



SUBJECT: Conference on Applied Statistics in Defense

DATE: May 2, 2014

Dear Colleague,

The Executive Board for the Conference on Applied Statistics in Defense (CASD), formerly the Army Conference on Applied Statistics, is pleased to announce that this year's conference will be held from October 20-24, 2014 in Washington, DC. CASD is a conference of the Interface Foundation of North America and a forum for the presentation and discussion of theoretical and applied papers relating to the use of probability and statistics for solving problems of national importance, with an emphasis on defense and national security. CASD provides valuable opportunities for constructive interaction among academic, industry, and government agency scientists. CASD also serves a nurturing role in the elevation of statistical proficiency among researchers in other disciplines who find themselves statistical practitioners because of the compelling benefits statistical science brings to research, development, and testing.

CASD is the successor conference to the Army Conference on Applied Statistics (ACAS), which was established in 1995 by six sponsoring activities within the national defense community. In the ensuing years, the organization has broadened its mission to include context areas of national importance and has attracted more industry, academia, and other government agencies. CASD is also the successor to the Conference on the Design of Experiments in Army Research, Development, and Testing, a historic series of meetings that began in 1955 and formally concluded in 1994.

This year's conference program will include invited talks by prominent investigators in various branches of statistics and applied probability as well as contributed papers of a technical, applied, or clinical nature. To date, the following distinguished researchers have been confirmed:

- Antonio Possolo, keynote (National Institute of Standards and Technology)
- Richard Davis (Columbia University)
- David Hunter (Pennsylvania State University)
- David Marchette (Naval Surface Warfare Center)
- Shane Reese (Brigham Young University)

CASD technical sessions will feature contributed papers by government, academic, and industrial scientists, including investigators under contract to government agencies. Contributed papers can range in content from new research to well-posed problems in which statistical methods are applied to solve specific national problems. Speakers are strongly encouraged to present their papers in terms of the potential or real problems that motivated the work. Results that rely on relatively recent or specialized results in the theory of statistics and probability should be explained in sufficient detail to permit an audience of statistical practitioners with broadly varying backgrounds to use the results to enhance their own problem-solving capabilities.

Clinical sessions, a distinct element of CASD, accept unresolved problems in applied statistics. A panel of experts comprised of invited speakers and other distinguished attendees offer guidance on how to proceed. We invite you to consider this opportunity to present an interesting statistical problem to some of the country's leading applied and mathematical statisticians.

The Executive Board of CASD is also pleased to announce that Dr. William Meeker of Iowa State University will present a short course for registered conference attendees prior to the conference on October 20-21. Entitled "Statistical Methods for Product Life Analysis and Accelerated Testing," this course will be a hands-on workshop where participants will use JMP 11 software for analyzing reliability data and test planning. The course will focus on concepts, examples, models, data analysis, and interpretation. Examples and exercises will include applications using product field (maintenance or warranty) data, accelerated life tests, and accelerated degradation tests. After completing this course, participants will be able to recognize and properly deal with different kinds of reliability data and properly interpret important reliability metrics. Topics will include the use of probability plots to identify appropriate distributional models (e.g., Weibull and lognormal distributions), estimating important quantities like distribution quantiles and failure probabilities, the analysis of data with multiple failure modes, the analysis both destructive and repeated measures degradation data, and the analysis of recurrence data from a fleet of systems or a reliability growth program.

Participation from many activities is sought to ensure a mixture of science and application. A call for papers is hereby extended. Speakers will be notified regarding paper acceptance on a rolling basis, but no later than September 12. To submit a paper for consideration, please send the following information by September 5 to Alyson Wilson, alyson_wilson@ncsu.edu.

1. Title of paper, and a brief abstract.
2. Name of author(s) and exact title of the organization(s).
3. Type of paper (technical or clinical).

4. Telephone number of the author(s).
5. E-mail address of the author(s).

Technical papers last 30 minutes and include 5 minutes at the end for audience discussion and questions. Of the 40 minutes available for clinical papers, approximately 15 minutes are recommended for the problem statement, allowing 25 minutes for panel discussion.

The Conference on Applied Statistics in Defense also marks the occasion when the Army Wilks Award is presented for significant contributions in statistical research or applications relevant to national defense. This year the Board is accepting open nominations for award candidates. A letter of nomination, up to three supporting letters, and the nominee's CV should be e-mailed by August 15, 2014 to Jock Grynovicki, jock.o.grynovicki.civ@mail.mil.

This year's conference and short course will take place at the Bureau of Labor Statistics in downtown Washington, DC just a few blocks from the city's transportation hub, Union Station. With three airports, a convenient Metro system and plenty of pedestrian-friendly sidewalks, DC is easy to get to and around. The nation's capital offers an assortment of entertainment, sports and outdoor activities, and sightseeing opportunities. Named by *Travel & Leisure* in 2011 as the top U.S. destination for museums and galleries, DC is noted for the assortment and quality of fantastic free attractions, from the magnificent memorials and monuments on the National Mall to must-see sites like the National Gallery of Art, the Library of Congress and the museums of the Smithsonian Institution. If you are planning to see some of the area when you arrive, be sure to visit Washington DC's official travel website, <http://washington.org/>.

Information concerning the conference and short course is available at www.armyconference.org. This site will be periodically updated as details finalize, including information regarding registration fees, lodging, agenda, etc. Any additional inquiries concerning the conference may be directed to Wendy L. Martinez, by email (Martinez.Wendy@bls.gov), phone (202-691-7400), or fax (202-691-7426).

Sincerely,

Wendy Martinez
Edward Wegman

CASD 2014 Program Chairs