

Prepared for the University of Alaska Board of Regents



NASA Funds UAS SEAMONSTER

NASA awarded UAS \$881,755 to create SEAMONSTER, a wireless data network to aid in remote research projects throughout Southeast. The acronym SEAMONSTER stands for Southeast Alaska Monitoring Network for Science, Telecommunications, and Educational Research. The network will be capable of sending research data as it is collected for analysis at UAS.

Assist. Prof. of Physics Matt Heavner is the Principal Investigator on the grant that will give researchers across disciplines real-time capability to examine data as it comes in, instead of having travel to remote places to download data from monitoring devices. The grant will support undergraduate research for environmental science students and helicopter air time to get to the remote places where the wireless infrastructure needs to be created. The network will extend from the Mendenhall Glacier and Juneau Icefield through Berners Bay and may extend as far as Glacier Bay. It will use satellite hook-ups and radio modems to return data.

"It going to be very exciting for the environmental science students who get to work on this project," said Heavner. "The network and the information it transmits will benefit the entire Juneau research community, and be used to educate our students in the classroom."

The network developed at UAS will return data on glacier dynamics and mass balance measurements from the Juneau Icefield and glaciers throughout the region. It will also aid on-going research projects in watershed hydrology, coastal marine ecology, and human impact and hazard monitoring. The project is in cooperation with Vexcel Corporation of Boulder Colorado, a subsidiary of Microsoft, and a leading international remote sensing company; providing engineering services; remote sensing products synthetic Aperture Radar, Satellite data processing, Ground Stations, Mapping, and GIS.

UAS Partners with DOL, Industry, and Native Corp to Train Mine Workers

UAS joined with The Alaska Department of Labor & Workforce Development in providing a two-week intensive introduction to crafts training for 18 students. The graduates received certificates of completion from Northern Industrial Training (NIT) and University of Alaska Southeast (UAS), as well as the National Center for Construction Education and Research.

"We now have 18 individuals ready to go to work in the mining industry," said Labor & Workforce Development Commissioner Greg O'Claray. The training program covered structural ironwork, millwright, pipefitting, pipe welding, electrical work, equipment operation and safety. The Industrial Company (TIC), the prospective employer of program graduates, contracted with NIT to provide core curriculum instructors and TIC had their skilled employees teach the skilled training portion.

Students attended an introduction to the Kensington Mine mill site the day after graduation. Employment interviews began the following week for positions with TIC.

"Six of the graduates will begin working immediately, and plans call for an additional six to be added each week thereafter until all are on board by the mid-September," said TIC Construction Manager Ken Dean.

The success of this effort was due to collaboration between Coeur Alaska, TIC, UAS, UAA/Mining & Petroleum Training Service, the Alaska Department of Labor & Workforce Development's Division of Business Partnerships and Juneau Job Center, Berners Bay Consortium, and Central Council of the Tlingit and Haida Indian Tribes of Alaska.



Staff and Faculty

Greg Wagner of Anaktuvuk Pass was awarded the Small Water System Operator of the Year Award at the 46th Annual Alaska Water Wastewater Management Association conference in Anchorage last week.

Eight nominations were received for this award. Greg was recognized for his positive attitude, the ownership he takes towards his job, and the operator certifications he has earned. He is currently the lead operator in Anaktuvuk Pass and holds state certifications in Water Treatment and Water Distribution. He is the only North Slope Borough village operator who creates and submits the Consumer Confidence Reports for his village each year without assistance. Greg sees each new problem that develops with his water system as a challenge and an opportunity to use his troubleshooting skills and the knowledge that he has. He prefers to resolve problems himself and without outside help, which is rare in Rural Alaska.

From his remote village in the Brooks Range, he took the initiative to enroll in the University of Alaska distance-learning program to enhance his ability to fulfill his role as Lead Operator. Greg graduated this Spring with an AAS degree in Environmental Technology.

When asked to comment, Greg stated: "I'm not one to toot my own horn, but I think it would be good for the ENVT program and I'm proud to promote it. I'd like to thank all of the faculty and staff of the UAS ENVT program, for helping me achieve my degree. Without the distance education program, it would have been very difficult for me to complete my degree. Living in Anaktuvuk Pass, working full time, and caring for my daughter, I just wouldn't have had the opportunity to achieve this important career goal."

Assistant Professor of Automotive Technology **Tony Martin** has a feature article in the July 2006 issue of Motor Age magazine called "Particulate Problems."

Lawrence Lee Oldaker, emeritus professor of education, presented the paper "Blackstone to the New Frontier: Blackstone's Influence on Educational Policy for Dominated Alaskan Cultural Groups" to the Oxford Round Table on Educational Law and Policy, Pembroke College, Oxford University, England (August 8, 2006).

UAS hosted the Phycological Society of America

UAS Professor Michael Stekoll was the local organizer for the 60th annual meeting of the Phycological Society of America (PSA) held at Centennial Hall, July 7-12. The Phycological Society of America, formed in 1946, is the leading scientific organization seeking to promote phycology (the study of algae, including freshwater algae, seaweeds, and phytoplankton), and foster phycological research and education. The meeting in Juneau was the first time the Society has met in Alaska.

During the four days of meetings, there were over 150 presentations on topics including harmful algal blooms, algae as critical habitat for fish and shellfish, chemical warfare amongst the seaweeds, invasive species and many other topics. There were over 170 attendees the US and from several other countries, including China, Korea, Japan, New Zealand and Israel. Featured speakers were Dr. Robert Paine from the University of Washington, Dr. Mark Hildebrand from Scripps Institution of Oceanography, Dr. Paul Falkowski from Rutgers University and Dr. Edward Theriot from the University of Texas.

Dr. Stekoll and his graduate student, Cadie Buckley, presented posters of their research during the meeting. The posters were "The Alaskan Alaria Species, Including an Unusual Fat Alaria from Southeast Alaska" by Michael Stekoll, co-authored with Dr. Gayle Hansen of Oregon State University, and "Seasonal Variation of Major Nitrogen Pools in *Palmaria Mollis*" presented by Cadie Buckley.

One of the highlights of the meeting was the intertidal seaweed collecting field trip on a glorious, sunny day to Shaman Island on Monday, July 10. About 45 meeting participants were led on this seaweed collecting trip by UAS Adjunct Professor Sandra Lindstrom. Dr. Stekoll, with the help of his wife, Deborah, and Sarah Wood trundled out much appreciated mid morning refreshments in wheelbarrows. Dr. Cathy Connor capped off the event with an informative lecture on the geology of the Shaman Island area.

The PSA is composed of 950 scientists and practitioners from diverse backgrounds. The Society has an international membership and welcomes anyone interested in phycology. The Society currently publishes the Phycological Newsletter, and the Journal of Phycology, which is the premier professional journal in the field of algal research.