

# University of Alaska at Fairbanks, Part 2: Just Another Day at The Office?? Read this and you'll never complain about your daily commute again!



UAF being 300 miles away from the closest field sites, often with no traversable road between, routinely works small miracles in the transportation department. Gear is frequently subjected to at least 3 modes of transportation before reaching its destination. This can include auto trailer, boat, plane, seaplane, helicopter and old-fashioned hand carry across water and rocks.

Among the toughest challenges in Alaska is finding sites with a suitable power supply and high-speed communications. When power and comms are not available locally, bringing these to the site increases the team's "luggage" significantly.



Photo montage captures this process of transport and setup in Prince William Sound.



## Arctic Power Solution by UAF

To overcome the logistics nightmare of bringing in energy, UAF is developing a remote power system used specifically for SeaSonde equipment in Arctic environments. The remote power system has been designed such that no single piece weighs more than 55kg and is approximately no bigger than 1.2m x 2.4m. The device is equipped with four wind turbines, a solar array and a backup generator. The wind and solar power charge a large battery bank, which can provide five days of standard generation. If the batteries are drained and there's no electricity from solar or wind, the module recharges using a biodiesel generator. With funding from the Department of Homeland Security (DHS), the 2,720kg remote power module will undergo a test deployment with a SeaSonde in Barrow, Alaska, running this summer through November.