIM and/or IPH changes, and report status of any revisions.

Status: Item open

m. 18-02-339: Revision of Take-Off Obstacle Notes: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Dan Wacker, FPAG, added the Departure Working Group (DWG) is working on this, and inquired if this should be combined with 15-02-323, adding the idea is to not add coordinates to the obstacles. Rich Boll, NBAA, briefed [slides](#) from the original issue, and explained the interest was to produce obstacle data in the Terminal Procedures Publication to identify the obstacles in the takeoff obstacle notes for performance planning purposes. Jeurgan Kuhnhenh, LIDO, agreed with Rich on his presentation. Dan will brief LIDO on the DWG activities to get their input. Bill Tuccio, Garmin, would like to see some use case examples on this data, since it appears to be more of an engineering issue than a pilot operational issue. Dan brought up combining issues,

and John Moore, Jeppesen, pointed out these are two separate needs and should be kept separate. Rich thinks this could be closed and combined with the previous item. Jeff decided to keep both issues open.

Action Items:

- Flight Procedures and Airspace Group will report DWG status.

Status: Item open

n. 18-02-340: Obstruction Coordinates in Source Documentation: Jeff Rawdon, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). Access to Geographic Information Systems (GIS) data is now available. Rich Boll, NBAA, agrees with closing the issue. Jay Leitner, American Airlines, advised they have sent out info as a Safety Alert for Operators (SAFO) to distribute the information, and agrees this issue can be closed.

Status: Item closed

o. 18-02-341: Chart Departure Obstacle Clearance Surface (OCS) Beginning Height: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Some procedures are still active that were evaluated with departure end of runway (DER) heights up to 35 feet, but that information is not communicated to pilots. Procedures are reviewed every two years, but will not necessarily be revised unless there is a safety concern. Kevin Keszler AFFSA, reviewed the FAA's departure procedure forms, and found only five procedures remaining in the NAS that utilized this evaluation methodology. Any others have since been amended or have had P-NOTAMs issued, and Kevin would like to close the item. Rich Boll, NBAA, discussed requirements to actually amend procedures. He pointed out per Order 8260.19I paragraph 1-1-6 implementation can commence 24 months after the effective date, and said that requirement was removed from Order 8260.46. Susan Walker, FPAG, took an action to research the removal of the effective date from Order 8260.46. TJ Nichols, FPAG, said Rich raised some great points that have gone beyond this issue, adding it may be a good time for a new issue on criteria implementation with more FAA offices involved in the conversation. Jeff added there is more ongoing coordination on criteria updates to match criteria release, and this is an ongoing challenge. Kevin inquired if a new issue will be raised. Jeff said he does not see an actual RD coming out of the issue, but more likely a briefing item. Rich and Lev Prichard, Allied Pilots Association, both feel procedure updates need to be driven by stringent requirements. TJ reiterated there will be discussions with all involved parties on a reasonable implementation timeline, considering resources, to address identified NAS issues. Johnnie Baker, Aeronautical Information Services, took an action to look into the procedure Rich referenced at K1B6 and ensure similar circumstances are not happening at other airports.

Action Items:

- Susan Walker, Flight Procedures and Airspace Group, will research removal of the implementation requirements language from Order 8260.46.
- Johnnie Baker, Aeronautical Information Services, will investigate the referenced procedure at K1B6.

Status: Item closed

p. 19-01-342: Charting “NA When Local Weather Not Available” for Alternate Minimums: Jeff Rawdon, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). The issue has not yet been worked, but will remain open and actions remain the same.

Action Items:

- Flight Procedures and Airspace Group will research with the Flight Operations Group regarding alternate weather requirements, and possible policy changes.
- Flight Procedures and Airspace Group will brief the results of those discussions at the next meeting.

Status: Item open

q. 19-01-343: Clarify Text of Notes that Affect Minima: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Diane Adams-Maturo, FPAG, advised this was not included in Order 8260.19I. Jeff said FPAG will make sure this is added as an issue in the issue tracking system to be addressed for a future revision.

