



FAA
Aeronautical Information Services AJV-5

AISWG - Aeronautical Information Services Working Group

Meeting Agenda 16-03 | October 4th, 2016

1. Opening Remarks:

- a. Charter updates.

2. Old Business:

- a. **12-089 (April 3, 2012): UAS Standards and Charting.** ISSUE: During discussion of Issue 12-085 (Activity Areas Data), Paul Eure stated that as UASs become more prevalent, the FAA must develop standards to accommodate these new aircraft. Paul stated that the En Route Service Unit is in the process of developing separation standards for UASs, but is having difficulty attempting to coordinate with the UAS office (AFS-80). Paul also briefed that six Unmanned Aircraft Systems (UAS) training and research areas are being established across the US. Paul asked who should be contacted to coordinate the charting and publication of these areas?

Status 04-03-12: New issue initiated by Paul Eure, AJE-31. During discussion of the NFDCs plan to database certain activity areas, Paul Eure stated that six UAS training and research areas are being established across the US, and asked what group should be contacted to coordinate charting and publication of these areas. Val Watson responded that coordination should go through the UAS Office (AFS-80). Paul responded that this office has been somewhat non-responsive to date, and added that En Route has been trying to coordinate development of separation standards for UASs through this office with little success. Mike Foster added that the military services are working with FAA HQ on this issue as well. Paul responded that he was only referring to civilian UASs at this point. Chris Criswell responded that coordination should involve both the civilian and military UAS offices. George Bland stated that the military services are incorporating UASs into the NAS, not just at designated areas. Paul responded that the same process is happening on the civilian side, as it was mandated by Congress, which is why En Route is developing the separation standards, but that these research areas must also be included on the VFR charts once they are established. Lance Christian stated that the Las Vegas UAS Center for Excellence has a

lot of experience with these activities and would be a good source of information. Paul responded that to implement these standards in six months as anticipated, they need a solution now. Val stated that AeroNav Products already has a specification available for charting these areas, but just needs the data. Chris added that the UAS Office is the authoritative source of this data, and that the NFDC relies on the authoritative source for publication and charting data. Greg Pray and Mike Foster volunteered to coordinate this issue through the civilian and military UAS offices, respectively.

IOU:

- 1) Paul Eure will report on the separation standards being developed by En Route, and provide more information on the six UAS research areas being established at the next AISWG meeting.
- 2) Greg Pray will contact a representative of the UAS office handling civilian UASs and invite them to the next AISWG meeting to provide more information.
- 3) Mike Foster will contact a representative of the UAS office handling military UASs and invite them to the next AISWG meeting to provide more information.

Status 07-10-12: The following status update of the three open IOUs from the last meeting was provided:

- 1) Paul Eure briefed that since AFS will not develop standards because no safety case has been made, En Route will attempt to reverse engineer standards from the recommendations of the safety panel. He stated that Congress has mandated that standards must be established by 2014. IOU OPEN.
- 2) Greg Pray contacted Mike Connor and invited him to the AISWG to brief the group. Mike C. briefed that Congress has set strict guidelines for developing procedures involving UASs, and that he will keep Greg updated on changes through the end of the year. Chris Criswell asked what groups in the FAA were handling the new guidelines regarding UASs. Mike C. responded that these were handled by AJV-115 along with AFS-407. Chris asked if there was any guidance on charting for UASs. Mike C. responded that there is no published guidance for submitting requests, but they must go through AJV-115. Brad Rush stated that only areas with continuous UAS activity should be charted to avoid chart clutter. Mike C. responded that he can work to establish the criteria for charting, but needs contacts to help. Brad responded that Val Watson should be the contact for charting, and that Chris Criswell should be the contact for data. Chris asked when guidance on UASs would be available. Mike C. responded that 7210 series notice was being developed to provide guidance to Air Traffic, but did not have a date for release. IOU OPEN.
- 3) During the discussion of item (2), Mike C. also provided information on UAS coordination with the military. Lance Christian asked if AJV-115

and AFS-407 were also coordinating with the military. Mike C. responded yes, they are coordinating with the DoD and NASA. Mike Foster responded that military COAs are going through the OE/AAA system. Mike C. agreed and added that outside of COAs, the military is going through AJV-115. Lance added that military UAS experts will need to be consulted for criteria, and Michael Clayton agreed. Mike F. responded that USAASA was representing the US Army on all UAS matters. Mike C. added that coordination on UAS matters has currently been handled through the DoD Policy Board on Federal Aviation (PBFA). George Bland responded that Col. Carl King (email: carl.king@pentagon.af.mil, phone: 202-385-4594) is involved with the PBFA and would serve a contact for military coordination. Val asked how many military UAS areas have been established. Mike F. responded that approximately 50-100 have come through the COA process. John DeMaria responded that to his knowledge there has only been one UAS area submitted for charting. Chris added that a majority of the existing areas fall within restricted airspace and therefore are not charted. IOU OPEN.

