Aeronautical Information Services Working Group (AISWG) Meeting 13-02 April 2, 2013 FAA AeroNav Products Silver Spring, MD and Oklahoma City, OK

1. Opening Remarks:

a. Introduction. Mr. Chris Criswell, AJV-22, the current chair, opened the meeting at 0830, April 2, 2013, from the AeroNav Products conference room in Silver Spring, MD with participation from the AeroNav Products conference room in Oklahoma City, OK via the video-teleconferencing (VTC) system and additional participation via audio teleconferencing (telecon). The minutes of meeting 13-01, which was held on January 8, 2013, were distributed electronically on January 25, 2013.

b. Attendance. The following were in attendance for this meeting:

Name	Organization	Phone	Email
Silver Spring, MD			
Chris Criswell (Chair)	FAA/AJV-22	202-267-9302	christopher.criswell@faa.gov
Victor Nazarian	FAA/AJV-21/22(CTR)	202-267-3286	victor.ctr.nazarian@faa.gov
Jay Jackson	FAA/AJV-22	301-427-5121	joseph.a.jackson@faa.gov
Jennifer Hendi	FAA/AJV-3B	301-427-4816	jennifer.l.hendi@faa.gov
John DeMaria	FAA/AJV-32	301-427-4960	john.a.demaria@faa.gov
Steve Broman	FAA/AJV-21	202-267-8429	steven.broman@faa.gov
Andrew Goldsmith	FAA/AJV-22	202-267-8265	andrew.e.goldsmith@faa.gov
Tom Harris	FAA/AJV-21	202-267-9293	thomas.g.harris@faa.gov
George Sempeles	FAA/AOV-310	202-267-9290	george.p.sempeles@faa.gov
Greg Pray	FAA/AJV-21	202-267-9292	gregory.pray@faa.gov
Alcus Davis	FAA/AJV-21	202-267-9553	alcus.davis@faa.gov
Harry Lahanas	FAA/AJV-21	202-493-5752	harry.lahanas@faa.gov
Ed Rosada	NGA/SA	314-676-0589	edward.j.rosado@nga.mil
Justin Nahlk	NGA	314-308-4722	justin.m.nahlik@nga.mil
Lance Christian	NGA/MSR	571-557-3870	lance.d.christian@nga.mil
Jeff Waterman	NGA/SF	314-676-1636	geoffrey.d.waterman@nga.mil
Lynette Jamison	FAA/AJR-B1	540-422-4761	lynette.m.jamison@faa.gov
Robert Carlson	FAA/AJV-322	301-427-5134	robert.d.carlson@faa.gov
Adam Edmondson	FAA/AJV-322	301-427-5112	adam.edmondson@faa.gov
Carolyn Meushaw	FAA/AJV-311	301-427-4853	carolyn.meushaw@faa.gov
Raymond Zee	FAA/AAS-100	202-267-7874	raymond.zee@faa.gov
Oklahoma City, OK			
Tom Schneider	FAA/AFS-420	405-954-5852	thomas.e.schneider@faa.gov
Charlie Rose	FAA/AFS-460	405-954-3222	charlie.l.rose@faa.gov
Brad Rush	FAA/AJV-3B	405-954-3027	brad.w.rush@faa.gov
Don Harmer	FAA/AJV-3B	405-954-9930	donald.r.harmer@faa.gov
Paul Hoegstrom	AFFSA	405-739-9011	paul.hoegstrom@tinker.af.mil
Chris Pillifant	AJV-3	405-954-0623	chris.pillifant@faa.gov
Robert Myers	AFS-420	405-954-5357	robert.p.myers@faa.gov
Telecon			
Mike Foster	USAASA	703-806-4869	james.m.foster1.civ@mail.mil
Mike Connor	FAA/AJV-115 (CTR)	202-385-4598	mike.ctr.connor@faa.gov
Paul Eure	FAA/AJE-31	202-385-8451	paul.eure@faa.gov

2. Old Business:

a. 09-076 (October 6, 2009) Airway Minimum Turning Altitude (MTA).

ISSUE: At the closure of meeting 09-04, Paul Eure presented a question that he had received from Denver ARTCC involving a minimum turning altitude over various airway combinations over the Jackson Hole VORTAC. The MTAs are significantly above the MEAs and are documented on the Form 8260-2 for the facility/fix. Paul's question is how are controllers and pilots made aware of turning restrictions and should there be a charting standard?

Status 10-06-09: New issue opened from the floor as a result of a post meeting question raised by Paul Eure. Apparently, there are criteria in TERPS to evaluate minimum turning altitudes on airways. There is policy in Order 8260.19 on how to document MTAs on Form 8260-2. However, there is no policy to ensure pilot or controller awareness of MTAs. Bill Hammett stated that this is a serious issue and recommended that it be added to the AISWG agenda for resolution. Tom Schneider, Chair AISWG agreed. **OPEN.**

<u>IOU:</u> Tom Schneider will research the rationale behind the 8260-2 documentation requirement.

<u>Status 01-05-10:</u> Tom Schneider briefed that this issue is being worked through the US-IFPP as there is a possibility of criteria changes. Tom also stated that AFS-420 is also internally discussing the need for documentation guidance and possible charting requirements. **OPEN.**

IOU: Tom Schneider to continue to track and work the issue.

Status 03-30-10: John Bordy presented a briefing validating the issue and recommending both short-term and long-term solutions. John emphasized that he didn't believe there are too many of the Jackson Hole MTA scenarios. A discussion followed. Don Harmer expressed concern over chart clutter. Val Watson stated that if the occurrence of MTAs is as uncommon as believed, there would not be a significant chart clutter issue. She recommended that the information be placed as an airway remark on the 8260-16. Since this form goes through Part 95, the information would be charted immediately and IACC specs would not need to be addressed. On the other hand, using a "T" or other symbol to represent the MTA would require approval of the IACC. Tom Schneider responded that the -16 documentation requirement is being considered for Change 1 to Order 8260.19D. Lance Christian stated that the problem should not exist and recommended that MEAs be increased to accommodate any required MTA. John responded that MEA increases would impact all users (even those not turning) as well as ATC facilities. Bill Hammett asked whether MEAs could be directional; for example,

regarding JAC, retain the lower MEA for southbound traffic and raise the northbound MEA to accommodate the MTA. Lance suggested a search of the NAS to see how many MTAs are required. Rick Mayhew stated that he would see if NASR could determine this. Bill Hammett re-capped the issue and stated that several IOUs are necessary. **OPEN.**

<u>IOUs:</u> 1) Rick Mayhew will attempt to determine the extent of the problem through a NASR inquiry; 2) Val Watson will coordinate a possible charting solution through the MPOC; 3) The En route Service Unit must take immediate corrective action to resolve current known MTA requirements; 4) The En route Service Unit will develop controller guidance for 7110.65 and the PCG; 5) Tom Schneider to develop documentation requirements for Form 8260-16; and 6) Tom Schneider to work within AFS-400 to ensure pilot educational material for the AIM and IPH is updated accordingly.

<u>Status: 06-29-10:</u> There were 6 IOUs on this issue from the last meeting that were addressed in order:

- 1. Rick Mayhew briefed that he searched the NFDC worldwide resources database and uncovered 8 fixes with MTAs. He cautioned that as the search process utilized mapping text from an example Form 8260-2 and used an Optical Character Recognition program, there may be additional fixes with MTAs whose documentation does not match the search parameters. **IOU CLOSED.**
- 2. Valerie Watson briefed that the last MPOC meeting was cancelled; therefore, the issue has not been discussed yet. She needs a sample 8260-16 in order to write the spec change. Brad Rush will supply a sample. At the next MPOC meeting, she will propose that a new symbol for MTAs not be developed. Rather, the meaning of the existing "x" flag used to denote a MCA will be re-defined to indicate dual use for both MCAs and MTAs. Brad Rush added that as soon as IACC specs are approved, he will prepare an internal AeroNav Services policy memo to the En Route Navigation Team to implement the change prior to 8260.19 revision. Paul Eure expressed concern over pilot/controller understanding of MTA vs. MCA. Val responded that the "x" symbol will always have an associated note and its meaning will therefore be clear to the user. Lance Christian stated that the DOD has a database issue with this proposal because DAFIF will only accommodate one altitude on an airway. He re-stated his previous position that airway MEAs should be raised in order to accommodate the MTA requirements. **IOU OPEN.**
- 3. Paul Eure advised that all affected ARTCCs were provided copies of the form 8260-2s with known MTAs. **IOU CLOSED.**
- 4. Paul Eure advised that he has developed DCPs to provide controller guidance regarding MTAs. He will begin coordination when charting specifications are complete. **IOU OPEN.**
- 5. Tom Schneider briefed that he is developing a policy change to document MTA requirements on Form 8260-16 vice Form 8260-2 (current practice). This policy is planned for inclusion in Change 1 to Order 8260.19E. There will also be a cross reference in the 8260-2 instructions as a reminder. **IOU OPEN.**
- 6. Tom Schneider stated that IPH and AIM guidance cannot be developed until the charting specifications are completed. **IOU OPEN**.