Action Items:

- Flight Procedures and Airspace Group develop possible draft language for a future version of Order 8260.19 and brief at ACM 21-01.

Status: Item open

r. 19-02-344: Intermediate Segment Stepdown Altitudes: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). A memo was published in 2011 to provide guidance for adjusting intermediate segment fix locations for high temperature effects. The memo advised that guidance would be placed in a future revision of Order 8260.3, but this has not yet occurred. The plan at this point is to include it in a revision in the near future. Appropriate guidance will be included as an appendix to the order, and language currently referencing the 2001 memo will be revised to reference the appendix. Gary Fiske, FAA ATC Procedures (Terminal) Team, said as a result of the 2011 memo, KLAX ILS finals were revised to account for high temperature days by moving some fixes. John Blair, FAA Flight Operations Group (FOG), advised he and Joe Lintzenich, FOG, worked the situation in depth, and they found that over the years many locations had applied the memo guidance and support including the guidance in Order 8260.3. Rich Boll, NBAA, added this is also an RNAV issue, particularly for SBAS approach procedures. Jeff said they will ensure language in Order 8260.3 (and also Order 8260.58 if necessary) will point to the appendix. Paul Hannah, Lean Engineering, discussed that the PARC NAV WG has discussed similar capture fix issues, and Gary Petty, FPAG, said the changes would be coordinated as necessary to ensure there is no disconnect and would not have an unexpected negative effect on existing procedures.

Action Items:

- Flight Procedures and Airspace Group will brief the Order 8260.3 changes.

Status: Item open

s. 19-02-345: Use of P-NOTAMS on SID/ODPs and STARs: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Jeff said this issue was already discussed earlier as part of issue 16-01-325, noting the challenges of working this for SIDs and STARs. This is an ongoing discussion, with an emphasis

on avoiding unintended consequences. FPAG is awaiting feedback on the issue from Aeronautical Information Services.

Action Items:

- Flight Procedures and Airspace Group will continue to work the issue and report status.

Status: Item open

t. 19-02-346: Deceleration Segment on STARs Supporting Compliance with 14 CFR 91.117(c): Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Jeff said the STAR Working Group will start up again soon and would include this request with additional STAR criteria revision discussions. To address a previous suggestion of incorporating a mandatory 200 KIAS speed restriction, Jeff presented a hypothetical situation to demonstrate a concern with that proposal. Lev Prichard, Allied Pilots Association, referred to the Oakland area, and said the STAR for the primary airport should be designed to remain in the Class B airspace. Gary McMullin, Southwest Airlines, said in the Oakland example, speed reduction was considered in the arrival design and was not an issue. He added this requirement to consider the FAR speed limit in arrival design is already in criteria. Rich Boll, NBAA, said in the original RD the speed was not required by design, so the Order may have changed. Gary said TARGETS evaluates this by adding a temporary fix for evaluation purposes, but Jeff said that is a best practice method but not by criteria. Gary suggested a criteria requirement to apply speeds per FAR requirements. Jeff said this would only be at issue if the arrival might take an aircraft below Class B airspace, and only then would be necessary to ensure the leg length would be adequate for deceleration. Also, he does not intend to refer developers to the FAR as a reference, but rather include any pertinent information.

Action Items:

- Flight Procedures and Airspace Group will continue to work the issue and report back.

