

Minutes: PDAD Meeting 18 Nov 2011

Taken by Jon Christopherson, SGT at the USGS EROS

Meeting held 13:00, November 18th, immediately following the ASPRS Fall Conference

- Called to order at 13:02 by Stensaas
- Attendees:
 - Chuck Olson, MTRI, colson147449MI@comcastcom;
 - Greg Stensaas, USGS, stensass@usgs.gov
 - Bob Ryan, Innovative Imaging & Research, rryan@i2rcorp.com;
 - Sam McComas, The Atlantic Group sgmccomas@atlgroup.com;
 - Dave Syzmanski, Booz-Allen-Hamilton, Ass't Director of the Remote Sensing Division sysmanski_david@bah.com;
 - Mike Benson, USGS, benson@usgs.gov;
 - Jon Christopherson, SGT at the USGS EROS, jonchris@usgs.gov;
- Previous minutes - Stensaas gave explanation of why meeting was rescheduled this week
- Stensaas talked about PDAD briefly.
 - ASPRS Board has discussed what issues need to be addressed and by which divisions.
 - There is a petition going around now to set up a lidar division. They would like to consolidate to create a stronger focus for this growing area.
 - Chuck Olson said that he would not sign the petition; feels that we don't need a division for each various type of sensor, will get out of hand.
 - Bob Ryan weighed in with his thoughts, which mostly agreed with Olson & Stensaas
 - Much discussion followed about the many different types of sensors; thermal, lidar, more.
- PDAD sponsored two sessions this time, one about Data Quality, the other about remote Sensing for the gulf oil spill. Both went well with good attendance.
- Ryan said that Bruce Davis, DHS, already has a session lined up for APSRS Spring Conference in Milwaukee. He would like to coordinate with PDAD
- Stensaas mentioned some of the things heard during the gulf oil spill session earlier today.
- Stensaas says that he believes that PDAD should generate a letter supporting open access to all researchers to the many datasets collected from multiple sensors over the Gulf this year during the spill.
- **ACTION:** The attendees at PDAD unanimously supported that "the PDAD ask the ASPRS Board to generate a letter to the interested parties in the gulf oil spill that all remote sensing data collected during this disaster be made available to researchers for furthering the general knowledge of the use of remotely sensed data in national disasters."
- 3(b)i: Stensaas briefed on the various efforts to generate digital imaging guidelines, including contracting guidelines. USGS will decide on Dec. 3rd whether to implement their Digital Imagery QA Plan.
 - This will be presented to Bruce Quirk and Mark DeMulder
- Bob Ryan discussed the work that he is doing on developing Cal/Val specs, including specification guidelines and validation guidelines. He says that he needs help on the geositional standards.
 - Stensaas asked how this relates back to the ASPRS National Mapping Standards

- Ryan said that this document is not relevant to digital remote sensing, it is no longer valid
 - **ACTION:** We will take an action to notify PAD and the rest of PDAD to ask for volunteers to help with this.
- Stensaas related how the USGS National Ranges are being developed with ranges in Sioux Falls, SD, Rolla, MPO, and Pueblo, CO at present with ranges under development in Mt. Airy, NC and possibly in Rochester, NY. There is still a need for ranges in the West and possibly the South. The USGS is also in talks with Salt Lake City and County about establishing a range there.
 - Ryan said that the NASA Stennis range could be resurrected into an operational state and that there may be support for that.
 - Chuck Olson said that there is a range in Fort Custer, Battle Creek MI has a radiometry range that anyone can fly over.
 - There was then discussion of the perceived need for lidar test ranges. “Test Range” is a good concept, but what are they intending to test? Geometry? Spatial? Radiometry? Some people are making images out of these lidar products.
 - Stensaas asked: 1) What are the requirements for testing and validating lidar?, and 2) What are the requirements for making lidar systems common, so that they have a common calibration & validation process?
 - Olson commented on how the lidar industry, in its relative infancy now, has some who are making amazing claims. We need to have an independent validation of the capabilities of these sensors, with a focus on the various applications for which they are used. A better understanding by the community at large is needed. Somebody has to develop the understanding of capabilities that can be used to educate all.
 - Sam Komes said that he agrees with this, but that he feels that we need to have a type certification program for this similar to what is done with digital aerial imaging cameras. This will help minimize some of the wilder claims made by some about the capabilities of their lidar mapping.
 - **ACTION:** PDAD to create a working group to work with the lidar quality assurance and quality control and define standards and best practices through ASPRS.
- Unmanned Aerial Systems (UAS): Stensaas described how Larry Handley and Mike Hutt, both of the USGS, have been working with UAS systems and are hoping to bring this to ASPRS in Milwaukee
- Charlie Mondello is developing a Ten Year Forecast for ASPRS again. Mondello would also like the ASPRS to create a Standard for Oblique Imagery, including collecting, data, aligning, and mensurating from oblique data. He has volunteered to develop a working group to help define standards for this.
 - Ryan mentioned that it is ironic that we’d support this before we have good standards out for older products like digital imagery, etc. He still thinks this is a good idea and it should be done.
- Stensaas mentioned possible PDAD-sponsored sessions for Milwaukee, including:
 - Digital camera Manufacturer session
 - Digital Camera QA
 - UAV/UAS Technologies and Applications
 - PDAD/PAD session on Interoperability
 - Develop a session in lidar and hyperspectral technology and waveforms
 - GPS and Datum session with ISPRS Commission One did not work out for Orlando but maybe for Milwaukee?

- There was a short discussion by several about GPS and datums and what PDAD's role would be in that kind of session or research. Decided to ask NGS or Muhammed Moustafa or others working on these topics and encourage them to present at ASPRS Milwaukee.
 - There have also been recommendations to have a session on machine control and short range photogrammetry.
 - Discussion followed about whether machine vision and short-range photogrammetry are in the domain of ASPRS
 - Olson said that there will be one short session on the growth and direction of ASPRS
 - Stensaas said that he recommends that we keep this open as a possibility and contact Clive Fraser as a possible chair to help organize this.
 - Ryan also asked if we were interested in having a map accuracy standards "Hot Topic" session.
 - Attendees agreed that this is a valid topic. It was suggested that a draft proposal be published then hold this Hot Topic session and then be prepared to "catch bullets" that people fire at it.
- Final thoughts from Stensaas: We have talked in the past about becoming more involved in some of the "other" data acquisition systems, i.e. hyperspectral, thermal, etc.
 - Olson said that he has had sessions before and would be happy to include anyone in this sessions at Milwaukee
 - Ryan said that perhaps we are focusing on this wrongly. Instead of focusing on sensors we should perhaps focus on societal issues that need addressing and then discuss which sensors/systems would be best suited to address these major issues.
 - To this end, Stensaas said that he would like to establish a monthly telecon/webex for PDAD and invite anyone to come with issues, ideas, or other topics to discuss. We need to have more opportunities for people to participate in PDAD.