The bottom line is that further action is dependent on the charting specs.

<u>IOUs:</u> 1) Val Watson to keep the group apprised of MPOC actions; 2) The ATO En Route Service Unit will develop controller guidance for 7110.65 and the PCG when specs are complete; 3) Tom Schneider to develop documentation requirements for Form 8260-16; and, 4) Tom Schneider to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly once charting specifications have been agreed to.

<u>Status 10-05-10:</u> A status update of the four open IOUs from the last meeting was provided:

- 1. Val Watson briefed that RD 689, which supports MTA charting via dual use of the current MCA icon, has been staffed through the MPOC and is currently in the IACC signature process. The IACC spec change should be in place by the end of the month. **IOU CLOSED.**
- 2. Paul Eure briefed that two DCPs are out for comments to update the PCG and 7110.65. Comments are due NLT the end of October. **IOU OPEN.**
- 3. Tom Schneider briefed that Brad Rush has prepared an internal AeroNav Services memo regarding interim Form 8260-16 documentation for flight procedures personnel (A copy of the memo is attached). Tom will extract pertinent guidance from the memo and include it in Change 1 to Order 8260.19, which will be effective in March 2011. Brad briefed that they will begin documenting and charting MTAs as soon as the IACC Spec is signed. **IOU OPEN.**
- 4. Tom Schneider stated that he has briefed Jim Rose, AFS-420, on the necessity of updating the IPH. Paul Eure is coordinating the AIM change. **IOU OPEN.**

During discussion, Bill Hammett recommended a graphic notice be published in the NTAP to help ensure pilot/controller awareness until the AIM and IPH are updated. **IOU OPEN.**

<u>IOUs:</u> 1) The ATO En Route Service Unit will track the DCPs for controller guidance for 7110.65 and the PCG; 2) Tom Schneider to include documentation requirements for Form 8260-16 in Change 1 to Order 8260.19E, which is tentatively scheduled to be effective in March, 2011; 3) Tom Schneider to continue to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly; and 4) Tom Schneider & Bill Hammett to develop a Graphic Notice for the NTAP until the AIM and IPH are updated.

<u>Status 01-11-11:</u> A status update of the four open IOUs from the last meeting was provided:

- 1. Paul Eure briefed that there were several non-concurs on the DCPs being developed to provide controller guidance. Most non-concurs indicate a problem understanding the difference between MCA and MTA. The issue is being worked. **IOU OPEN.**
- 2. Tom Schneider briefed that guidance for documenting MTAs on Form 8260-16 has been included in Change 1 to Order 8260.19E, which is in the coordination process. He added that the -16 is being revised to a report format. **IOU CLOSED.**

3. Tom Schneider briefed that work is on-going within AFS-400 to update pilot educational material. Jim Rose, AFS-420, is working the IPH and AFS-410 is working AIM guidance.

IOU OPEN.

4. Tom Schneider briefed that he and Bill Hammett completed a Graphic Notice for the NTAP and forwarded it for publication. **IOU CLOSED.**

During discussion Valerie Watson recommended that the Graphic Notice be forwarded to the En Route Charting Team for development of a Safety Alert to be posted on the AeroNav products web site. She also recommended the Notice be sent to Jeppesen so they could develop a briefing bulletin for their products. Tom stated that he had already forwarded the Notice to Ted Thompson, Jeppesen.

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for 7110.65 and the PCG; 2) Tom Schneider to continue to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly; and, 3) Val Watson to track AeroNav Products development of a Safety Alert for government chart users.

<u>Status 04-05-11:</u> A status update of the three open IOUs from the last meeting was provided:

- 1. Paul Eure from the En Route Service Unit was unable to attend because of illness; therefore, an update on controller (JO 7110.65) guidance was not available. **IOU OPEN**
- 2. Tom Schneider briefed that work is on-going within AFS-400 to update pilot educational material. Jim Rose, AFS-420, is currently working the IPH. Tom asked Suzette Rash if she had any knowledge of AFS-410 progress on AIM guidance. Suzette responded that she was unaware of the current status of the issue within AFS-410. **IOU OPEN.**
- 3. Val Watson briefed that the AeroNav Products developed a Charting Notice vice a Safety Alert for government chart users. The Charting Notice is posted on the AeroNav Products web site. **IOU CLOSED**

During discussion, it was noted that Paul Eure had forwarded 8 Form 8260-2s with MTAs annotated asking when all would be charted. Brad responded that Jackson Hole, AZ (JAC) and Pomona, CA (POM) have been charted. The remaining fixes are currently being worked into 8260-16 revisions. Bill Hammett noted that he had received correspondence from Wally Roberts (NBAA consultant) expressing concern that Jeppesen has not addressed MTAs. Tom Schneider responded that he had forwarded Ted Thompson the information on JAC and agreed to follow up to ensure Jeppesen is aware of the MTA issue.

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly; and, 3) Tom Schneider to coordinate with Jeppesen to ensure they are aware of and are addressing the MTA issue. OPEN.

Status 07-12-11: A status update of the three open IOUs from the last meeting was provided:

- 1. Paul Eure briefed the DCP is in the final stages of approval. All non-concurs have been mitigated; however, he has no estimate when it will be signed. In the interim, there is no field guidance on MTAs for controllers. **IOU OPEN.**
- 2. Tom Schneider briefed that IPH guidance has been written and the revised handbook is in internal AFS coordination process. Tom also stated that he reminded AFS-410 of the AIM guidance reminding them the cutoff is Aug 25 for February 2012 publication. **IOU OPEN.**
- 3. Tom Schneider briefed that he coordinated with Jeppesen and they have established a new charting process for MTAs similar to our IACC Specs. They have also received source for 7 new MTAs and all applicable Jeppesen enroute charts were updated to reflect MTAs before or on June 10. **IOU CLOSED.**

During discussion, Paul Eure asked whether all US MTAs have been charted. Brad responded that all have been worked as amended form 8260-16s. Val Watson agreed to confirm charting with the Enroute Charting Team. **OPEN.**

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly. 3) Val Watson will confirm with the Enroute Charting Team that all of the currently known MTA locations (8) have been charted.

<u>Status 09-27-11:</u> The following status update of the three open IOUs from the last meeting was provided:

- 1. Paul Eure, who represents the En Route Service Unit was not present; therefore, no update on this IOU was available. **IOU OPEN.**
- 2. Tom Schneider briefed that he was unable to get in touch with the AFS-410 representative to determine the AIM status. He did note that MTA information has been included in the draft IPH update. **IOU OPEN.**
- 3. Val Watson, who was unable to attend, forwarded the following update as received from the Enroute Charting Team:

The following airways have been amended and published with MTA remarks with effective dates as noted: V197 @ POM CA effective 11/18/10;

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V236 @ OGD UT effective 1/13/11; V328 @ JAC WY effective 3/10/11; V330 @ JAC WY effective 3/10/11; V465 @ JAC WY effective 3/10/11; V465 @ MLD ID effective 3/10/11.
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Additionally, the following airways were identified for amendment to include MTA remarks based on existing -2 data:

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V327 @ FLG AZ; V421 @ ECHOA CO; V85 @ ALLAN CO; V134 / V220 / V591 @ SLOLM CO V4 / V495 / V287 @ LOFAL WA; V495 / V4 @ JAWBN WA.
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These airways are in PTS for work and should be published sometime in 2012; however, exact publication dates are undetermined at this time due to competing priorities, and a very small production work force. Since there is a plan in place to address future MTAs as they are discovered, This IOU may be closed. **IOU CLOSED.**

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to work within AFS-400 to ensure pilot educational material in the AIM and IPH is updated accordingly.