Status: Item open

5. New Business (New Agenda Items)

a. 20-02-347 RESERVED

b. 20-02-348 RESERVED

c. 20-02-349: Charting Required NAVAID Changeovers on IAPs, including SID/STAR: Joel Dickinson, FAA Flight Operations Group, briefed the issue directly from his [recommendation document](#), suggesting there should be an indication of changeover point on instrument approach procedures, SID, and STAR charts, to include associated switches from PBN to conventional navigation for hybrid procedures. This was discussed at the US-IFPP and that group decided it should be presented to the IPG for feedback. Bill Tuccio, Garmin, asked if any examples are available, and Joel said there are several at Denver where there is no clear indication of when to switch from PBN to conventional navigation. Joel added RNP to GLS approaches would be another example. Rich Boll, NBAA, inquired if the changeover points were charted, would they become regulatory, Joel said that part of the discussion is whether those

would be advisory or mandatory. Gary McMullin, Southwest Airlines, said many impacts would have to be considered, possibly at the PARC NAV Working Group, such as consideration for different flight manuals. Joel wants the group to determine if this is worth pursuing, either at the IPG or PARC NAV WG, or is this is considered to be basic navigation understanding, and not necessary? John Moore, Jeppesen, suggested this should not go further until fully vetted in the ACM. The Andrew Lewis, Garmin, and Bill Tuccio suggested this is basic pilot knowledge and is not necessary. Jeff Rawdon, FAA Flight Procedures and Airspace Group, felt more examples would be useful, and wants to accept the RD with Joel preparing some examples for the next meeting. Joel will also form an ad-hoc virtual working group to discuss this, and asked for interested participants and comments to be sent to him. Gary Fiske, FAA ATC Procedures (Terminal) Team, said he is concerned about additional chart clutter, and wonders if there is a systemic problem driving this as opposed to being a safety of flight issue. Joel emphasized the WG might very well determine there is little or no interest or need, and suggest nothing be done.

Action Items:

- Joel Dickinson, Flight Operations Group, will prepare some examples for the next meeting.
- Joel Dickinson, Flight Operations Group, will form an ad-hoc virtual working group to discuss the issue.

Status: Item open

d. 20-02-350: Inconsistent Missed Approach Reference in 8260s for GLS Approaches: Bill Tuccio, Garmin, briefed from the [slide](#), and wondered if the difference in missed approach point identification between the two GLS procedures was a criteria issue. Jeff Rawdon, FAA Flight Procedures and Airspace Group, said he investigated this and it appeared to be a documentation error. Johnnie Baker, Aeronautical Information Services, said this would not be corrected as a P-NOTAM or chart NOTAM issue since the chart was correct. Jeff took an action to forward this specific issue RD with an explanation e-mail to Johnnie, who agreed to look into it and fix as necessary, however does not see the need for ACM involvement. The group agreed to not accept the issue, with the noted actions.

Action Items:

- Flight procedure and Airspace Group will forward the RD and an explanatory email to Aeronautical Information Services for possible correction of the forms.

Status: Item not accepted

e. 20-02-351: Unnecessary Helicopter Note on Approach Charts: Bill Tuccio, Garmin, briefed from the [slide](#). Even though the note to not reduce visibility is unnecessary when the published visibility is so high that a reduction by half is still above the note limitation, the developer has no latitude to not publish the note. There was no consideration on not adding the note if, as in this case, it would not be necessary. Diane Adams-Maturo, FAA Flight Procedures and Airspace Group, agreed to look into the issue of not publishing an unnecessary note.

Action Items:

- Flight procedure and Airspace Group will investigate possible revisions to Order 8260.19.