IOU:

- 1) Paul Eure report on the separation standards being developed by En Route at the next AISWG meeting.
- 2) Chris Criswell and Val Watson will collaborate with Mike Connor to establish charting criteria for UASs and report progress at the next AISWG.
- 3) Mike Connor will contact Col. Carl King to coordinate military UAS standards and report progress at the next AISWG. Mike Foster will confirm that USAASA is the US Army lead for UAS.

Status 10-02-12: The following status update of the three open IOUs from the last meeting was provided:

- 1) Paul Eure briefed that no progress has been made on defining separating standards for UAS. Paul Eure, Randy Willis and Brad Rush recommended that this issue be removed as an ASIWG issue. The group agreed. IOU CLOSED.
- 2) Mike Conner briefed that the UAS test sites have been postponed. Chris Criswell asked about the current symbology and notations used to mark UAS operations on charts. Mike Connor responded that current operations are conducted using a Certificate of Authorization (COA) and many operations are within existing restricted airspace. Valerie Watson asked if we could have someone from the UAS office involved with making a charting reference or symbol. Valerie Watson also indicated that the draft Order 7900.3 contains a process for submitting UAS charting requests. IOU OPEN.
- 3) Mike Connor introduced Randy Willis (AJV-115) as the POC for UAS operations. Randy Willis briefed that current UAS operations will

continue to involve waivers and coordination between the Military and operators of airspace and airports. Randy said he will need to reevaluate the subject related of temporary vs. permanent UAS operations and the difference between short and long term authorizations. Some “temporary” authorizations are over 2 years old. Current goal is to have integration with NAS in 2015. IOU OPEN.

IOU:

- 1) Randy Willis will report back to the group on UAS authorizations.
- 2) Chris Criswell will provide Mike Connor a copy of draft Order 7900.
- 3) Mike Connor will report back on the status of developing charting criteria.

Status 01-08-13: The following status update of the three open IOUs from the last meeting was provided:

- 1) Mike Conner indicated that the UAS Authorizations are all handled through the COA process. IOU OPEN.
- 2) Chris Criswell indicated that when draft Order 7900.3 is ready he will distribute to the AISWG. IOU OPEN.
- 3) Mike Conner briefed that a draft Advisory Circular is being written that defines UAS charting standards. Mike will provide the draft AC to Chris Criswell who will distribute with the AISWG minutes. IOU OPEN.

IOU:

- 1) Mike Connor will report back on any changes to UAS authorizations.
- 2) Chris Criswell will distribute draft Order 7900.3 to the AISWG.
- 3) Mike Connor will report back on the status of developing charting criteria.

Status 04-02-13: The following is a status update from the last AISWG.

- 1) Mike Connor stated that the FAA UAS Support Office (AJV-115) is working on an advisory circular which will provide guidance on how to submit UAS charting request and criteria for charting. Chris Criswell indicated that Order 7900.3 should be referenced with the advisory circular. IOU OPEN.
- 2) Chris Criswell reiterated that NFDC is targeting late summer or early fall for the final Order 7900.3 which will include a fillable pdf form for UAS data. IOU OPEN.

IOU:

- 1) Mike Connor will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.

- 2) Mike Connor will distribute the most recent draft of the UAS advisory circular.
- 3) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

Status 07-09-13: No status updates for were provided for the three open IOU's from the last AISWG. IOU OPEN.

IOU:

- 1) Mike Connor will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.
- 2) Mike Connor will distribute the most recent draft of the UAS advisory circular.
- 3) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

Status 11-05-13: John Graybill updated the group on the progress of the 7900.3 and the fillable pdf forms which will be used to submit UAS areas. Mike Connor was not present to provide updates. IOU OPEN.