<u>Status 01-10-12:</u> The following status update of the two open IOUs from the last meeting was provided:

- 1. Paul Eure, who represents the En Route Service Unit was not present; but provided an update via email stating that the MTA DCPs are still being processed and are in the final stages and about ready to go to Safety. Mike Foster asked if there was a timeframe associated with the processing of the MTA DCPs. Steven Habicht responded that Paul's email did not provide that information, and he will request an update for the next meeting. **IOU OPEN.**
- 2. Tom Schneider briefed that he contacted an AFS-410 representative and was assured that the updated AIM material will be published in February 2012. He also contacted Jim Rose (AFS-420) and was assured that the MTA material has been included in the IPH update. **IOU OPEN.**
 - <u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to work within AFS-400 and track the AIM and IPH to ensure pilot educational material is updated accordingly.

<u>Status 04-03-12:</u> The following status update of the two open IOUs from the last meeting was provided:

- 1. Paul Eure briefed that coordination is still underway, that they have resolved all non-concurs, and that the order is out for final disposition (internal FAA coordination). Val Watson asked if this included the PCG? Paul responded yes. **IOU OPEN.**
- 2. Tom Schneider briefed that the updated AIM material was published and that the MTA material has been included in the IPH update, which has finished coordination and should be published in the next three to five months. **IOU OPEN.**
 - <u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to track the IPH to ensure pilot educational material is updated accordingly.

<u>Status 07-10-12:</u> The following status update of the two open IOUs from the last meeting was provided:

1. Paul Eure briefed that coordination is still underway, and that they must write the safety decision memo for the DCPs. Val Watson asked if the existing MTAs have been

published. Bill Hammett responded that they should have been, according to the status update provided at the AISWG meeting on 9/27/11. **IOU OPEN.**

2. Tom Schneider briefed that AFS has incorporated all comments from internal coordination into the IPH update, and the completed draft is currently out for external coordination. Chris Criswell asked where he could find a copy of the draft IPH. Tom responded that a copy is available on the Flight Standards webpage (for reference, the link is provided:

http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs420/policies_guidance/draft_directives/). **IOU OPEN.**

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to track the IPH to ensure pilot educational material is updated accordingly.

<u>Status 10-02-12:</u> The following status update of the two open IOUs from the last meeting was provided:

- 1. Paul Eure briefed that work on the safety decision memo for the DCP is low priority at this time and other work has taken precedence. **IOU OPEN.**
- 2. Tom Schneider commented that the OPR is still working on updating the IPH. Rick Dunham mentioned that the Tech writer is still in the editing phase. **IOU OPEN.**
 - <u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to track the IPH to ensure pilot educational material is updated accordingly.

<u>Status 01-08-13:</u> The following status update of the two open IOUs from the last meeting was provided:

- Paul Eure provided an update after the meeting. He stated that there is no change on the safety decision memo for the DCP. It is low priority at this time and other work has taken precedence. IOU OPEN.
- 2. Tom Schneider commented that the Instrument Procedures Handbook is out for coordination. **IOU OPEN.**
 - <u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to track the IPH to ensure pilot educational material is updated accordingly.

<u>Status 04-02-13:</u> The following status update of the two open IOUs from the last meeting was provided:

1. Paul Eure stated that there is no change on the safety decision memo for the DCP. It is low priority at this time and other work has taken precedence. **IOU OPEN.**

2. Tom Schneider commented that the Instrument Procedures Handbook is out for coordination, **IOU OPEN**.

<u>IOUs:</u> 1) The ATO En Route Service Unit will continue to track the DCPs for controller guidance for JO 7110.65 and the PCG; 2) Tom Schneider to continue to track the IPH to ensure pilot educational material is updated accordingly.

b. 12-084 (January 10, 2012): Aeronautical Data Management (ADM) Initiative Briefing. ISSUE: The source data that comprises Aeronautical Information (AI) is captured in multiple databases across the Federal Aviation Administration (FAA) Air Traffic Organization (ATO) business areas. The same data is often captured by different entities causing unsynchronized data inaccuracies throughout FAA systems. To prevent this reality from causing air traffic safety issues, human intervention and workarounds are used to validate data. As the Next Generation Air Transportation System (NextGen) evolves and the demand for air traffic increases, current methods for ensuring accuracy, precision and data transfer will be unable to meet demands. We must make changes that create persistent data and consistent interpretation of that data in order to enable our organization to communicate authoritative source information at the right time and place to those who need to know.

<u>Status 01-10-12:</u> New issue submitted by Chris Criswell, AJV-22. Chris stated that since the ADM initiative will be recommending changes to FAA data management policy and directives, the AISWG should be briefed on this initiative and its recommendations. As part of the ADM core team, Barb Cordell briefed the AISWG on the ADM initiative:

The ADM initiative was chartered as a means to streamline IT work and save money following the consolidation of AeroNav Products, AIM, and the Service Centers under Mission Support Services. The initiative was also chartered to address recommendations from the NAV Lean project. The core team focused the initiative on two areas of data from the NAS OV-7 (i.e., logical data model): NAS Base Infrastructure ("physical ground infrastructure") and NAS Air Transport ("airspace"). The team reviewed how data was managed across the various organizations and developed five recommendations to improve the FAA's data management:

- 1. Certify Data Stewards and Coordinators (Data Steward = Originator of Data)
- 2. Standardize FAA Geospatial and Temporal Models (including development of a standard common geodetic calculator)
- 3. Designate Authoritative Sources for Data: Points (including fixes), Navaids, Airports (including surveys), Airspace, Procedures, and Holding
- 4. Develop Authoritative Sources for Points and Holding (i.e., establishment of a single database for points)
- 5. Designate Common Document Management Solution

These recommendations are currently with the directors of the organizations for response, and will be presented to an Executive Council for approval, tentatively scheduled for February.

Following the briefing, Chris Criswell requested that the AISWG receive a copy of the briefing to review the recommendations further. Barb stated that she would provide the briefing after it has been presented to the Executive Council. Jay Jackson asked why obstacle data was not included in this initiative. Bill Johnson, also a member of the MDMM core team, responded that the team was given a limited amount of time to complete this task so they couldn't cover all data, and that obstacles and ATC communications data would be included in the next phase. Bill Hammett asked if these recommendations were developed with input from subject matter experts (SME) in each area. Barb responded that SMEs were involved in the ADM meetings. Danny Olsen asked if DoD data was included in the ADM recommendations. Barb responded that ADM was coordinated with NGA, and that Monique Yates was included as a member of the ADM core team. George Bland expressed concerns that ADM should include international input and not focus solely on CONUS operations, since differences between US and International data must be reconciled as the world moves to a more data-centric environment. Barb responded that the FAA was coordinating with Eurocontrol on all major data management initiatives and that AIXM [Aeronautical Information Exchange Model, the ICAO recommended standard format for aeronautical data exchange] will play a large part in these initiatives. Barb summarized that a key objective of the ADM recommendations is to develop a well-defined process for data stewardship, including providing training to data stewards on origination and holding these stewards accountable for their data. Jim Seabright added that although ADM will be recommending what organizations are stewards of particular data, these organizations must agree to be stewards of this data. Chris Criswell requested that Barb keep the AISWG apprised of the status of the ADM recommendations. OPEN.

<u>IOUs:</u> 1) Barb Cordell to provide the ADM briefing to Chris Criswell following presentation to the Executive Council for distribution to the AISWG. 2) Barb Cordell to brief the AISWG at the next meeting on the results of the presentation to the Executive Council.

Status 04-03-12: The ADM briefing was distributed to the AISWG along with the agenda for this meeting. Barb Cordell was not present at the meeting, but Fran Hubbard attended in her place. Fran briefed that the ADM briefing was presented to the Executive Action Group (EAG), and that, as a result, three initiatives were approved as of March 30, 2012. [Copies of the project charters for the three initiatives were distributed to the AISWG on April 4, 2012.] Fran stated that the initiatives have been assigned to leads, who will form teams by April 6, 2012, and the initiatives are planning to kick-off on April 16, 2012, to begin work. Based on these dates, Chris Criswell asked if the dates mentioned in the MDMM briefing were accurate. Fran responded that the dates in the briefing are accurate, but that they define when plans will be completed, not when solutions will be implemented. Chris then asked where in the briefing the "Points" database was mentioned. Fran responded that as part of the initiative to identify authoritative sources ("Initiative 3"), the analysis and requirements for the "Points" database will be finalized and put out for bid. Chris stated that the ADM briefing implies that the initiative will focus on identifying the authoritative sources of the data, not on developing new databases. Fran responded that in the case of points data there is no other alternative, i.e., an appropriate database does

not currently exist. Jay Jackson then asked why there was no mention of obstacle data in the briefing, and stated that these efforts should be coordinated with the Terrain and Obstacles Data team. Fran responded that obstacle data will be included in the next iteration of the process, and that in the meantime these efforts will be coordinated across all groups. Charlie Rose then asked if the ADM briefing designated the authoritative sources. Fran responded that the groups formed in ADM Initiative 3 will designate the authoritative sources. **OPEN.**

<u>IOUs:</u> Barb Cordell/Fran Hubbard to brief the AISWG at the next meeting on the status of the ADM initiatives.

