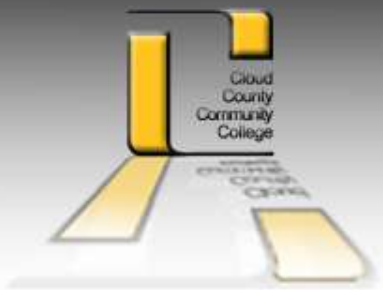
Cloud Power Wind Farm

KSU
Sustainability Conference
2010



CCCC Wind Energy Programs

1 yr Wind Energy Technology Certificate

2 yr Wind Energy Technology AAS Degree

1 yr WET Assessment and Development

1 yr Wind Blade Repair Program

CCCC Wind Sustainability

- Cloud Power Wind Farm
  - Nordtank 130 kW
  - 2 Northwind 100 kW
  - Zond 750 kW
- Geothermal HVAC System

Pouring the concrete for the foundation of the Nordtank wind turbine. Note the flag and the elevation, it is a windy hill.


Placing the component parts for
easy access during the installation.

Picking the lower section up for installation. Total weight of the three tower sections is 12,000 lbs.

Swinging the lower section into place to lower over the foundation bolts.

Un-nesting the upper tower section from the mid-section. The lower section has been installed behind the crane.


Attaching the blades to
the hub. This unit is called
the rotor assembly. Once
again note the flags.
These are different days.


Torqueing the blade bolts with a 42” long torque wrench. The nacelle is in the background.

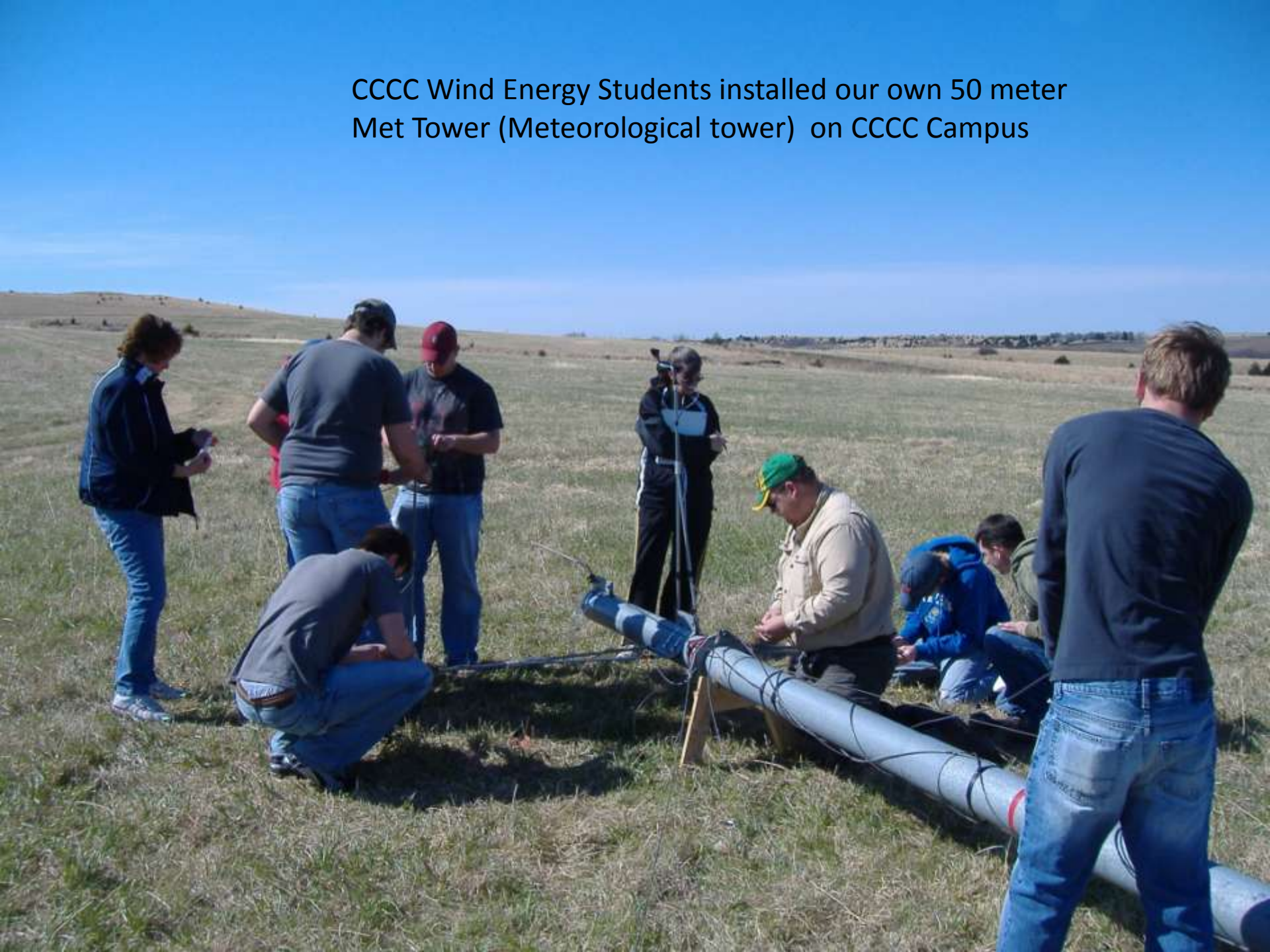
Picking the nacelle up to install it on the tower.