IOU:

- 1) Mike Connor will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.
- 2) Mike Connor will distribute the most recent draft of the UAS advisory circular.
- 3) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

Status 01-07-14: John Graybill stated that no additional progress has been on the 7900.3 and the fillable pdf forms which will be used to submit UAS areas. Mike Connor was not present to provide updates. IOU OPEN.

**NOTE: Mr. Scott Gardner will replace Mr. Mike Connor as the AISWG UAS POC. Scott Gardner, 202-267-8192, scott.gardner@faa.gov*

IOU:

- 1) Mike Connor will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.
- 2) Mike Connor will distribute the most recent draft of the UAS advisory circular.
- 3) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

Status 04-08-14: No updates were provided. John DeMaria took the action to contact Scott Gardner for a response to the IOU's. IOU OPEN.

IOU:

- 1) Scott Gardner will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.
- 2) Scott Gardner will distribute the most recent draft of the UAS advisory circular.
- 3) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

Status 07-08-14: Scott Gardner requested that all new UAS charting requests to him. Corpus Christi TX has an example of UAS description. Scott Gardner will use the UAS Charting criteria AC developed by Mike Connor as a starting point for establishing policy for UAS charting. Jennifer Hendi and Tom Harris will gather existing published UAS charting information and send it to Scott Gardener to be vetted. IOU OPEN.

IOU:

- 1) Scott Gardner will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.
- 2) Jennifer Hendi and Tom Harris will provide the existing published UAS charting information and provide it to Scott Gardner.

Status 10-07-14: Scott Gardner was not present to provide an update on the draft UAS advisory circular.

IOU: Scott Gardner will report back on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.

Status 02-03-15: Scott Gardner has been replaced by Eric Lautenschlager. John Graybill provided an update that NFDC will coordinate with Eric Lautenschlager regarding what UAS data should be included in NASR and the process for submitting that data to NFDC

IOU: John Graybill will report back on the status of adding UAS data to NASR. John will request that Eric Lautenschlager provide an update on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.

Status 04-07-15: John Graybill reported that he met with Eric Lautenschlager. John stated that they are defining a shared vetting process for UAS charting provided an update that NFDC will coordinate with Eric Lautenschlager regarding what UAS data should be included in NASR and the process for submitting that data to NFDC.

IOU: John Graybill will report back on the status of adding UAS data to NASR. John will request that Eric Lautenschlager provide an update on the development of the UAS advisory circular which includes guidance for the submission of UAS charting requests.

Status 07-07-15: John Graybill reported that requirements for storing Unmanned Aircraft Activity (UAA) area data in NASR were included in the Activity Area Resource specifications submitted to the NASR team in June. Currently, requests to chart UAA areas are submitted to Visual charting from the UAS office. Visual Charting creates a NFDD add-on page for the entry and then, subsequently, adds the symbol to the chart. Once NASR has been modified to store UAA data, NFDC will take over responsibility for accepting and publishing UAA data in the NFDD.

IOU: John Graybill will report back on storing UAA data in NASR and the publication of UAA.

Status 10-05-15: John Graybill and Langston Majette will work with the UAS office on finalizing the charting criteria. John will update the group on UAS incorporation into NASR. IOU Open.

**Note: Langston Majette now works in the FAA UAS office.*

Status 04-05-16:

- 1) Langston Majette provided the following update from his detail to support UAS work in the Mission Support Services AJV-0 office: The ATO UAS Integration Team is working to see if a UAS symbol should be added to VFR charts but unsure of the scale of the work. They are currently developing a policy for model and hobbyist UAS operators (who want representation on VFR charts). The UAS symbol was not developed to chart model aircraft activities. However if it is deemed a safety concern, it could be used. This angle of the issue is still under discussion.
- 2) Langston Majette shared that the ATO UAS Integration Team is also working to establish criteria for UAS entries for the "Special Notices" section of the Chart Supplement. With the current absence of criteria, too many generic entries provide minimal safety value to pilots.
- 3) John Graybill said UAS symbology on VFR charts / Charting Supplements relates to populating miscellaneous activity areas into the NASR database.

IOU: Langston is working to engage AJV-115 to establish charting and chart supplement guidance by this summer. Updates from Langston Majette next AISWG meeting. IOU OPEN.