Status 07-10-12: (Editorial Note: The title of this issue has been changed from MDMM to ADM to align with the change in the name of the initiative) Barb Cordell/Fran Hubbard did not attend the AISWG meeting and no update was provided. **IOU OPEN.**

<u>IOUs:</u> Barb Cordell/Fran Hubbard to brief the AISWG at the next meeting on the status of the ADM initiatives.

Status 10-02-12:

Barb Cordell briefed that three ADM initiatives were approved by the Executive Action Group.

- 1. Certify Data Stewards and Coordinators (Data Steward = Originator of Data)
- 2. Standardize FAA Geospatial and Temporal Models (including development of a standard common geodetic calculator)
- 3. Designate Authoritative Sources for Data: Points (including fixes), Navaids, Airports (including surveys), Airspace, Procedures, and Holding

MDM timeline has been moved up from 2017 to 2015. This timeline is considered a very aggressive schedule and is dependent on funding. **IOU OPEN.**

<u>IOUs:</u> Barb Cordell/Fran Hubbard to brief the AISWG at the next meeting on the status of the ADM initiatives.

Status 01-08-13:

After the meeting Barb Cordell and Fran Hubbard provided an update on the ADM initiatives.

- 1. Certify Data Stewards and Coordinators (Data Steward = Originator of Data)
 - a. The stewardship training content has been completed and approved by the core team. Next steps is to seek approval of the Executive Action Group

(EAG) then to determine how this training will be delivered; eLMS, instructor led, or a mix.

- 2. Standardize FAA Geospatial and Temporal Models (including development of a standard common geodetic calculator).
 - a. The first stage of the Temporal and Geospatial project has been completed and approved by the core team, resulting in standardization and implementation guides for geospatial and temporal models. A second stage was initiated to document the interaction (orchestration) between distributed systems and to look at terrain data needs. The result will be submitted to the core team by the end of February.
- 3. Designate Authoritative Sources for Data: Points (including fixes), Navaids, Airports (including surveys), Airspace, Procedures, and Holding.
 - a. Recommendations have been made and approved for surveys, airports, points and holding. Because of the short timelines, we made a recommendation to use airnav 2.0 as the interim authoritative source for navaids. The EAG approved this recommendation. Recommendations will go to the EAG for approval the end of Feb for obstacles, procedures (approaches, arrivals, departures and routes). Funding has been designated for this effort. The NAV Lean program office is working to develop all the required documentation for the release of the funds. We have started the detailed requirements gathering for implementing points and holding. We will start the implementation of surveys and airports as soon as funding is released. **IOU OPEN.**

<u>IOUs:</u> Barb Cordell/Fran Hubbard to brief the AISWG at the next meeting on the status of the ADM initiatives.

Status 04-02-13

- 1. Chris Criswell updated the group on the status of the Survey and Airport Transition Plan and the Business Policy Team.
 - a. The Survey and Airport Transition Plan identifies a single authoritative source and one official FAA repository for both survey and airport data. **IOU OPEN**
 - b. The Survey and Airport Transition teams are in the process of writing the project plan and technical requirements. **IOU OPEN**
 - c. The Business Policy Team is in the process of updating The Office of Airports and AIM Service Level Agreement. **IOU OPEN**

<u>IOUs:</u> Barb Cordell/Fran Hubbard to brief the AISWG at the next meeting on the status of the Survey and Airport Transition Plan and the Business Policy Team.

c. 12-085 (January 10, 2012): Activity Areas Data. ISSUE: There are currently a variety of methods for disseminating data describing aerobatic activity areas (Ultralight, Glider, Hang Glider, Aerobatic Practice & Training areas): some of these areas are published in text form in the back matter of the A/FDs, some are represented on the Visual charts by symbols, others by boxed notes, but it is desired that the SOURCE be standardized. During a recent ACF Charting Group meeting (Issue 11-01-238), it was recommended that AIM maintain and disseminate data describing these various activity areas in a way similar to Parachute Jump Areas (PJA), so that the information is available directly from the FAA designated office in a data-based, standardized format.

Status 01-10-12: New issue submitted by Val Watson, AJV-3B. Val asked if these areas could be better described to provide more information and a better source of data for charting. Chris Criswell responded that designating specific areas for these activities can be difficult because they are not well defined. Jeff Waterman stated that some aerobatic areas are well defined, and that these areas should be stored in the database similar to PJAs. Brad Rush stated that this data must be stored with source information to provide accountability for this data. Chris also stated that if these areas are defined by a radius about a point, as several people suggested, that the point may overlap with other symbols on the chart, and that coordination would be needed to determine the cartographic judgment to be used in these cases. Val responded that charting standards for the areas already exists, with cartographic rules for hierarchy of symbols and offset when necessary, and that detail is an AeroNav Products issue and not what is being addressed here - what AeroNav Products is looking for (and what Jeppesen is looking for) is a more consistent and complete sourcing of these areas, preferably in the NASR database and with as much location information (e.g., lat/long) as possible. Val stated that Ted Thompson from Jeppesen specifically requested at the ACF Charting Group meeting that glider, ultralight, hang glider & training operations areas be databased in the same fashion as PJA's. Curtis Davis asked who the source would be for this data, and suggested that it may be the Service Centers although they are not reliable. Chris responded that the OSGs should be the source. Chris agreed to investigate what solutions AIM could provide for this issue. OPEN.

<u>IOU:</u> Chris Criswell will research database options for activity (e.g., aerobatic, glider) areas data and report them to the group.

Status 04-03-12: Chris Criswell briefed that the NFDC has established a process for adding changes to activity areas within Special Notices section to the NFDD, and that the NFDC is currently gathering requirements for databasing these areas in a similar manner to PJAs. Val Watson asked if these changes are included in the add-on pages of the NFDD. Chris responded yes. **OPEN.**

<u>IOU:</u> Chris Criswell will keep the group updated on database options for activity (e.g., aerobatic, glider) areas data.

Status 07-10-12: John Graybill briefed that the NFDC is currently developing Order 7900.3 to standardize submission of airspace data, including special activity area. The order will contain forms that standardize the data required by the NFDC and will prepare the NFDC to maintain the data in a database in the future. Tom Schneider asked if the airway data being defined in this order would affect the 8260-16 forms. John responded that the 8260-16 form would not be affected since Order 7900.3 only covers non-regulatory airways. Val Watson stated that customers (e.g., Jeppessen) have complained that they cannot track changes to the special notices using the NFDD add-on pages, and are requesting a timeframe for when the notices will be databased. John responded that he could not provide a timeframe for this request. Chris Criswell suggested that AeroNav Products should disseminate changes to the Special Notices to improve efficiency, since they currently process the changes through the NFDC's Aeronautical Chart Changes (ACC) portal and then create the add-on pages for the NFDD. Brad Rush responded that data should be submitted through the portal, validated by AIM, and distributed via the NFDD to AeroNav Products for publication (i.e., AeroNav Products should not be involved with the data changes). Chris responded that since the recent ATO re-organization, the cartographic standards role has been moved from AIM to AeroNav Products, and thus the responsibility for the ACCs also moved. Val stated that this function should not be performed by AeroNav Products, and that it is AIM's function to validate data. Chris responded that the changes come from a variety of sources, and it is the function of cartographic standards to coordinate and validate these changes. Deb Copeland added that AeroNav Products is now performing these functions, and that they have been adding brief, descriptive text to the top of the add-on pages that highlight the changes to airport diagrams and sketches. Val asked if this text could be added to the add-on pages for Special Notices. Deb responded yes. IOU OPEN.

<u>IOU:</u> 1) Chris Criswell will keep the group updated on database options for activity (e.g., aerobatic, glider) areas data.