CCCC Wind Energy Instructor Lucas Chavey waving from the top of the wind turbine tower.

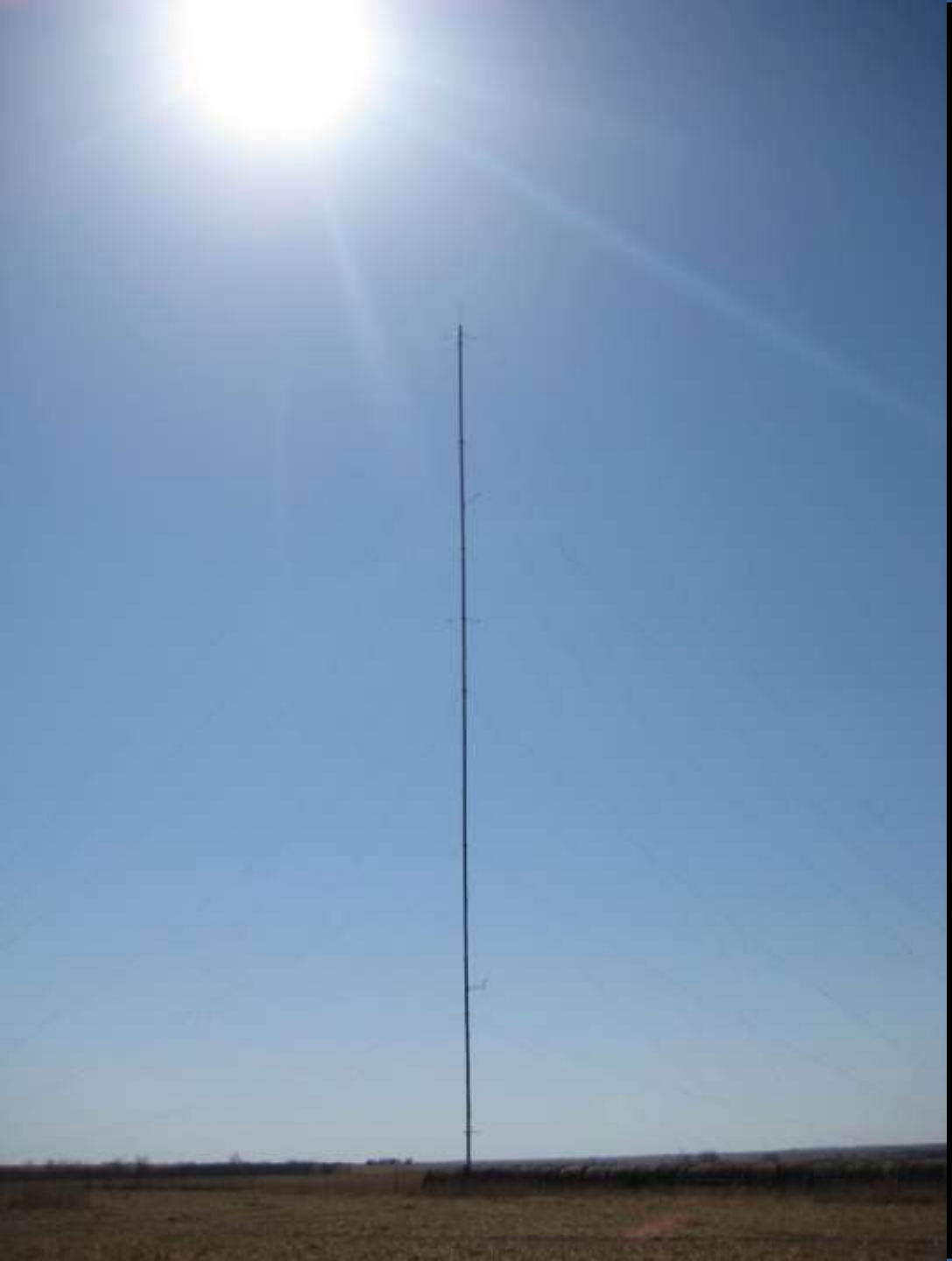
CCCC Wind Energy Students just hanging around during rope rescue training.

