ASCE Society Minutes
Date: 4 December 2013
Location: ES 1045

Activity – Professional Society Meeting

Attendance –
- Students: _20__ Grad: 4
- Faculty: _1_
- Faculty Advisor: _1_
- Practitioner Advisor(s): ___
- Other: ___

Report Prepared by – ___Ellen Studebaker_____________________

Officer Announcements – We need people to write the mead and technical papers for conference

Business – UW associate Dean and Smith Professor

Guest Speaker – Dr. Jay Puckett

Topic – Sabbatical Leave Chat- Old Dog New Tricks
Sabbatical from Aug. 2010-Aug. 2011
Coming off being Civil and Architectural Department head
Found time to learn and work with matlab
Sabbatical: update research skills
  Building information modeling
  Computational fluid mechanics and solid mechanics
Spent 1 month in Belgium with a Mechanical Engineering Grad Student and supervising professor
Round some new research areas:
Working with a grad student studied high mass poles with height of 120-160 feet tall, slender poles. First and second mode frequency low, but when the when the wind frequency and the natural frequency of the poles lined up, resonance occurred creating an oscillation force perpendicular to the wind. This movement caused stresses in the welds.

About ten years ago, WYDOT examined their traffic signal light poles, 1/3 of the connections bases had cracks. A solution they found was covering the poles with a perforated shroud to help settle the vibrations. They developed a new connection design
and was tested at UW and is not used across the US. Poles with cracks have been, or are being, replaced.

He used fluid dynamics to model the movement of the wind around the light pole.