- 2) John Graybill will keep the group updated on the status of Order 7900.3.
- 3) Deb Copeland will have the add-on pages for Special Notices updated to include a brief textual description of the changes.

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

- 1. Chris Criswell briefed that requirements are being developed to collect, database and disseminate activity areas from NASR via the NFDD. **IOU OPEN.**
- 2. John Graybill provided an update prior to the meeting: Order 7900.3 currently out for comment . **IOU OPEN.**
- 3. There was no update. Val Watson briefed the group that Terry Sharp is the new A/FD manager. **IOU OPEN.**
 - <u>IOU:</u> 1) Chris Criswell will keep the group updated when NASR will begin disseminating activity (e.g., aerobatic, glider) areas data.

- 2) John Graybill will keep the group updated on the status of Order 7900.3.
- 3) Terry Sharp will brief on the status of the textual description activity area Special Notices.

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

- 1. Chris Criswell briefed that the current focus is on creation of fillable PDF's forms that will be used to submit the different types of activity areas data through the Aeronautical Chart Changes (ACC) web portal. Once the Order is complete the forms will be placed on NFDC.FAA.GOV and submitted through the ACC web portal to AeroNav Products who will place the information within the ADD-ON page of the NFDD. Ultimately the fillable PDF forms will used to develop the functionality within eNASR. IOU OPEN.
- John Graybill provided and update prior to the meeting that Order 7900.3 is still be worked on. Tom Schneider asked if 7900.3 has been distributed for comment. Greg Pray said that he will find out if the 7900.3 has been sent out for comment and will provide. IOU OPEN.
- Adam Edmondson, A/FD team lead briefed the group that the A/FD team currently receives Special Notice activity areas through the ACC webportal. The A/FD team will vet the Special Notice and then post the change within the ADD-ON page of the NFDD. IOU OPEN.
 - <u>IOU:</u> 1) Chris Criswell will keep the group updated on when the fillable pdf forms will be made available on NFDC.FAA. and on the eNASR enhancement to accommodate the activity areas data.
 - 2) John Graybill will keep the group updated on the status of Order 7900.3.
 - 3) Adam Edmondson will provide an update on adding the textual description activity area Special Notices to the ADD-ON page of the NFDD.

Status 04-02-13: The following status update of the three open IOUs from the AISWG were provided:

- Chris Criswell updated the group that once the final 7900.3 Order has been distributed fillable pdf forms will be added to the nfdc.faa.gov website to allow for the submission data described within the 7900.3. IOU OPEN
- 2. John Graybill updated the group that NFDC is targeting late summer or early fall for the final Order 7900.3. **IOU OPEN**
- 3. Bob Carlson updated the group that the Special Activity Areas are being processed by AJV-3 and included within the ADD-ON page of the NFDD. Order 7900.3 will establish a fillable pdf form to standardize the Special Activity Area submissions. **CLOSED**

<u>IOU:</u> 1) Chris Criswell will keep the group updated on when the fillable pdf forms will be made available on NFDC.FAA.GOV.

2) John Graybill will keep the group updated on the status of Order 7900.3 and the associated fillable pdf forms.

d. 12-087 (January 10, 2012): Special Purpose Surveys: Tree Clearing Projects. ISSUE: Tree clearing projects may take place within the extents of one or more of the Airport Airspace Survey Surfaces that impact instrument procedure development. AIM in conjunction with NGS is proposing recommended processes for the collection of these new tree heights.

Status 01-10-12: New issue submitted by Chris Criswell, AJV-22. Jay Jackson stated the desire to upgrade procedures has led airports to conduct tree clearing and tree topping projects, and that since no guidance is provided for how to submit these new tree heights, the Terrain and Obstacle Data Team (TODT) is receiving poor data. Chris Criswell stated that this data is being submitted on old UDDF surveys with the old heights crossed out and adjusted based on the amount that was cut from the tree, without regard to tree growth. George Bland responded that if the trees are not re-surveyed, then the growth rate (height/year) of the tree species should be accounted for in the data (Dan Lehman concurred that this is the Navy procedure as well). Jay responded that tree growth rate is an average and not accurate enough for a 1A survey. Rick Dunham asked why this guidance was not provided in Advisory Circular 150/5300-18B (AC-18). Chris responded that at the time that AC-18B was released, this situation may not have been applicable. Tom Schneider stated that any guidance for surveyors should be included in AC-18. Chris and Jay agreed that this guidance should be included in AC-18, but that the Office of Airports was not providing any guidance to the field in the meantime, which prompted the guidance developed by AIM and NGS. Brad Rush stated that these survey-related matters should be handled by the Office of Airports, and that AIM should not be providing this guidance. Chris responded that we have a problem today with how the new obstacle heights are reported and guidance is necessary until the Office of Airports completes their Engineering Brief. Ray Zee stated that he would inquire with the Office of Airports about the status of the Engineering Brief that should provide this guidance and also when Airports GIS will be able to accept this data. OPEN.

<u>IOU:</u> Ray Zee will contact Mike McNerney to determine the timeline for an engineering brief that will provide this guidance and when Airports GIS will be able to accept single obstacle changes. He will report his findings to the group at the next AISWG meeting.

Status 04-03-12: The current draft of the engineering brief was distributed to the AISWG along with the agenda for this meeting. Ray Zee briefed that the engineering brief provides guidance for how to collect and submit data resulting from tree topping. Jay Jackson added that the Terrain and Obstacles Data (TOD) group needs the accurate height of the tree post-topping, but that it may be too much of a cost burden to require a new survey for each topped tree. Mike Foster added that it sounds like the TOD group is concerned with the airport's construction management plan. Jay responded yes, that there is not adequate guidance in the brief. Ray responded that the plan should be developed by the particular airport, and that the Office of Airports is more concerned with the data. Chris

Criswell added that it seems like the brief is requiring airports to submit a modified 18B survey, including capturing extra data requirements like runway ends, which may be costprohibitive to the airport. Ray responded that the brief will try to proposed only collecting data concerning the new tree heights. Chris then asked if there was a proposed release date for the brief, since Mark Howard with NGS still has questions about it, particularly whether NGS verification will be required for these modified surveys. Ray responded that there is no currently set release date, and he will contact Mike McNerney to determine the release date and also there are any requirements for NGS verification. Brad Rush asked how long one of the modified surveys would be valid. Ray responded that the brief recommends that trees should be cut to accommodate five years of growth, so in theory the survey is valid for five years. Chris then asked how long a typical 18B survey is valid. Ray responded that the survey is valid until the airport changes, but that this data is supplemented through annual Part 139 airport inspections. Brad noted that this only covers NPIAS airports, not non-NPIAS. Brad also added that the brief describes the process, and that a notice from the airport may be sufficient for this data, but NGS verification seems excessive. Chris responded that more guidance may still be needed for surveyors, and that this issue will continue to be discussed offline.

<u>IOU:</u> Ray Zee will contact Mike McNerney to determine the proposed release date for the engineering brief and to clarify NGS expected role in verification of these data. Ray Zee, Chris Criswell, and Jay Jackson will coordinate offline to resolve the outstanding issues regarding the engineering brief. Updates will be reported to the group at the next AISWG meeting.

Status 07-10-12: Ray Zee briefed that the draft of the engineering brief has been completed and is out for comment, but that there is currently no set release date. **IOU OPEN.**

<u>IOU:</u> Ray Zee will contact Mike McNerney to determine the proposed release date for the engineering brief and update the group at the next AISWG meeting.

<u>Status 10-02-12:</u> Ray Zee provided an update prior to the meeting: There were changes made to the engineering brief. It will soon be distributed to the regions for comment. Chris Criswell stated that he will try to get a draft to the AISWG this week. **IOU OPEN.**

<u>IOU:</u> 1. Chris Criswell will contact Mike McNerney to have the draft engineering brief sent out to the AISWG. 2. Ray Zee will update the group on the status of the engineering brief.

<u>Status 01-08-13:</u> The following is a status update for the two open IOU's from the last ASIWG.

1. Chris Criswell briefed the group that Dr. Mike McNerney stated the Draft Engineering Brief is still being worked on and is not currently available for distribution. **IOU OPEN.**

 Ray Zee confirmed that the Draft Engineering Brief is being reviewed by Airport Engineering Division Manager, John Dermody. Once the Draft is complete Ray will distribute to the group. IOU OPEN.