Status 07-12-16:

- 1) Langston Majette provided the following update from his detail to support UAS work in the Mission Support Services AJV-0 office: Work to establish VFR charting & Chart Supplement publication criteria has been temporarily put on hold due to the UAS Integration Team's focus on rolling out Part 107, effective August 29th, which will identify UAS activity that does not require charting. Langston reassured the working group that the ATO UAS Integration Team knows that the current box used for charting is not an adequate long-term charting solution. UAS access will be granted to Class E airspace first, followed by Class D, and ending with Class B access in December.
- 2) John DeMaria has received charting requests affecting Brownsville, El Paso, San Antonio, Albuquerque, Billings, Great Falls and Washington sectionals.
- 3) Val Watson shared that once charting criteria is established; the old boxes can be replaced.

IOU: Langston Majette will re-enter the AISWG request to establish VFR charting & Chart Supplement publication criteria into the ATO UAS Integration Team work after the first phase of airspace access is granted. He will provide an update at the next AISWG meeting. **IOU OPEN.**

- b. 15-105 (July 7, 2015): Airway Altitudes shown as Feet (FT) or Flight Level (FL).** Issue: NASR has a discrepancy in how Flight Level Airway Altitudes below 18,000 are data based.

Status 10-05-15: Scott Jerdan will report back at the next AISWG. IOU Open

Status 05-04-16: In US airspace, above 18,000 feet, flight levels are used (some exceptions over in oceanic airspace). The Flight Procedures and Airspace Order 8260.19 mandates these altitudes be documented as Feet in the Form 8260-16. As a result, the NASR database stores Flight Level Airway Altitudes incorrectly as Feet following the source. The FAA directorate, Flight Standards Service (AFS-400), owns the Flight Procedures and Airspace Order 8260.19 that directs these altitudes be documented as Feet in the Form 8260-16.

IOU: Tom Schneider from Flight Standards Service AFS-420, will assess whether the 8260.19 Order should be changed to source as flight levels above 18,000 feet. IOU OPEN

Status 07-12-16: AFS-420 does not feel a change is needed to the 8260.19. The working group discussed that older -16 forms have flight levels on them, newer ones do not, STARS and departures forms do have flight levels, and the procedures themselves are mixed. Alex Rushton added that it may help to know how they are coded for use in flight management systems. Enroute automation is affected because the airway altitudes in NASR are in feet and are manually changed to flight levels when charted. Val Watson asked if the flight levels should even be shown on the charts. Don Harmer added that this is an air traffic control (ATC) communications requirement rather than a charting or specifications issue.

IOU:

- 1) Val Watson will look for the source of the original mandate to chart airway altitudes as flight levels above 18,000 feet. As of September 27th, no documentation was found in the IACC specification records that would shed any light on the issue. IOU closed.
- 2) Flight Standards (John Bordy / Steve VanCamp) will take the action to collaborate with operations folks to identify what users need and want and assess how inconsistent we are. IOU open.

- c. **15-106 (July 7, 2015): AFS-460 Approving 3rd Party Procedures.** Issue: 3rd Party Procedures that do not have an Airport Ident in the system are being approved by AFS-460.

Status 10-05-15: The procedures are being approved because they are point in space. Tom Harris believes they are private airports and will report back at the next meeting. IOU Open

Status 05-04-16: The Ident Order does not allow for the reservation of airport idents. For NFDC to issue an airport ident a site number needs to be part of the request.

IOU: Charlie Rose of AFS-460 will check with new manager on the process at the next meeting (helipad procedures for hospitals). **Charlie Rose emailed (see 20160712 Attachment 15-106 Minutes.pdf) process submitted by Central Region to Jill Olsen on 6/13/16:**

- Starts with the owner/consultant filing a 7480-1 with the Regional Office
- Regional Office evaluates surrounding airspace and makes an airspace determination
- Regional Office will send the airspace determination and a filled out 5010 form back to the owner
- Owner reviews determination, signs 5010 form, and sends it back to the Regional Office

- Regional Office “packages” the original 7480-1, airspace determination, and owner-signed 5010 form and emails to Office of Airports HQ in DC.
- The Office of Airports will assign a SiteID.
- The package and Site ID# are then sent via email to NFDC for LocID assignment and inclusion in NASR.

