UAA College of Engineering Advisory Board

Thursday, September 10th, 2015

Location: Engineering Building Room 413

Meeting Minutes

I) Welcome and Introductions

Loren Leman called the meeting to order at 2:00 pm.

Roll call was conducted by Executive Assistant to the Dean of the College of Engineering, Ellie Soto. Attendees: Board Members John Aho, Melissa Branch, Catherine Call, Jack Colonell, Pat Coullahan, Bruce Davidson, Dan Fawcett, Mark Frischkorn, Virginia Groeschel, James Hemsath, Alex Hills, Jenny Jemison, John Lau, Loren Leman, Boyd Morgenthaler, Scott Pessetto, Richard Reich, George Skladal, Jon Zufelt. Guests Doug Goering, Ann Ringstad, Paul Kelly, Tom Case, Samuel Gingerich, Fred Barlow, Kenrick Mock, Kim Riggs, Jayna Combs

Excused: Paul Brooks, Derek Christianson, Dan Fawcett, Michael Todd, Steve Weaver

II) Board Housekeeping

A Approval of the Agenda

Loren Leman asked that the agenda presented be approved, with the following changes:

• Committee Reports Engineering Policy now chaired by Boyd Morgenthaler, replacing Alex Hills.

No objection to changes, motion carried.

B Approval of the Minutes

Minutes distributed a while back and then redistributed more recently. On Page 3 down near the bottom, Leman identified as Chancellor, should be Chairman. Under new business, where it says Chairman Leman proposed to extend a formal thank you to former interim Dean Bart Quimby, minutes do not say the next part which the board unanimously agreed to that. No objection to either revision or the main motion.

III) Special Order of Business

A Chancellor Tom Case

- Chancellor Case started the meeting by thanking everyone for attending and thanking the members of board for their commitment. He pointed out how there has been tremendous effort in supporting engineering in Alaska and particularly at the University of Alaska Anchorage. He was very pleased with joint advocacy between UAA and UAF, and how together they are furthering the engineering field in Alaska. He expressed how ecstatic he was that the move-in to the new engineering building, the Engineering and Industry Building, actually happened on time, in July. He was also very pleased with how the building turned out.
- He then extended thanks and congratulations on work well done to everyone who made the
 building possible, especially to those who designed and built the building. He believes it is
 going to be a great year ahead, and he is very appreciative of everyone's support. He then
 happily introduced President Johnsen.

B UA President Dr. James "Jim" Johnsen

- President Johnsen first introduced himself and welcomed everyone. He then extended a formal welcome to Dr. Fred Barlow, the new dean, and stated that it was a pleasure to meet him and to have him as part of the University of Alaska Anchorage and of the College of Engineering. He then discussed the challenges that the University of Alaska engineering programs are facing, particularly with the construction of the Engineering and Industry building and remodel of the old building in Anchorage and with the repairs and remodeling taking place in Fairbanks.
- President Johnsen then discussed how choices need to be made regarding the allocation of
 resources across the State. He highlighted how it was all possible due to the commitment
 that everyone in the room displayed and wanted to make it clear that it is important to
 celebrate the College's accomplishments, as we will with the ribbon cutting ceremony. He
 then stressed the importance of continuing the momentum we have had with engineering.
- The next main topic he discussed was the importance of Collaboration. Some of the important collaborations that are taking place and need to continue include: Collaboration between private sectors, businesses, and the University; collaboration between faculty and administration; and collaboration among campuses. He then discussed the reason why they are here-- for the students. Even through the current budget issues and other struggles that the University is facing, we need to maintain the focus on the students and their education.
- He then closed his comments by thanking everyone for the opportunity of being there and speaking.

C Provost Sam Gingerich

- He first introduced himself and then thanked everyone for their attendance in the meeting.
- He expressed his advocacy for the engineering programs and his willingness to provide guidance, direction, and support.

D Dean's Report – Dr. Fred Barlow

• Dr. Barlow discussed the current enrollment figures, which show student credit hours going up 8.8% and student head count up 2.5%. He then pointed out how this was a great sign, with 1241 students currently enrolled (preliminary count), which is a huge increase from the 300 students UAA had seven years ago. In this semester alone, student credit hours are up to 7001, which is a 501 credit hour increase over last year. In a tribute to Alaska Natives accomplished in engineering, he then said two new faculty members are graduates of ANSEP: Matt Calhoun and Michele Yatchmeneff.

