FOREWORD

The historic 50th anniversary meeting of statistics in defense was held at the Georgia Institute of Technology. Fifty years ago at the suggestion of Sam Wilks, the Design of Experiments Conference in Army Research, Development and Testing (DOE) began in 1955 at the Diamond Ordnance Fuse Laboratories, now part of the Army Research Laboratory (ARL). That first of forty conferences was organized by the Office of Ordnance Research, now the Army Research Office of ARL. ACAS, DOE's successor, returned in its 10th year to the Army Research Laboratory to commemorate past contributions of statistics in the Army and continued with its current, broader focus on defense applications.

The tenth U.S. Army Conference on Applied Statistics was hosted the Army Research Laboratory, 20-22 October 2004 at the Georgia Tech Hotel and Conference Center in downtown Atlanta, GA. The conference was cosponsored by the U.S. Army Research Laboratory (ARL), the U.S. Army Research Office (ARO), the United States Military Academy (USMA), the Training and Doctrine Command (TRADOC) Analysis Center-White Sands Missile Range, the Walter Reed Army Institute of Research (WRAIR), and the Uniformed Services University of the Health Sciences (USUHS). Cooperating organizations include Los Alamos National Laboratory (LANL), George Mason University (GMU), the Office of Naval Research (ONR), and the Institute for Defense Analyses (IDA). The U.S. Army Conference on Applied Statistics is a forum for technical papers on new developments in statistical science and on the application of existing techniques to Army problems. The purpose of this conference is to promote the practice of statistics in the solution of these diverse Army problems.

The tenth U.S. Army Conference on Applied Statistics was preceded by a two-day short course "Quantitative Graphics and Visual Analytics for Communication and Discovery", taught by Professor Dan Carr of George Mason University. James Gantt, U.S. Army Research Laboratory, opened the conference. The keynote address, "Models for Anthrax: Antibiotics and Vaccines," was delivered by Ron Brookmeyer, Johns Hopkins. Several distinguished researchers spoke during invited general sessions: David Banks, Duke; Doug Bates, Wisconsin; Russell Lenth,

Iowa; Bill Szewczyk, NSA; and Mark Vangel, Massachusetts General Hospital. This year's conference will feature three special sessions: Statistical Text Processing (organized by Carey Priebe, Johns Hopkins, and Ed Wegman, George Mason; Recent Advances in Engineering Statistics (organized by Jeff Wu, Georgia Tech); and The Volume-of-Tube Formula: Perturbation, Mixture Models and Applications (organized by Catherine Loader and Ramani Pilla, Case Western). Nineteen contributed papers and four clinical papers rounded out the program.

An important moment in the conference was the awarding of the Army Wilks Medal to David W. Scott of the Rice University.

The Executive Board for the conference recognizes James Gantt, for hosting the conference, Edmund Baur, ARL, for maintaining the conference web site, David Webb, ARL, for overseeing conference communications, Barry Bodt, ARL, for chairing the conference, and Yasmin H. Said (GMU) and Barry A. Bodt (ARL) for assembling the conference proceedings.

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