<u>IOU:</u> 1. Ray Zee will update the group on the status of the engineering brief. 2. Ray Zee will distribute the Draft Engineering Brief to the AISWG when available. 3. Ray Zee will update the group on the method that will used to update obstacle within the Obstacle Repository System (ORS).

<u>Status 04-02-13:</u> The following is a status update for the three open IOU's from the last AISWG.

- 1. Ray Zee updated the group that the engineering brief is still being reviewed internally. **IOU OPEN**
- 2. Ray Zee stated that once the Office of Airports has completed their review of the engineering brief it will be distributed to the AISWG. **IOU OPEN**
- 3. Ray Zee will work with Dr. Mike McNerney on defining the requirements to update new obstacle heights contained in existing operational systems such as ORS. **IOU OPEN**

<u>IOU:</u> 1. Ray Zee will update the group on the status of the engineering brief. 2. Ray Zee will distribute the Draft Engineering Brief to the AISWG when available. 3. Ray Zee will update the group on the method that will used to update obstacle within in existing operational systems such as Obstacle Repository System (ORS).

e. 12-088 (April 3, 2012): Revision of the AIM. <u>ISSUE</u>: During discussion of Issue 09-076 (Airway Minimum Turning Altitude (MTA)), Paul Eure presented a question regarding revision of the FAA Aeronautical Information Manual (AIM). Paul asked who the OPR of the AIM was and how changes to the AIM are coordinated? He felt that changes to the AIM may not be adequately coordinated across the domain of affected stakeholders.

Status 04-03-12: New issue initiated by Paul Eure, AJE-31. During discussion of another issue, Paul Eure asked who the OPR of the AIM was. Tom Schneider replied that each paragraph of the AIM has a particular OPR, and that Brenda Hawkins with the AIM office has a matrix listing of this information that is periodically distributed. Paul responded that changes to the AIM are not being effectively coordinated, and cited a recent example when an additional option ("heavy") was added to the AIM to describe the icing level, and that this led to confusion as not all involved were aware of the change. Chris responded that this is an important issue that will be added as a new business item for the next meeting.

<u>IOU:</u> Chris Criswell will request that Brenda Hawkins or another member of the AIM office provide a briefing on submitting and coordinating changes to the AIM at the next AISWG meeting.

Status 07-10-12: Chris Criswell briefed that he contacted the AIM office and was informed that all changes to the AIM should be routed through either Heather Mathieson (AJV-11) or Kolie Lombard (AFS-410), who will coordinate with the OPR of the section affected by the change. Bill Hammett responded that this represents a change from the past, in which all changes to the AIM were routed through one person in the office of primary responsibility (OPR), now AJV-362, for coordination and publication. Bill added that there was a list of OPRs for each specific paragraph in the AIM that was maintained by AJV-362. It was acknowledged that the list is outdated. Paul Eure stated that this issue was presented because the AIM was updated without the proper coordination and resulted in incorrect information being published. Chris stated that a current listing of the OPRs for the AIM is needed so that changes can be properly coordinated. Bill stated that the AIM currently instructs users to submit changes to AJV-362 via a form, which give the impression that AJV-362 will coordinate the changes. Brad Rush responded that AJV-362 just publishes the information and isn't responsible for the coordination. Paul responded that when he completes a DCP for the AIM, he submits it to Heather Mathieson for coordination. Bill asked how Paul knew to coordinate changes with Heather (AJV-11) when the AIM says to go through AJV-362. Paul responded that his group follows an internal SOP for submitting DCPs to the AIM. Bill responded that the AIM crosses several lines of business and proper guidance for submitting and coordinating changes needs to be publically available to ensure the proper coordination procedures are followed. **IOU OPEN.**

<u>IOU:</u> Brad Rush will request that Brenda Hawkins or another member of the AIM office (AJV-362) provide a briefing on submitting and coordinating changes to the AIM at the next AISWG meeting.

<u>Status 10-02-12:</u> Guy Copeland briefed the group that management of AIM changes has been transferred to Gary Norek's group (AJV-11). Bill Hammett responded that the AIM OPR master list has fallen out of use and needs to be updated so that changes can be properly coordinated. Guy Copeland believes the AIM will be incorporated into JPAMS. **IOU OPEN.**

<u>IOU:</u> Chris Criswell will request that Gary Norek (AJV-11) provide a briefing on submitting and coordinating changes to the AIM at the next AISWG meeting.

<u>Status 01-08-13:</u> Chris Criswell briefed the group that he spoke to Gary Norek's group (AJV-11). Gary stated that the Project Lead, Mike LaJuene is working on finalizing the OPR list for the AIM. Bill Hammett stated that the other issue that needs to be addressed is in regards to improving the coordination of AIM changes. Chris stated that a system currently being developed called JPAM is supposed to be the process management system that improves the coordination of Order changes. **IOU OPEN.**

<u>IOU:</u> 1. Chris Criswell will request that Mike LaJuene provide the master list of AIM OPR's by the next AISWG. 2. Mike LaJuene will provide a briefing on submitting and coordinating changes using JPAM at the next AISWG meeting.

<u>Status 04-02-13:</u> Mike LaJuene was not able to attend the AISWG. Chris Criswell will request that he attend the next AISWG.

<u>IOU:</u> 1. Chris Criswell will request that Mike LaJuene provide the master list of AIM OPR's by the next AISWG. 2. Mike LaJuene will provide a briefing on submitting and coordinating changes using JPAM at the next AISWG meeting.

f. 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.

- <u>IOU:</u> 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.

<u>Status 07-10-12:</u> 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.**
- During the discussion of item (2), Mike C. also provided information on UAS 3. 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.
 - <u>IOU:</u> 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.

<u>Status 10-02-12:</u> 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.
 - <u>IOU:</u> 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.
 - 3) Mike Connor will report back on the status of developing charting criteria.

<u>Status 01-08-13:</u> 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.
- 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: 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

g. 12-090 (July 10, 2012): UTC vs. Local Time for Aeronautical Data. ISSUE: NFDC has highlighted an issue with the use of UTC and Local Time when distributing aeronautical data to the public. Proponents submit these data (e.g., Tower hours) to the NFDC in UTC time. NFDC converts the hours to local time for entry in the NASR database, and these data are distributed to the public via the subscriber files and online airport lookup. AeroNav Products converts these hours back to UTC time for inclusion in publications such as the A/FD. These differences can cause confusion to the aviation community, and also may cause issues if pilots don't properly convert from UTC to Local (e.g., if they don't account for daylight savings time).

Status 07-10-12: New issue initiated by Greg Pray, AJV-21. Greg briefed that the NFDC would like to publish all times in UTC time, with a few exceptions, such as those times published in the Federal Register. Val Watson asked why there would be exceptions, and asked if the group could recommend that all times in NASR be revised to UTC time instead of local time. Tom Harris responded that the Federal Register must be published in local time according to US law. Paul Eure added that the Federal Register is intended for use by the general public rather than aviators, which is why local time is preferred over UTC. Val then stated that AeroNav Products can convert UTC time to local where necessary for charting and publications. Deb Copeland responded that FAA charts and publications currently use a mix of local and UTC time, and that AeroNav Products should solicit input from industry at the next Aeronautical Charting Forum (ACF) before making any changes to the publications. Val agreed and asked if all times in NASR could be converted to UTC time and whether NASR could also database the UTC conversion factor for each location, referring to the "UTC-5(14DT)" information currently published in the A/FD but not in NASR. Greg responded yes, but that he was not sure of the amount of time and effort required for this request.

<u>IOU:</u> Greg Pray will research options for converting all times in NASR to UTC time and report the results to the group.

<u>Status 10-02-12:</u> Thomas Harris reported after the meeting that NFDC will change all local times to UTC and is exploring methods to notify users of the UTC change to the NFDD and NASR subscriber files. **IOU OPEN.**

<u>IOU:</u> Thomas Harris will report back to the group on converting local time to UTC within NASR.

Status 01-08-13: Thomas Harris reported that the conversion of local time to zulu within NASR will be implemented in two cycles. Tom also indicated that a lot of times within NASR are contained within "remarks" so it may not be possible to automatically update those times. The conversion of local time to zulu within NASR may take several cycle due to manual updates. Greg Pray briefed the group that the NASR subscriber file users will be notified of the time change via the Facility Aeronautical Data Distribution System (FADDS) user registration email list. **IOU OPEN.**

<u>IOU:</u> 1. Thomas Harris will report back to the group on converting local time to UTC within NASR.