Status 07-12-16: AFS-460 shared that the new process is being implemented. Drew Goldsmith shared that more coordination may be needed in the field for the new process to stick. Specific challenges cited included; a) an airport’s proponent must sign and submit the final 5010 form, not the 3rd party procedure developer, b) 3rd party procedure developers are ‘reserving’ LOC IDs through an AFS-400 KSN site.
<https://avssp.faa.gov/avs/afs400/IndustryFAA/SitePages/Home.aspx>

Scott Jerdan shared via email after the 7/12/16 AISWG meeting, “Please refer to Order JO-7350.9. NFDC is not issuing reserved airport identifiers. AFS should consider shutting down the link below if it is used to issue “reserved” identifiers for airports.”

IOU: AFS-460 has already issued guidance through email to follow the process as outlined by ARP and not use the ksn site to reserve ids. Charlie Rose (AFS-460) offered to follow up on the ksn site originated by Mike Webb (AFS-420), with the new acting AFS-460 manager.

- d. 16-107 (April 5, 2016): Addition of Miscellaneous Activity Area Resource to NASR.** Issue: AIS signed IACC RD 751 in October of 2015, which creates a mechanism for charting Aerobatic Practice Areas on VFR Charts (Helicopter Route, Flyway, Terminal Area & Sectional). Currently sourced by NFDD add-on page until NASR can be modified to accommodate them. Getting Miscellaneous Activity Areas databased in NASR is desirable for chart automation purposes, for tracking & record keeping. The FAA’s ATO Program Management Office (PMO, AJM-33) is now responsible for the management of the NASR database management tool (moved from AJV-5).

Status 07-12-16: John Graybill shared that this request was submitted in May 2015, however, will not be fulfilled until the first of the new year at the earliest. The AISWG agreed this should get on the NASR priority list before the NAVLean lock out on November 28th.

IOU:

- 1) CJ Meushaw will reach out to the NAVLean point of contact for a NAVLean NASR lock out summary (or headline). CJ Meushaw followed up with the NAVLean program manager in the ATO’s Program Management Office service unit, Suzanne Koppanen. Suzanne

clarified that there is no NAVLean requirement 'lockout' scheduled for the NASR database maintenance to her knowledge. New requirements derived from AJV-5 SME input for NAVLean will be developed in parallel as appropriate, with other NASR requirements and then the coding will be merged. IOU closed.

2) CJ Meushaw will forward the AISWG Miscellaneous Activity Area Resource request to Nate Rahn for submission to the NASR technical control board (TCB). On September 27th, CJ forwarded a formal NASR enhancement request through the AIS Governance and Standards team AJV-553 representative to the NASR CCB. IOU closed.

e. 16-108 (July 12, 2016): Hang Gliding / Paragliding Site Charting Criteria.

Issue: Katie Murphy, Manager, AIS Visual Charting Sub Team B shared that the United States Hang Gliding and Paragliding Association (USHPA) has provided a list of more than 400 hang gliding and paragliding sites in the United States. The number of flights at these sites ranges from 1 to thousands per year. Visual Flight Rules charting needs to depict some of these sites on the charts. However a minimum flight activity number must be established for charting purposes. AIS Visual Charting Team believes discussing this with the AISWG would be beneficial.

Status 07-12-16: Rick Fecht shared that VFR Charting is looking for help to develop charting criteria. It was discussed that AJV-5 Aeronautical Information Services does not decide what charting criteria is; Flight Standards or some other FAA organization does. The working group also discussed the need to catalogue the sites in a source database such as NASR. It was concluded that this will be opened as an issue with IOUs and follow up discussion at the next AISWG.

IOU: AJV-5 will find out who in the FAA: 1) is responsible for determining charting criteria, and 2) governs hang / paragliding activity.

3. New Business:

- a. AISWG web page: Align AISWG external wiki web page with initiative to consolidate external access points in support of data quality and improved customer service. Link to the AISWG on the AJV-5 website is located on the "Aeronautical Data/NFDC" page under the heading "Resources". The AISWG link also remains on the old NFDC website will go away when the old NFDC website is disabled. http://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/

4. Next Meeting: January 10, 2017

5. Attendance:

Present	Name	Organization	Phone	Email
	Krystle Behrns	FAA / AJV-5614	301-427-4820	krystle.a.behrns@faa.gov
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	Robert Carlson	FAA / AJV-5641	301-427-5134	robert.d.carlson@faa.gov
	Michael Clayton	AFFSA	405-582-5012	Michael.clayton@us.af.mil
	Michael Couchman	USAF	571-557-7143	Michael.R.Couchman@nga.mil
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