Status: Item accepted and open

f. 20-02-352: Combine RNAV (GPS), ILS and GLS charts into one chart: William Fernandez, Aeronautical Information Services, briefed the recommendation from a [slide](#), suggesting combination of [procedures](#) by using different lines of minima. Order 8260.19 allows up to five lines of minima, and this would reduce the overall inventory of procedures. He acknowledged the notes could become lengthy and chart clutter would be a consideration, but feels there are possible points of value and wants the input. John Collins, GA pilot said the concept would be difficult for the pilot. Also, because of approach naming conventions driving the database, John wondered how the aircraft FMS would define the approaches. Kevin Allen, American Airlines, discussed the confusion of a new procedure in China (ZGSZ RNP ILS 34 AR) describing the confusion and complexity that could arise. Rich Boll, NBAA, discussed FMS limitations, especially with all the names in the title. He also discussed coding issues and documentation on source documents. Missed approach differences would be hard to work through. Rich said there are places where this may have an advantage, like in Houston. Andrew Lewis, Garmin, said this would be a problematic concept due to coding and unclear notes, and this may double the length of the notes section. He asked regarding benefit, and Bill said it could streamline the periodic review process and reduce the inventory of procedures. John Moore, Jeppesen, expressed concern that pilots would not like the suggestion, and the confusion factor would be a risk. Rich pointed out the recommendation addresses the position of an 8260-series form driving a charting agency, and but with the interest of streamlining the flight procedure evaluation process. Rich suggested perhaps focusing on the evaluation process and not the charting, considering where many surfaces and routes are the same to aid the process. The group unanimously agreed this item should not be accepted for further consideration, however, it is noted that the language in Order 8260.19 could be interpreted that the concept as presented in the RD could be valid. Flight Procedures and Airspace Group will review Order 8260.19 and clarify the language if the intent is not clear.

Action Items:

- Flight Procedures and Airspace Group will review the language in Order 8260.19 to be certain the intent is clear, and revise if it is not.

Status: Item not accepted

g. 20-02-353: Revised Guidance & Charting for Order 8260.3 Circling Area Dimensions: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue from the [slides](#). Rich Boll, NBAA, asked about a timeline on the completion strategy for the remaining procedures, Jeff said this is still being evaluated. Johnnie Baker, FAA Aeronautical Information Services (AIS), said there are about 1,460 procedures left, and he anticipates AIS having all these evaluated around July 2021 but no later than October 31, 2021. Flight Inspection will keep working these as they can. Valerie Watson, AIS, advised they have to

chart what is on the form, and these are published under authority of Part 97, so removing the circling icons will require docket action. Valerie suggested if procedures are revised due to an increase in minimum circling altitudes via P-NOTAM, the circling icon should be added for consistency. TJ Nichols, FPAG, said the problem is Flight Inspection (FI) views charting the Icon as a separate action requiring flight validation, and FI resources are operationally limited at the moment due to the pandemic. The intent is to get all of the remaining procedures evaluated, and add higher minimums where required, while working within the limitations of the FI schedule. Rich Boll, NBAA, discussed issues for the pilots without the circling icon, and added Aeronautical Information Manual (AIM) guidance was recently changed on approach category speeds. He would like an evaluation on how many of the remaining procedures would see an increase in minimums. Rich thinks the modification of minimums as required is more important than dimensions. TJ expressed the higher altitude airports were already prioritized first, and mostly lower altitude airports are left. Johnnie concurred that mostly smaller airports are left, and FI will prioritize validations from the list of revised procedures. Andrew Lewis, Garmin, asked now many cycles the ultimate removal of the circling icons would take, and Valerie Watson said the charting team can do 350 P-NOTAMS per 56-day publication cycle. *(Editorial note: after the meeting, AIS provided the information that there are currently 5,104 charts with the circling icon, and likely some additional projects in the workflow that would add the circling icon. They anticipate removal of icons from approximately 1,000 charts each 56-day cycle, so are estimating removal of all circling icons could be accomplished in six cycles.)* Andrew asked that he be kept apprised of developments and FPAG will work out details on how to accomplish that.

Action Items:

- Flight Procedures and Airspace Group will brief progress on evaluation and validation of the remaining 1,462 procedures.
- Flight Procedures and Airspace Group will determine a means to keep the data and chart providers informed on the process.