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

1. Tom Harris reported that due to the federal register reporting airspace legal descriptions in local time NFDC cannot convert airspace descriptions within NASR to Zulu time. Tom also indicated that many of the local times stored within NASR are contained in free text which does not allow for global conversions. Lance Christian stated that the airspace legal description does not restrict conversion of times within a database. It was recommended the discussion of local time vs. zulu time be submitted to the ACF.

<u>IOU:</u> 1. Thomas Harris will report back to the group on the status of converting local time to UTC within NASR.

h. 12-091 (July 10, 2012): Mini-IFR Supplement. ISSUE: NGA currently sends a copy of all changes to the upcoming IFR Supplement publication (known as the "Mini-IFR Supplement") to AeroNav Products to ensure that the same changes are made in the FAA Airport/Facility Directory (A/FD). However, if changes are made to the A/FD that did not originate from a NFDD from the NFDC, there will be discrepancies between the A/FD and the NFDC's NASR database, and its corresponding subscriber files. AeroNav Products will generally coordinate with the NFDC to make the necessary changes, but there are still several instances where the changes may not be completed within the cycle, leading to the discrepancies. This process should be discussed to develop a plan to mitigate these discrepancies.

Status 07-10-12: New issue initiated by Greg Pray, AJV-21. Greg briefed that increased coordination was needed between the NFDC and AeroNav Products to avoid these discrepancy issues. Chris Criswell asked why AeroNav Products was reviewing FILs for changes when the NFDD should be their source. Deb Copeland responded that AeroNav Products has to review the FILs to ensure consistency with DoD IFR Supplement, but that they still use the NFDD as primary source and coordinate with the NFDC when changes are discovered. Chris asked what would be required to eliminate AeroNav Products review of the FILs and have them only use the NFDD. Deb responded that their group sends down packets of FILs each cycle that were not published on time which needs to be resolved. Mike Foster responded that since FILs are validated by the military, they should go directly into the NFDD and publication. Chris responded that manual data entry methods were causing the delay, and that an automated flow is needed to process the FILs.

<u>IOU:</u> Chris Criswell will research options for automating the entry of FILs into the NASR database and report options to the group.

<u>Status 10-02-12:</u> Chris Criswell responded that requirements are currently being collected to automate the ingestion of FIL data into NASR. **IOU OPEN.**

<u>IOU:</u> Chris Criswell will provide an update on automating FILs data into the NASR database.

<u>Status 01-08-13:</u> Chris Criswell briefed the group that due to competing NASR requirements the automation of FIL data into NASR will be moved to late 2013. **IOU OPEN.**

<u>IOU:</u> Chris Criswell will provide an update on automating FILs data into the NASR database.

<u>Status 04-02-13:</u> It was agreed that the new process for submitting FIL's through the Airport Data Change web portal located at nfdc.faa.gov has reduced the potential for inconsistencies between NGA and FAA products. Bob Carlson said he would research where (AJV-3) is discovering inconsistencies between the NFDD and FIL . **IOU OPEN.**

<u>IOU:</u> Bob Carlson will research if (AJV-3) is still discovering inconsistencies between the NFDD and FIL.

i. 12-092 (July 10, 2012): AISWG Webpage. ISSUE: AIM is planning to develop a webpage to support the AISWG by providing information for upcoming meetings, hosting minutes from past meetings, etc. Chris Criswell would like to gather feedback from the AISWG on this proposal, and straighten out any logistical details, such as whether the webpage should be publicly available or only available to AISWG members.

<u>Status 07-10-12:</u> New issue initiated by Chris Criswell, AJV-22. Chris Criswell briefed on the NFDC's new website (https://nfdc.faa.gov/xwiki/bin/view/NFDC/WebHome)

and AIM's intent to use this site to host a webpage for the AISWG, so that participants would have access to archives such as past meeting minutes and closed issues. The group all agreed that this was a good idea. Bill Hammett added that access to the webpage should be restricted to AISWG participants only (i.e., FAA and DoD), since making the site public could possibly turn the AISWG into another Aeronautical Charting Forum. The group agreed.

<u>IOU:</u> Chris Criswell will update the group on the status of the AISWG webpage.

<u>Status 10-02-12:</u> Chris Criswell briefed the group that the AISWG Web Page is still under development. **IOU OPEN.**

<u>IOU:</u> Chris Criswell will update the group on the status of the AISWG webpage.

<u>Status 10-02-12:</u> Chris Criswell briefed the group that the AISWG Web Page has been deployed on NFDC.FAA.GOV and is password protected. The AISWG link is located at https://nfdc.faa.gov/xwiki/bin/view/NFDC/References. Password: aiswg Username: aiswg2013 **IOU Closed.**

j. 12-093 (July 10, 2012): Joint Use Airports List. ISSUE: The "Joint Use" airports list contained in the NASR database does not agree with the military "Joint Use" airport list. AeroNav Products is requesting that the NASR database be updated with the correct "Joint Use" airports so that the Airport/Facility Directory (A/FD), which uses the NASR database as source, is published with the correct data. AIM is requesting that the Office of Airports update FAA Order 5000.5, LIST OF JOINT USE AIRPORTS, so that the NASR database can be updated.

Status 07-10-12: New issue initiated by Val Watson, AJV-3. Val briefed that NASR lists 100+ "Joint Use" airports, Order 5000.5 lists 24-30 "Joint Use" airports, an Office of Airports website

(http://www.faa.gov/airports/aip/military_airport_program/index.cfm?sect=joint) has a list, and asked which source of data is correct. Brad Rush added that the Office of Airports need to identify the single authoritative list, and publish this list in both the order and online. Bill Hammett responded that CFR Part 139 defines what constitutes a "Joint Use" airport, and added that in addition to the Office of Airports defining the list, that the definition in Order 8260.15 must be revised. Lance Christian agreed, stating that most of the military define a "Joint Use" airport as an airport with a "Joint Use" agreement, which is a smaller list of airports than those with both military and civil operations. Bill added that this definition does not match the one listed in CFR Part 139. Tom Schneider added that a joint meeting between the NFDC, Office of Airports, and DoD was held in October of 2011 to establish airport definitions, but that no progress from that meeting has been reported. Ray Zee stated that he will coordinate with the Office of Airports on this issue.

<u>IOU:</u> Ray Zee will research the definition for "Joint Use" airports and coordinate a standard definition and list of airports with the Office of Airports. He will report his progress to the group.

Status 10-02-12: Ray Zee provided an update prior to the meeting: He stated "We previously had several different definitions, but under the most recent re-authorization act it has been defined as "an airport owned by the Department of defense, at which both military and civilian aircraft make shared use of the airfield." The Planning and operations side of ARP have been notified and they will plan to evaluate the impact to their databases." Val Watson stated that Order 5000.5 needs to be updated. ARP is planning to update the Part 139 definition.

Editors note: "Joint Use Airport" legally defined in 14 CFR, Part 139.5 as "Joint-use airport means an airport owned by the United States that leases a portion of the airport to a person operating an airport specified under § 139.1(a)".

IOU OPEN.

<u>IOU</u>: Ray Zee will report on the progress of updating Part 139 and Order 5000.5 to the group.

<u>Status 1-08-13:</u> Ray Zee reported that there is a new definition for "Joint Use Airport" in the code of Federal Regulations based on the most recent Defense Authorization Act. The Office of Airports is identifying the airports that fall within this new definition. Ray is working to get clarification on the scope of the new definition. **IOU OPEN.**

<u>IOU</u>: Ray Zee will report on the progress of updating Part 139 and Order 5000.5 with the new "Joint Use Airport" definition released in the most recent Defense Authorization Act. Ray will provide a list of airports that fall within the definition.

<u>Status 4-02-13:</u> Ray Zee reported that based on the most recent definition 94 possible joint use airports have been identified. No other progress has been made on updating Part 139 and Order 5000.5 with the new "Joint Use Airport" definition.

