

## UAA Geomatics Advisory Board Meeting

April 24 2014, 6pm-8pm

### Attendees:

Thomas Newman	TerraSond
Jim Sharp	WH Pacific
Michael Schoder	US BLM
Steve Schmitt	Municipality of Anchorage
Angela Parsons	Alaska DOTPF
Eric Gabrielson	Design Alaska (by phone)
Terri Morganson	ESRI
Kevin Quinn	Kodiak Mapping
Nathan Wardwell	JOA Surveys
Jeff Yates	DAT/EM Systems International
Luke Boggess	URISA Alaska – R&M Consultants
Don Davis	UAA Geomatics Retired
T Bart Quimby	UAA Geomatics Chair
Gennady Gienko	UAA Geomatics
Jeffrey Hollingsworth	UAA Geomatics
Caixia Wang	UAA Geomatics
Steven Callaghan	UAA Geomatics Adjunct Instructor
Cody Gibson	UAA Student Association President
Dan Collins	UAA Student Association President Elect
Nathan Toothaker	UAA Student Association Vice President
Joshua Foreman	UAA Geomatics Student

### 4. Agenda:

- 1) Attached
  - a. Approved? Terri M. moved to approve, Jim S. second, no objections

#### 5. Minutes: Previous meeting March 27, 2014

- 1) Bart Q. section 7, second sentence: should be "Tom talked with Russ Faux..."
  - a. Bart will do edits
- 2) Approved? Michael S. moved to approve, Luke B. second, no objections

#### 6. Student Project Presentation

- 1) Josh Foreman, Seth Kiester, & Joe Zych
  - a. AGIS & MS-50, 3D modeling from photos, goals were to develop a non-traditional topo. No aerial or UAV, location at Bird Creek Parking lot.
  - b. Data acquisition: placed 25 targets (rappelled) for photo control, shot cliff with cameras (Canon EOS70?) and MS-50 did the scan.
  - c. Delineated the ground sampling distance (4cm). LiDAR scan 200,000 , ArcGIS used 45,000 points. Looked at control points to assess control, best at 15 control points.
  - d. Conclusions:
    - i. MS-50 (\$75K for software and equipment?) always have to put out control.
    - ii. AGISOFT (\$3500) with camera at \$2000.
    - iii. Time in field vs office time
    - iv. Would have been better to have more control
  - e. GAB members asked questions and provided feedback and thanked the students for the presentation.

#### 7. Discussion of potential future student projects

- 1) Bart Q.,
  - a. senior project will be in the spring semester, and students usually looking for projects that aren't just normal business – encouraging students to be used to do new/different work. There are a few students who are needing projects for Fall 2014 . Practicing engineers ask "what if" , and want to instill this in the students with their projects. This year there will be 3 groups with about 3-4 students each.
- 2) Steve C. asked what kind of projects have been done?
  - a. Projects could include GIS programming, web applications (ArcGIS Online), GPS receiver comparisons (RTK vs Static), Time frames for collection, geodatabase for vertical control (analysis of what has changed like build up of buildings that could have changed the MOA Bowl2000), geology major did a remote sensing looking for Lithium deposits but couldn't get images of desired site, comparisons of tidal elevations and photogrammetry.
- 3) Angela P. : Civil engineering projects can include GIS - potential to partner?
- 4) Bart Q.: Looking for funded research too.

- 5) Gennady G. : Point clouds generated by different sensors and fusing of data. Example of engineering building or sports complex (interiors?).
- 6) Terry M. : Could set up a subcommittee of GAB to assist with project development – do it in Sept?
- 7) Don D. : John Oswald will chair?
- 8) Tom N. : Target providing a list of projects before Christmas break, need to make sure that data is readily available.
- 9) Steve C. : Recommend that it is split up if needed, 2 in fall and 2 in spring
- 10) Joshua F. : It can be hard to do the project in just one semester
- 11) Bart Q. : Curriculum committee should consider this point. Also need the projects to be in depth enough to use all the skills and knowledge developed during program. But results cannot be guaranteed.

## 8. Reports

1. GSA: Cody Gibson
  - a. Had 6 meetings this year (up from 5 last year), 4 guest speakers, sent 8 students to the Surveying and Mapping Conference
  - b. Working on job placement, compiled postings (handout) and created a book of student resumes (provided 20 copies to GAB) and have pdf version that will be sent to ASPRS and GAB members. Some students looking for jobs but also the portfolio shows the diversity of students in the program.
  - c. Dan Collins is president elect
  - d. Discussion:
    - i. Bart Q. : Compliments Cody and Nate on great work (& Cody thanked Nate for his work).
    - ii. Don D. : Is there a community service project?
      1. No but GSA wants to make it a priority for next year.
    - iii. Nate T. : K-12 outreach should be good to do as well.
    - iv. Cody G. : One student helped with geology club with elevations of wells – helped with program outreach.
    - v. Angela P. : Is there an opportunity in the summer engineering academy that Scott Hamel is coordinating?
      1. Caixia W. is doing a 1 week section on programming and 3D modeling.
2. Geomatics Chair Report: Bart Q.
  - a. Team has done well with curriculum update. New classes are on the schedule for Fall 2014 and have been submitted for Spring 2015. Received good response for completeness. Now working with students so they can transition – especially students who need classes no longer available.
  - b. Web page reviews philosophy.

