# PDAD General Meeting 4:00-5:00pm Tuesday, 20 March, 2012

Attendees:

**Name Firm/Agency/School E-mail**Charles Mondello Pictometry charles.mondello@pictometry.com
Jon Christopherson SGT@USGS EROS jonchris@usgs.gov
Ajit Sampath SGT@USGS EROS asampath@usgs.gov
Mike Benson USGS EROS benson@usgs.gov
Dean Merchant Ohio State Univ. merchant.2@osu.edu
Isaac Zaworski Urban Robotics isaac.zaworski@urbanrobotics.net
Ron Ondrejka Retired/ITEK ronowisc@aol.com (925)930-9396
Brian Huberty US Fish & Wildlife brian\_huberty@fws.gov
Carolyn Merry Ohio State Univ. merry.1@osu.edu (614)292-3455
Larry Handley USGS handley1@usgs.gov
Greg Stensaas USGS EROS stensaas@usgs.gov
George Y.G. Lee USGS gylee@usgs.gov
Armando Guevara Visual Intelligence armando.guevara@visualintell.com
Robert Ryan (via tele.) I2R

Agenda:

* Stensaas passed out Agenda

Everyone introduced themselves around the room

Ideas for 2013 Conferences:

* Larry Handley talked UAS special sessions. Mentioned the impact of travel cuts recently.
* Larry said we could continue to try to pull something together. They had talked about bringing a UAV in for display but the “Sierra” they had thought of using from Ames is getting ready for deployment
* Stensaas mentioned the interest that PDAD has about the sensors that are being used and could be used aboard UAVs.
* Charles Mondello suggested expanding our interest to real-time imaging come down from aircraft (manned or unmanned) to cover some of this
* Ryan would like us to see more NASA data represented

Join Efforts with Other Divisions:

* Efforts with lidar committee to define QA/QC standards
* Remote Sensing (Climate Change): Ryan mentioned how radiometric calibration becomes extremely important for remote sensing related to climate change.
* Stressed the need to begin working toward radiometry as “more than” colorimetry, which is practiced by most.
* Photogrammetry – some overlap with PAD
* National Mapping Accuracy Standards: PDAD should also weigh in with our thoughts on this, too.
* Stensaas mentioned how the new chair of the Standards Committee is very active and we should see much more activity with Standards.

Committees:

* Stensaas reported on how the PDAD website has recently been updated and is in the process of being further updated.
* Under the digital imagery guidelines on the website, there is a section related to old imagery guidelines started by Kinn, Ryan, Mondello and others. That had gone dormant, but Bob Ryan, with others, have revisited this with some new material
* Ryan discussed how “GSD is not enough” to describe resolution. Bob discussed the different types of imagers, Bayer arrays, etc. and their effects on resolution/spatial performance. An example of this will be posted on the PDAD webpage.
* Stensaas explained how the document uses Modulation Transfer Function (MTF) and a particular aspect of that, Relative Edge Response (RER). Using 1,5-inch imagery from Intergraph, they resampled it to illustrate different MTFs and some of the different causes of degradation to spatial resolution.
* Calibration Guidelines: Dean Merchant reported that the guidelines have gone through 24 cycles.
* Stensaas asked when Merchant thought that the guidelines would be ready to show to the entire PDAD. Merchant reported that they have gotten approval to publish this in PE&RS.
* Stensaas was surprised that the Board has already approved this for publication without first being reviewed by PDAD and perhaps Standards committee too. Further discussion followed.
* Mondello reported on Oblique Imagery Standards subcomittee
* Phase 6 of the 10-year forecast will be having a special session. Currently they are looking fo gov’t sponsors for Phase 7.
* Stensaas reported briefly on the efforts to revise the National Map Accuracy Standards. Doug Smith is working on this, much progress has been made, now they are just trying to pull this together. Next meeting is Thursday, 3:15.
* UAS: Handley largely reported on these earlier. Stensass mentioned how Mike Hutt, USGS, described how there are at least 30 different areas which USS/DOI are working with UAS systems now.
* Stensaas mentioned that PDAD should perhaps work more actively to engage the manufacturers to help direct us on which directions PDAD should be going.
* Armando Guevarra, Visual Intelligence, talked about how users are demanding more and more things. He thinks it would be appropriate for PDAD to look into next-generation imagery systems. He said that they are getting demands for fused data, merged sensor systems, etc. He also said that, if we want to revolutionize the world, we have to reduce the cost of sensors. They are still a half-million dollars. How can we make less expensive, truly metric systems?
* Armando also commented that about a year ago or more, it was proposed that “frame” is not a good term anymore, since many systems have multiple cameras or “heads”. M7VI proposed KPS, Microsoft has proposed “buckets”. What can we use as an apples-to-apples reference to compare sensors?
* Ron Ondrejca pointed out that, of historical interest to this group, on Oct. 17th the Hexagon return system was declassified. He presented USGS/Greg Stensaas with a complete calibration record for the KH-9 series! The NASA Large-Format Camera (LFC) was so much like the Hexagon camera system. The calibration of the LFC was done in the same stellar calibration facility in N.M. that the Hexagon systems were, and Ron participated in this.

Meeting time was expended, meeting adjourned.

# PDAD Session 11:00am-Noon Thursday , 22 Mar, 2012

Attendees:

**Name E-mail**
Robert Ryan (Chair)
Greg Stensaas stensaas@usgs.gov
Qassim Abdullah
Mike Benson benson@usgs.gov
Doug Smith
Dean Merchant merchant.2@osu.edu
Julia Talaya Julia.talaya@icc.cat
Andrea Laliberte andrea .laliberte@earthmetrics.com
John McCombs john.mccombs@noaa.gov
Jon Christopherson jonchris@usgs.gov

Discussion Items:

Discussed PDAD sessions for upcoming APSRS conferences in Tampa & Baltimore:

* Will have one presentation to update progress on Guidelines & Standards
* Will have a “UAVs & Sensors” session at Baltimore to replace Camera Manufacturers session

Talked about status and activities of the various subcommittees:

* Charlie Mondello & Oblique Standards reports that he has only talked to a few people so far
* Dean Merchant’s committee on *In-Situ* Calibration is approximately 60 people on the mailing list and quite active.

Baltimore: Session on Data Quality and Guidelines/Standards is needed

Stensaas & Ryan then discussed how people do not help in the committees nor even attend meetings. As volunteers they are not interested in donating lots of time & labor to these things it seems.

Bob Ryan & John McCombs talked about the need for Aerial Camera Radiometry improvements such as standards, metrics, and even common language throughout the industry. This is especially needed for data that will be archived for future uses.

Discussed doing a Survey Monkey to all PDAD members to ascertain their interest and areas that PDAD should work on. No action given to accomplish this.