





Calhoun: The NPS Institutional Archive

Energy Academic Group

Energy Academic Group Publications

2014

Optimization of Vertical Axis Wind **Turbine Arrays**

Hobson, Garth V.

http://hdl.handle.net/10945/43341



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

NPS Home

About NPS

Academics

Administration

Library

Research To

Technology

Services



ENERGY ACADEMIC GROUP

Energy Goals Academics Executive Ed Research Faculty Seminar Resources

Science and Technology Projects

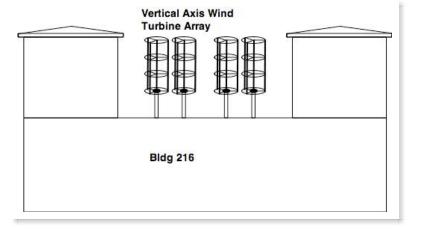
NPS Energy Academic Group > Research

-RESEARCH PROJECTS -

OPTIMIZATION OF VERTICAL AXIS WIND TURBINE ARRAYS

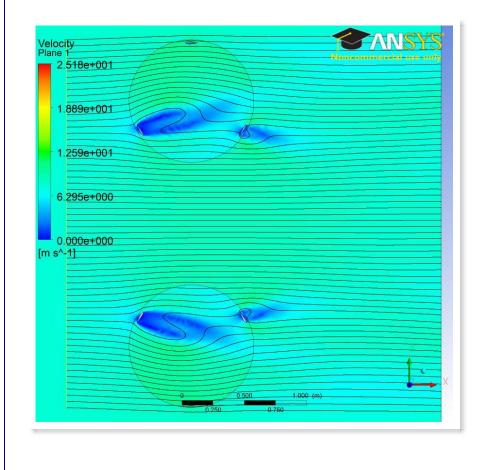
Garth V. Hobson, Professor Anthony Gannon, Professor Lt. J. Ponder, Student

- Doubling the number of blades from 3 to 6 gives a 2.3 times increase in torque
- Running two (3-bladed) VAWTs inward at 1m part gives a less than one percent increase in combined torque
- Bringing them closer to 0.5m increases the overall torque by 7%









Contacts | Employment | Copyright / Accessibility / Section 508 | Privacy Policy | FOIA | Intranet Access

This is an official U.S. Navy website.

All information contained herein has been approved for release by the NPS Public Affairs Officer.

Page Last Updated: Nov 5, 2013 2:12:36 PM | Contact the Webmaster