Status: Item open

h. 20-02-354: Use of Suitable Area Navigation (RNAV) Systems on Conventional Procedures and Routes: Bruce Williams, Flight Instructor and FFAST Team Member, presented the [item](#), and briefed from [slides](#). This issue is related to questions he often receives in his instructional capacity regarding confusing equipment notes when the pilot has a suitable RNAV (IFR-approved) system. The issue is addressed in the AIM and AC 90-108, but is hard to locate. Bruce would like information regarding the use of a suitable RNAV system to be more prominent, and clarify that pilots can disregard notes that would no longer apply (e.g., ADF required or GPS required). Bruce said the real goal would be to clarify equipment requirement notes on the charts, but recognizes that is a difficult challenge. The alternative is to clarify the guidance on the notes in the AIM, AC, Instrument Procedures Handbook (IPH), etc. Bruce showed the location of the information via the slides, pointing out how hard it is to find in the AIM. Example approaches were shown and discussed. Joel Dickinson, FAA Flight Operations Group, said this is an area he is also concerned about, and said they standardized the requirements box nomenclature for the PBN boxes a few years ago. Joel said they are working

on a draft AC that combine all existing AC 91-105/107/108 information in a single AC, to include RNAV substitution guidance. There are also adjustments to AIM/IPH guidance in progress, and will discuss with Bruce in a separate conversation. The group discussed the merits of accepting the issue for further action. John Moore, Jeppesen, suggested keeping it open since some criteria changes may occur and he would like the opportunity for the ACM to review those. Gary McMullin, Southwest Airlines, also receives this question often and wants to accept the issue and keep it open.

Action Items:

- Bruce Williams will work with Joel Dickinson on the issue.
- Flight Operations Group and Flight Procedures and Airspace Group will report on any work and changes to criteria or advisory guidance material based on this issue.

Status: Item accepted and open

i. 20-02-355: Minimum En route Altitudes (MEAs) Published on Standard Instrument Departures (SIDs) and Standard Terminal Arrivals (STARs): Rich Boll, NBAA, briefed the [issue](#) from his [slides](#), discussing original Aeronautical Charting Forum climb gradient issue and the changes made at that time. Rich said Air Traffic Order JO 7470.1A should be changed, rather than changing an 8260-series order. Gary Fiske, FAA ATC Procedures (Terminal) Team, said there is an effort to cancel this order and assign it to Flight Standards as an 8000-series order, or assign it to AJV-A. The associated evaluations are done in TARGETS, and AJV-A has assumed responsibility for that system. The original OPR for Order JO 7470.1 was the PBN policy office, which was realigned to other areas of Mission Support during a recent reorganization. Gary agrees the order is obsolete in its current form and needs to be addressed. Dan Wacker, FAA Flight Procedures and Airspace Group, said there is a draft order change to 7470.1B on the subject, adding he had received a copy from Don McGough, Flight Inspection, and had forwarded it to Gary to look at. There was movement to update this revise language, and Don had been sent a copy for coordination. Gary recalled the message from Dan, but does not know who initiated the work on this. Dan said the point of contact for Order 7470.1B is Mike Stewart. Bennie Hutto, NATCA, asked Rich to clarify the intent of the RD on MEAs, and Rich said the MEAs should be based on the requirements of the 8260-series orders. John Collins, GA pilot, pointed out these are on conventional procedures also, adding the MEA has a legal description. Dan pointed out SIDs and STARs are not Part 95 procedures and asked John his perspective about adding MEAs on these. John thought they would be useful for the pilot. John Moore, Jeppesen, disagreed, saying MEAs are not in PANS-OPS and thought they should be designed as procedural altitudes. Dan added the U.S. has longer transitions and legs than procedures outside the U.S. Rich and Dan said the Departure Working Group is suggesting the position that there be no MEAs on SIDs and STARs.

Action Items:

- Flight Procedures and Airspace Group will identify the new office of primary responsibility (OPR) for Order JO 7470.1A, determine the status of the order, and formulate, or work with the OPR to help formulate a path forward for any necessary revisions.

Status: Item accepted and open

6. Next Meetings:

- a. **ACM 21-01:** The IPG portion is scheduled for April 26-27, 2021, as a virtual meeting.
- b. **ACM 21-02:** Schedule TBD