

**Virginia Tech**  
**Center for Geotechnical Practice and Research**  
**Annual Lecture Program**

**Thursday, February 26, 2009**

**Alumni Assembly Hall**  
**Inn at Virginia Tech and Skelton Conference Center**  
**Blacksburg, Virginia**

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**8:15-9:00**

**Dr. Dean B. Durkee, Ph.D, P.E., Vice President, *Gannett Fleming, Inc.***  
**“State of Hawaii Dam Safety Program”**

Phase 1 Investigations were performed on all of the dams in the State of Hawaii under an emergency proclamation in response to the Kaloko Dam failure. The presentation will include a brief history of dams in Hawaii, discussion on the failure, a summary on the Phase 1 Investigation findings, and an overview of the current efforts to reduce the risk of failure and revise the State Rules and Regulations.

**9:15-10:00**

**Aaron Goldberg, P.E., Senior Engineer, *S&ME, Inc.***  
**"Geotechnical Aspects of Design and Construction of the Charleston Naval Base Container Unit"**

A 200+ acre container terminal is currently being constructed on the site of the former dredge disposal basin, which in turn was constructed over marsh and tidelands. Two test embankments have been in place for over 1 year and initial filling of the site is underway. Challenges include anticipated settlement of up to 10ft, undrained shear strengths of less than 200 psf and an aggressive construction schedule.

**10:15-11:00**

**Ronald Boyer, P.E., Senior Associate, *Langan Engineering and Environmental Services, Inc.***  
**“Geotechnical Design and Construction Challenges in the New Jersey Meadowlands”**

Geotechnical design and construction challenges associated with the New Meadowlands Stadium and Meadowlands Xanadu projects will be presented. The 80,000 seat home stadium for the Giants and Jets and the Xanadu entertainment/retail venue are currently under construction at the New Jersey Sports and Exposition Authority Sports Complex. Several deep foundation types necessary to support building and entertainment components where subsurface conditions include historic fill and soft varved clays will also be discussed.

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## **Keynote Speaker**

**11:15-12:15**

**John T. Christian, Ph.D, P.E., Consulting Engineer, *Waban, Massachusetts***  
**“Uncertainty, Reliability, and Failure”**

Uncertainty is central to geotechnical engineering; geotechnical engineers seldom know everything they need to know. Geotechnical engineers have dealt with uncertainty by conservatism, judgment, and the observational method, but significant advances have now been made toward treating uncertainty rationally using probabilistic methods. Publications range from detailed treatment of the reliability of slopes to large-scale probabilistic simulations of hurricanes and the levees built to resist them. This presentation addresses the current state of affairs, reiterates some fundamental concepts that need to be born in mind by engineers who would apply probabilistic methods, and identifies some areas of future development.

**12:15**

**Lunch**

<http://cgpr.cee.vt.edu>



**All are welcome to attend**