High angle rope rescue training for the wind energy students.

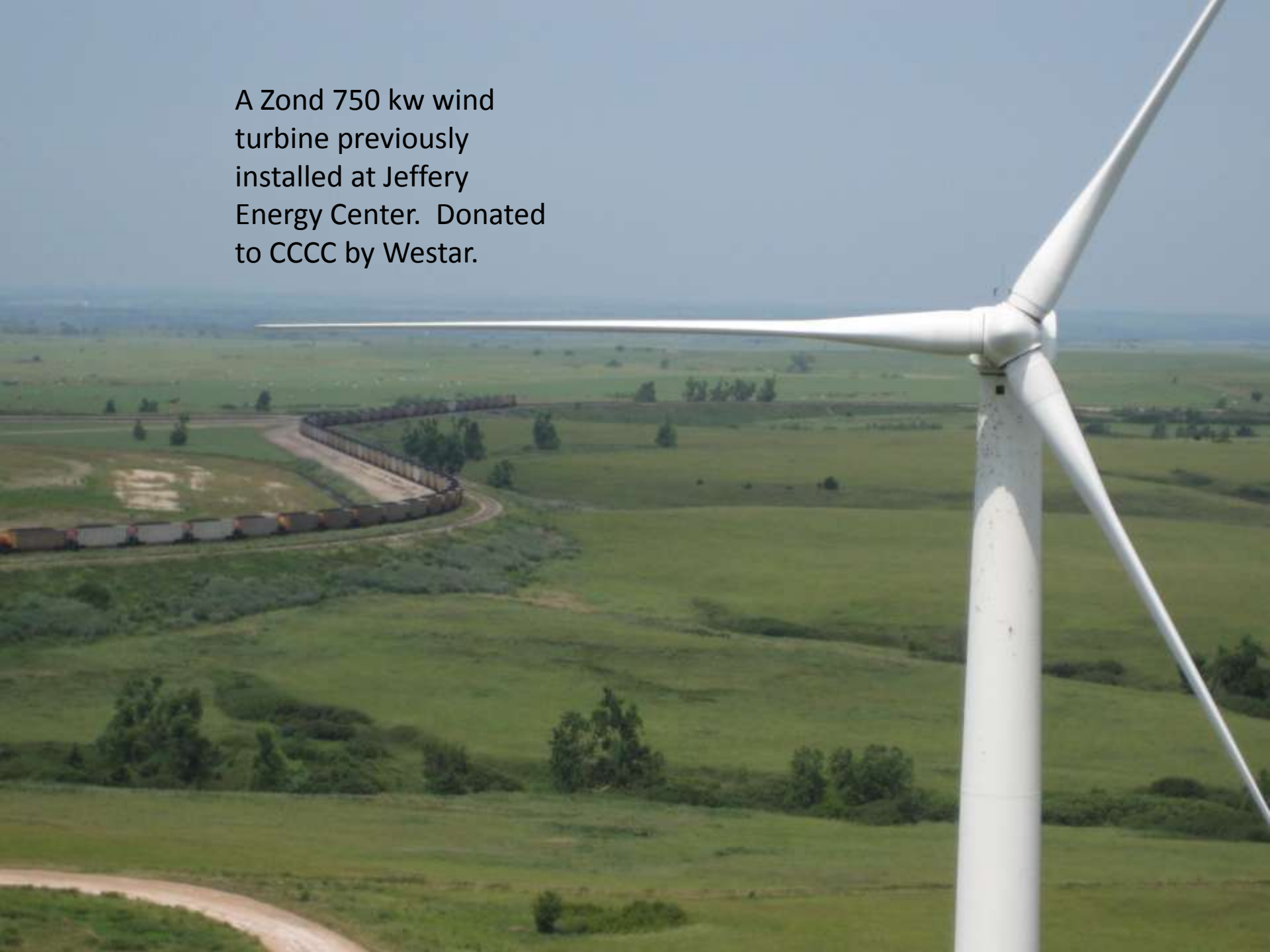
CCCC Wind Energy Students installed our own 50 meter Met Tower (Meteorological tower) on CCCC Campus




Raising the Gin Pole
to then raise the
Met Tower.