- c. Elective courses are covered by adjuncts and are always looking for new course ideas.
  - d. Caixia W. : received \$30k for new server. IT director is helping to configure it. The purpose is for education using all professional software, will allow remote access to users to do their work. Flexible enough for off-campus use. Want to have on-line course (like GIS 101 intro) with lecture on-line and lab in the class room. If successful can develop more on-line courses that could target out of state students and 25-100 simultaneous users. Believe that she has the correct UAA IT people working on the set up now.
  - e. Gennady G. : research grant (ABSCOR) funds a position (landscape modeling & visualization). 60% research, 20 % teaching, 20 % service. First search conducted failed. Second search resulted in 2 people interviewed on campus. Offered a person the position but it was turned down. Second candidate has been offered, expecting to have response soon.
  - f. Bart Q. : this position will be shared with computer science (visualization aspect). Sent out a letter for donations encouragement. Anonymous donor will match up to \$10K. Encourage GAB to use Pick/Click/Give with PFDs, \$500 minimum for eligibility for match from Exxon Mobil and the anonymous donor. Bart did the donation and directed it to the Al Talcot fund. Note that there are about 6 funds that can be targeted for donations. Need to call the University to direct where your donation should go, and you can't split \$ between the funds.
3. Faculty Update:
- a. Caixia W. : gave a tech talk at ASPRS and will be doing the summer engineering academy.
  - b. Gennady G. : developing a course on spatial analysis, publishing papers and participating on 5 committees.
  - c. Jeff H. : working to get HYPACK software, but need to determine how to fund. Ten seats will be \$3,500.
    - i. Bart Q: this is important to Alaska but cost to student benefit is high. Lab fees – need to spread the cost out.
    - ii. Question from GAB – is the \$3,500 one time or annual – Jeff needs to check.
  - d. Bart Q. : expect to elect a new Geomatics Dept chair in a couple of weeks. It will be one of the current faculty.
  - e. Don D. : Dept owes thanks to Bart as he has got movement and resolution on many issues, especially the curriculum change.
    - i. GAB applauded in agreement.

## 10. Bylaw amendments

- 1. Tom N. :
  - a. Reviewed work to date – has never been done before formally, last fall started work using the UAA College of Engineering Advisory Board as example.

- b. Jeff H. is redoing the Dept website and the University if wanting the advisory boards to be available.
- c. Bart Q. : will need a bio from each member (200 word – similar to what one might submit for a professional conference presentation). Target having these submitted by mid-May. Send to Tom N. and Bart Q. and please include a photo.
- d. Comments/Discussion on Bylaws?
  - i. Michael S. : is there concern about missing meetings? Note that pre-arranged absences are excused.
  - ii. Cody G. : should we have the GSA president be a board seat? Bart Q. noted that it isn't unusual for the student association president to have a formal role on the advisory board. It was noted that in Section 3 item B that the GD chair shall appoint one GD student as an ex officio member. Tom N. : adding the GSA president to the GAB is good idea – will do.
  - iii. Bart Q. : will need the Dean of COE signature block for the bylaws. Also the COE might make changes to the bylaws after we approve. Bart will submit to the Dean & Provost.
- e. Approval Jim S. motion to approve, Nathan W. second. Approved

#### 11. Confirm Board member list

- 1. Tom N. : notes that this is per the sign-in sheet list. Discussion of new members Kevin Quinn from Kodiak Mapping (aerial mapping expertise) and Jeff Yates from DAT/EM (software development expertise).
- 2. Bart Q. : what about who will represent on the College of Engineering Advisory Board? Bart will bring it to the board – Tom N. would be the member.
- 3. Luke B. : what is the tenure of the members? Tom N. : expect it to be resolved by natural attrition.
- 4. Approval of Members?
  - a. Jim S. : motion to approve, Terry M. seconds. None opposed.

#### 12. Donations to Geomatics funds:

- 1. Discussed previously in meeting – Tom N. encouraged all GAB to give.

#### 13. Additions to Agenda

- 1. Don D. : what is status of faculty? Bart Q. replied and summarized discussion previous in the meeting.

#### 14. Meeting Ajourned.

