



RENEWABLE ENERGY



ALL HANDS ON DECK! NACTEC STUDENTS COMPLETE WIND TURBINE INSTALL PROJECT.

NACTEC Students Complete Wind Turbine Install

Mother Nature held off just long enough for 13 students from Brevig Mission, Elim, Golovin, Nome, Shaktoolik, Stebbins, Teller, and White Mountain to complete the Skystream wind turbine installation project. Thirty days after the concrete foundation was

poured, during the Sept. 6th-16th Renewable Energy course, this group of students convened on October 14th to complete the final steps. Kirk Garoutte of Susitna Energy & Rob Bensin, Diane Ellanna, John Bullock, and Tony Parsons of Bering Straits Development

Company were on hand to work with the students on the successful installation of a 45' Skystream wind turbine. As a result of their efforts NACTEC is now part of the Alaska Wind For Schools program, as part of a larger national program in 11 states.



HINGE PLATE CONNECTION



FULLY ASSEMBLED TURBINE



SKYSTREAM IN ACTION

Value of “real world” construction training

The wind turbine installation project exposed students to construction careers in heavy equipment, carpentry, electricity, including education in apprenticeship and on the job training. The process for completing the wind turbine installation included: assembling hinge plate and base, testing base to mount on anchor bolts, assembling three 15' tower sections with an eco-friendly soap lubricant, installing turbine on top of pole, raising tower slightly to install blades and nose cone, erecting turbine with use of gin pole, leveling turbine, torquing (8) nuts to anchor bolts at 500 psi and then installing computer software to monitor turbine outputs.

As a result of this project, students are now familiarized with the efforts to install a Skystream wind turbine. Special thanks go out to several significant partners that made the turbine installation possible.

Thanks to:

Bering Straits Native Corporation's support through Education Tax Credit led to turbine purchase and installation.

Bering Straits Development Company workers for job shadowing and practical work experience.

Alaska Wind for Schools support provided reduced rate for turbine purchase and educational support.

Alaska Construction Academies with support from **Alaska Department of Labor and Workforce Development** and the **Denali Commission** support NACTEC construction training programs.

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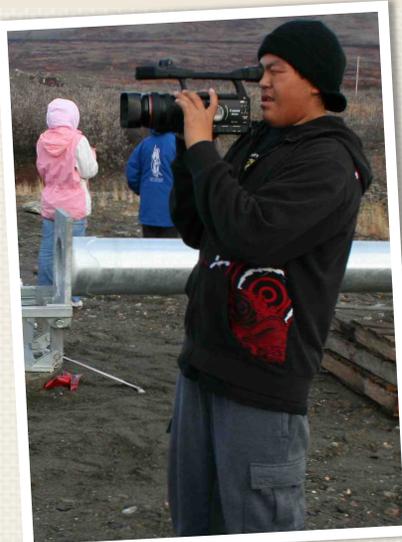
NATHANIEL

GOLOVIN FRESHMAN - NATHANIEL WAS ONE OF TWO STUDENTS WHO PARTICIPATED IN THE SEPTEMBER RENEWABLE ENERGY COURSE AND THE FINAL WIND TURBINE ASSEMBLY, STANDING, AND LEVELING EFFORTS. PICTURED HERE, HE TAKES THE LEAD ON SLIDING TWO POLE SECTIONS TOGETHER PRIOR TO ERECTING TURBINE.



ALEX/CORRINA

SHAKTOOLIK SOPHOMORE AND STEBBINS SENIOR- ALEX AND CORRINA WORKED WITH ELECTRICIAN, ROB BENSIN OF BERING STRAITS DEVELOPMENT COMPANY AND KIRK GAROUTTE OF SUSTINA ENERGY ON THE WIRING TO CONNECT THE WIND GENERATOR TO THE NACTEC HOUSE.



WESLEY

ELIM FRESHMEN - AS PART OF A VIDEO TECHNOLOGY COURSE, WESLEY TOOK AN ACTIVE LEAD DOCUMENTING THE WIND TURBINE INSTALLATION EFFORTS. THEREAFTER HE USED FINAL CUT EXPRESS TO EDIT HIS FOOTAGE TO CREATE A DIGITAL VIDEO OF THE INSTALLATION PROCESS.