Strategic Plan

(i) A challenge that this University has faced in the past has been formulating and executing a strategic plan. He plans to change that. In this strategic plan some changes that will be made will be an increase in the number of degrees and certificates offered, expansion of research, increase the amount of collaboration with other on campus groups and with local businesses, increasing the number of staff (currently the student to faculty ratio is 22:1 and the national average is 20:1), and forming our areas of distinction in Arctic, Energy, and Health (based on the needs of Alaska). He then

- acknowledged that this all needs to be done at a time when our budget is being challenged.
- One possible budget solution would be to increase revenue from tuition by a surcharge for
 engineering classes. One approach could be by charging 20% more for upper division
 courses. Striking a balance between fiscal stability in the college and minimizing the impact
 on students is necessary if we decide to raise tuition. We will need to find ways to support
 students, especially those in severe financial need.
- Fred is very impressed with the University of Alaska Anchorage and he believes it exudes large amounts of potential. From the incredible city it is in to the great faculty and student body, Fred believes that all this potential will manifest into an even stronger university.
- Fred believes that it is very important to listen when attempting to solve a problem. He wants to hear what the faculty, students, employers, and community have to say when it comes to the College of Engineering and how to make it a better.
- Questions for Dean Barlow
 - (i) Are you looking into a Ph.D. program?
 - (a) His response was that we currently have students completing Ph.D.s at UAA through programs at UAF, and he believes this is the best option for right now. He believes the focus needs to be on professional master degrees.
 - (ii) While you were talking about the collaboration, are you starting to think about situations where we may not have enough students for a course here and they don't at UAF?
 - (a) Currently, a course is already on the books at UAF that is being taught by a UAA faculty member, Andrew Metzger. We plan to have courses show on UAA and UAF catalogs to get around course block problems.
 - (iii) Has anyone prodded you about forming a Chemical Engineering program?
 - (a) We are very supportive of forming a Chemical Engineering program. We have a draft for a 2+2 program and it could start as early as 2016.
- President Johnsen Report on Differential Tuition:
 - (i) A task force is being formed on differential tuition that will be headed by Vice President of Academic Affairs for the UA System Dan White. Differential tuition is something that should and would most likely have to be in collaboration with UAF.
- E Sr. Development Officer Comments Jayna Combs
 - Jayna shared that there are 20 labs with naming opportunities. She then went over the events following the Ribbon Cutting Ceremony at 4:00 pm and the unveiling of the Alumni Hall of Fame at 6:30 pm. Virginia Groeschel added background to this award. She said that the idea came from Dean Orson Smith and will recognize the best of the University's Alumni. This year Michael Fierro was recognized and honored as one of the engineers who helped design the Engineering and Industry Building. Representative Sam Kito will also be honored.
 - Jayna then discussed the Dean's Excellence Award. This is a 4 year retention scholarship for students. This year, \$70,000 has been raised for this scholarship and 5 students will receive it. Money needs to continue to be raised to keep this scholarship going. There is an online

place to donate money to this scholarship fund, this is on the website, there is a giving button and select the scholarship fund from the drop down menu; people wishing to donate may also call Jayna and ask how to donate.

- F Student-Faculty Project Presentation Civil Engineering Professor Thomas Ravens and Grad Student Elan Edgerlye presenting on "Hydrokinetic Research"
 - This project is on hydrokinetic energy development on the Tanana River in Nenana. The
 project is in partnership with UAF and is being led by the company Oceania. The goal of this
 project is to help the hydrokinetic energy industry advance by helping design larger scale
 devices.
 - Elan then presented the procedure that they went through during this project. He mentioned that they developed a hydrokinetic turbine that measured the river's velocity and turbulence. They characterized the wake of the turbine for spacing and to evaluate how computer software can be used to simulate the presence of this turbine for future designs.