<u>IOU</u>: Ray Zee will report on the progress of updating Part 139 and Order 5000.5 with the new "Joint Use Airport" definition released in the most recent Defense Authorization Act. Ray will provide a current list of airports that fall within the definition.

k. 12-094 (October 2, 2012): STAR NOTAMs. ISSUE: On October 20, 2011, Change 2 to FAA Order JO 7930.2, *Notices to Airmen*, required that SID and STAR NOTAMs be issued as FDC NOTAMs vice as a "UAR" or "USD" NOTAM D. To accommodate this policy change, Aero Nav Products cancelled and re-issued all SID NOTAMs changing them from USD to FDC. No such corrective action was dictated by the ATO to require STAR NOTAM compliance with policy. The result is that one year later, there are still more than 200 UAR non-compliant NOTAMs in the system. STAR NOTAMs fall under the responsibility of the ARTCC in whose airspace the STAR originates; therefore, it is recommended that guidance be sent to all ARTCCs to cancel all UAR

NOTAMs under their purview and re-issue them as FDC NOTAMs. This will ensure policy compliance and continuity within the NAS. It should also be noted that some UAR NOTAMs are in excess of 5-years old, which could be detrimental to flight safety.

<u>Status 10-02-12:</u> Bill Hammett briefed the group on the issue. Paul Eure said that a memo was sent to the ARTCC managers to cancel and/or reissue the "UAR" NOTAMs as FDC NOTAMs.

<u>IOU</u>: Paul Eure will update the group on the progress of resolving the UAR NOTAMs.

Status 01-08-13: Paul Eure reported that ARTCC managers have resolved 23 of the 48 UAR's

<u>IOU</u>: Paul Eure will update the group on the progress of resolving the remaining UAR NOTAMs.

<u>Status 04-02-13:</u> Paul Eure reported that Lynette Jamison has helped the ARTCC managers resolved all but 8 UAR's.

<u>IOU</u>: Paul Eure will update the group on the progress of resolving the remaining UAR NOTAMs.

I. 13-095 (January 8, 2013): Spaceports. <u>ISSUE</u>: Spaceport America in New Mexico has been identified as a "private airport" (i.e. 90NM) which came about as the result of Spaceport America officials filling out and submitting 7460-1 form to report their new runway. Consequently, since this form is usually only used by "airports", The Office Of Airports put Spaceport America into the 5010 database as an airport—an outcome not intended by Spaceport America. Spaceport America is currently stored in NASR as a pvt airport and charted on the Albuquerque Sectional as a pvt airport even though it is considered a spaceport. AST-100, Commercial Space Transportation has requested that Spaceport America be removed from NASR but remain charted with a unique symbol, labeled "spaceport" and a note referencing a corresponding "Special Notice" located in the A/FD.

- i. How should a standalone Spaceport be charted?
- ii. How do we database and chart a dual-use (airport/spaceport) facility?
- iii. Is an A/FD Spaceport Special Notice helpful?
- iv. Does a Spaceport need to be stored in NASR?
 - 1. What information is required?
- v. How does AST-100 coordinate launches with the controlling agency?

Status 01-08-13: Kelvin Coleman reported that Spaceport America (90NM) which sits within White Sands R-5111 has requested that the facility not be data based or charted as a "private airport" due to regulatory issues associated with an airport. Spaceport America is requesting that the facility be labeled as a spaceport on the sectional with a symbol dedicated to spaceport operations. Kelvin added that there are currently 8 total spaceports

in the U.S. that should also be considered for charting. John DeMaria stated that once 90NM is removed from NASR then the visual charting group will replace the private airport symbol with a base landmark symbol and include the "spaceport" label. Adam Edmondson stated that once the "Spaceport America" name is removed from the A/FD Special Notice his team will add the Special Notice to the back of the A/FD.

<u>IOU</u>: Kelvin Coleman will report on the progress to chart and database "Spaceport America" and the other 7 spaceports.

<u>Status 04-02-13:</u> Kelvin Coleman reported that Spaceport America (90NM) was removed from NASR and a landmark symbol with "Spaceport" text was placed on the sectional to represent Spaceport America. Kelvin is working with Adam Edmondson of AJV-2 on finalizing the A/FD Special Notice. Chris Criswell suggested that the "Spaceport" type should to be data based.

<u>IOU</u>: Kelvin Coleman will report on the progress to publish the A/FD Special Notice and database the "Spaceport" type within NASR.

m. 13-096 (January 8, 2013): Military Runway Naming for Unmanned Aircraft. ISSUE: On August 18, 2012, the MSP-ADO received Form 7480-1, and attachments, with a request to add a paved Runway 155/335 (U) 1,080 feet long by 50 feet wide at Ray S, Miller Army Airfield (RYM), Camp Ripley, MN. Construction was scheduled between April 15, 2012 and November 30, 2012. (A Form 7460-1 was also submitted for the actual construction work. It was received via electronic submittal, and was processed concurrently.) The distance between the provided runway end coordinates only calculated out to 1075 feet. Correspondence with the proponent confirmed that length would be adequate. Additional email discussion informed the proponent that our system had limitations on runway naming, recommending that the UAS Runway be named 15/33. It was also noted that the proposal conflicted with FAA airport design standards. Nonetheless, ASN 2012-AGL-6062-NRA was circulated for Division review the same as an alteration to a civilian airport, as indicated in JO 7400.2G, Section13-1-5 a.

Subsequently, the determination letter for the case was issued, and the proponent submitted a new request to revise the runway names on December 6, 2012 which would have the UAS runway should be "U", without any numbers.

Status 01-08-13: Chris Criswell reported that NFDC was requested to assign a "U" designator for a UAS runway at KRYM. Currently "U" is reserved for ultralight within NASR. Mike Foster pointed out that the "U" designator may require NGA and FAA to make changes to their databases. Greg Pray and Ed Rosado confirmed that adding a "U" for a UAS runway designator would require database changes. Lance Christian stated that the use of three digits to uniquely identify UAS runways has been proposed. Mike Connor referenced Order 7900.2J Chapter 13 and requested that the issue be deferred until the FAA UAS Office has time to work the issue.

<u>IOU</u>: Mike Connor will work with NFDC and NGA on a UAS runway designator that will uniquely identify the UAS runway and report back at the next AISWG.

<u>Status 04-02-13:</u> The military would like more time to research the suggested UAS runway identifier type.

<u>IOU</u>: Mr. Lance Christian will report back at the next ASIWG on the recommended UAS runway identifier type.

3. New Business:

a. 13-097 (April 2, 2013): Displaced Threshold Elevation. <u>ISSUE</u>: Currently the 8260-3 form does not differentiate between threshold and displaced threshold for elevations. The NFDC AIS currently verifies the threshold and displaced threshold elevation against the most recent airport survey received from Airports GIS. The 8260-3 form should include additional information so that users know if there is a 'Displaced Threshold' being utilized on the 8260-3.

<u>Status 04-02-13:</u> Mr. Thomas Harris presented the issue to the group. It was agreed by the AISWG that the displaced threshold elevation does not need to be added to 8260-3 or -5. When the NFDC AISWG specialist encounters a discrepancy between the airport survey elevation and the elevation on the 8260-3 or -5 they should contact the procedure specialists who developed the procedure within AJV-3 for further clarification. **CLOSED**

b. 13-098 (April 2, 2013): Initial Contact (IC) Frequencies. <u>ISSUE:</u> Currently IACC Spec 4 states that only one Initial Contact (IC) frequency can be charted on all the Instrument Procedures at a specific airport. The instrument procedure charted Approach Control frequency should be the same frequency used in the air traffic approach control sector for that procedure. Tom Harris of NFDC is requesting that the IACC Spec 4 be changed to accommodate the specific Approach Control frequency used within the area of the instrument approach procedure.

<u>Status 04-02-13:</u> Mr. Thomas Harris presented the issue to the group. The group agreed that further research is necessary before a requirement document is submitted to the IACC.

<u>IOU</u>: Thomas Harris will report back at the next ASIWG with specific examples.

c. 13-098 (April 2, 2013): Stand Alone DME. <u>ISSUE:</u> Stand-alone DME's will begin operating as a new type of NAVAID within the NAS in support of RNAV operations using airborne FMS systems. Currently there are stand-alone DME's operating where the VOR portion of the VOR/DME turned off. The VOR component is NOTAM'd OTS.

<u>Status 04-02-13:</u> Mr. Victor Nazari presented the issue to the group. Victor informed the group that there currently a stand-alone DME work group that has been formed to resolve data and charting issues.

<u>IOU</u>: Victor Nazari will provide a and update and schedule for commissioning standalone DME's.

4. Closing Remarks

a. Next Meeting: The next four meetings will be held at AeroNav Products in Silver Spring, MD with VTC from AeroNav Products in Oklahoma City, OK on Tuesday, July 9, 2013, Tuesday, October 1, 2013, Tuesday, January 7, 2014, and Tuesday April 8, 2014. Start time is 8:30 AM and dress is business casual.