Successfully installed Met Tower. Installing one of these is much like raising a 150 feet long piece of cooked spaghetti.

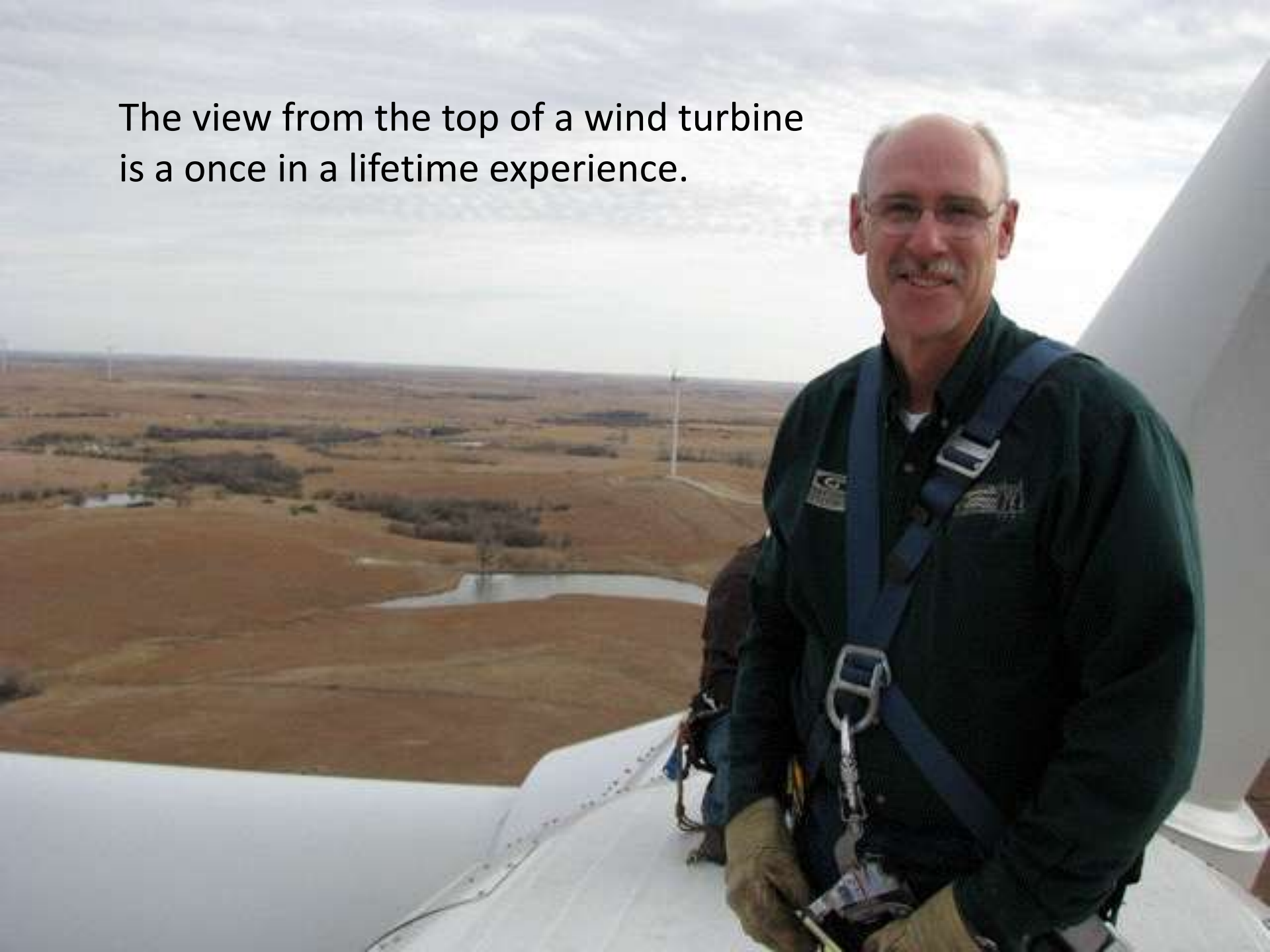


A Zond 750 kw wind turbine previously installed at Jeffery Energy Center. Donated to CCCC by Westar.

The Zond 750 is now located at CCCC Campus for wind energy student training.

What the inside of a Zond 750 looks like. Not much room inside.


Nordtank 130kw
Lower sections of the two
Northwind 100 wind turbines being installed.


The view from the top of a wind turbine
is a once in a lifetime experience.




Cloud County Community College
Wind Energy Technology

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