IV) Old Business:

- A UAA Engineering Buildings Update Kim Riggs
 - Status of Construction: The new building is complete and is fully operational. Received conditional occupancy notice on June 30th, began moving into the building July 1st.
 Conditional Occupancy notice extended until September 15th for some minor electrical work, with an electrical inspection taking place September 10th.
 - Final Cost of Construction: \$75 million. Some of the money that was intended for the new
 building was shifted to the renewal of the old engineering building. About a million dollars
 was put into the funding for equipment, with half of this money being used to move the
 equipment from the old building to the new building. About half of the equipment funding
 money is left and will be used to enhance existing equipment and purchase new equipment.
 - Old Engineering Building: Demolition began after move out. Second and third floors almost completely gutted. The roof was replaced and is approximately 75% complete. There were some unforeseen conditions with building materials so a few changes had to be made, that we hope won't affect the cost, but there is potential that it might.
 - Parking Structure: Most likely to be completed by Fall or Winter 2015. The opening of the
 parking structure will be pushed back to open in concurrence with the old engineering
 building because otherwise there is no safe way to get from the parking structure to the
 main part of campus.
- B Progress on Chairman's Challenge
 - In the interest of time, Loren requested to set comments on the Chairman's Charge aside, and said he would do this through email to remind the Board members of key points.
 - Committees need to be more active in their participation.

V) New Business

- A Thank you to Dr. Bart Quimby
 - During the last meeting, the Board moved to commend Bart for his 30 plus years of service to the university by giving him a letter of thanks and. Bart was very grateful and thanked the Board for their expressions of appreciation and support.

- B Bylaw's Change regarding Board Membership
 - (i) Proposal on the Bylaws Change will be available in December. The proposal is to bring department advisory committees into greater alignment with our Board by making the chairmen of these committees members of our board.

VI) Persons to be Heard:

- A UAF College of Engineering and Mines Dean Doug Goering
 - Thanked everyone for their efforts in project completions and the cooperation between UAA and UAF on building projects. Progress is resuming for the UAF Building. External construction complete, most of the internal floors are largely empty. Project needs \$32-34 million. No official fall numbers yet, but there has been an 8% increase in incoming freshman in the UAF engineering program. More than 100 students graduated from the Engineering program at UAF for the first time.
- B Chair of UAF CEMADC Bryan Clemenz, P.E.
 - (i) Thanked the board for all the support given on projects. Hopes the university systems will continue to ask for capital money for engineering building. Someone has been appointed from their advisory council to collaborate with Richard Reich on using the 2005 University of Alaska Task Force Study to look at programs in course work.
- C Legislative Update Ann Ringstad
 - (i) No report on the Legislature.
 - (ii) Very happy with the building's completion and thanked everyone for their support.

VII) Committee Reports:

- A Engineering Policy (Boyd Morgenthaler): Lots of advocacy and development done for the engineering building program under the leadership of Dr. Hills. Participated in the strategic plan. Looking forward to working with Dean Barlow. There are opportunities to work with the Anchorage School District's Engineering academies. Kenrick Mock conducted a study on student success, looking at students who did not achieve a C or better in certain course, with Math, Physics, Chemistry, and Intro to Engineering being at the top of this list. Matanuska Susitna Borough School District is also eager for collaboration with the engineering programs at UAA. Next committee meeting will be in October.
- B Facilities: No additional report
- C Membership (John Aho): 23 members, openings for 2. Send any information on possible members to Ellie Soto who will forward it to Dr. Aho. Also would like more activity by committees between Board meetings.
- D Graduate Research (Jon Zufelt): No report, but looking forward to meeting with Dean Barlow to discuss look at how to get more research interest in Anchorage.
- E Communications: No report
- F UAA/UAF Joint Committee (Richard Reich): Had a meeting prior to the last Board meeting. Discussions ongoing and looking to update the 2005 UA Engineering Review Task Force Study Summary and Recommendation. Would like collaboration among all three institutions. Due to the recent attention on the Arctic, the University should capitalize on this and collaborate with communities in the Arctic and how to help them.

VIII) Announcements and Member Comments:

- A Next Regular Board Meeting is going to be on December 4th at 7:30 am. Location TBD.
- B Member Comments:
 - Scott Pesseto: I support the Chemical Energy program and believe that it will be very critical to the university and industry.
 - George Skladal: I want to thank Dr. and Mrs. Quimby for their service to the university and I am looking forward to working with Dr. Barlow and I hope that President Johnsen will join Chancellor Case in coming to our meetings.
 - Tom Case: UAA has a new center, called the Arctic Domain Awareness Center. One of the
 things we are doing in the center is forecasting storm search. A model is in place for the YK
 Delta and Norton Sound areas, with a model of the Barrow area to be added in the
 upcoming year. These models will be helpful in giving advance notices to committee on
 possible storms.

IX) Adjournment:

Loren adjourned the meeting at 3:30 pm. Ribbon Cutting Ceremony and tours of the EIB followed.