

August 25, 1985

Mathematical Sciences

Dear Committee Member:

The nominees for the 1985 Army/Wilks Award are enclosed along with information on the histories of the individuals. Three names are carryover from last year: L. Crow; E. Parzen; and C. Wu; while R. Barlow is a new nomination (for the second time.) Please vote for a first place winner, a second place winner, and a third place winner. This will allow us to break ties using the method specified by the regulations.

Mr. Philip Rust, donor of the award money, would like the winner of the award to be associated with the solution of an important statistical or mathematical problem in one or more Army labs. Sam Wilks is the model for this award, so apparently the problem doesn't have to be completely solved, at least if it is difficult enough.

Please return these at your earliest convenience so that we can make the award on time.

Thank you all for your participation.

Sincerely,



Robert L. Launer

QUALIFICATIONS OF NOMINEES FOR 1985

R. E. Barlow

Professor of Operations Research and Statistics, Berkeley

SCIENTIFIC CONTRIBUTIONS Well known for his extensive work in reliability, and Bayesian statistics. Some of his areas of interest are fault tree analysis, reliability inequalities and total-time-on-test transforms.

PUBLISHED WORK More than 65 refereed journal articles. Co-author of three books with Frank Proschan: "Mathematical Theory of Reliability"; "Statistical Inference in Reliability and Life Testing; and a new text on data analysis in reliability (to appear). Also, with Bartholomew, Brenner, and Brunk; Statistical Inference Under Order Restrictions. Editor of "Reliability and Fault Tree Analysis" with Fussell and Singpurwalla.

ARMY INTERACTIONS ARO Contractor for 11 years. Invited representative at Tri-Services Review of Mathematical Sciences, 1983. Invited speaker ARO workshop on Reliability, 1985. Co-author of papers given at 26th Design of Experiments Conference, 1980, Las Cruces, and ARO Workshop on Reliability, 1984.

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Larry Crow

Reliability Operations Branch, Bell Labs, Whippany

SCIENTIFIC CONTRIBUTIONS PhD, Statistics, Florida State University (I. Shimi). Principle developer and proponent of Reliability Growth theory and methods. Appointed member of the ASA Committee on Quality and Productivity. Chairman, subcommittee on Quality. Invited by Physics Society of U.K. to lecture on Reliability. Member of International Electoral Technical Committee for Standards for Electrical Commerce. NATO Advanced Studies Institute - Post Doc, 1982 and 1986.

PUBLISHED WORK Open Literature Publications.

ARMY INTERACTIONS Member of AMSAA staff for approximately 13 years. American representative on the TTCP Committee. Important Army Spokesman and consultant on reliability methodologies. Frequent presentations at DOE and AORS meetings. Serves on MIL HDBK 189, "Reliability Growth Management," Committee. Initiator and coordinator of GWU master's Program. in OR at APG.

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EMANUEL PARZEN

DISTINGUISHED PROFESSOR OF STATISTICS, TEXAS A&M UNIVERSITY

SCIENTIFIC CONTRIBUTIONS Professor Parzen has made extensive contributions to the spectral theory of time series, developed the mathematical foundations for nonparametric density estimation, and has developed a complete nonparametric, probability based statistical data modeling using quantile functions. He is a member of the ISI, and an elected fellow of IMS, ASA, AAAS, and RSS.

PUBLISHED WORK He has published more than 80 papers in refereed statistics and mathematical journals. Author of "Modern Probability Theory"; "Stochastic Processes"; and "Time Series Papers".

ARMY INTERACTIONS Invited speaker at the 14th Design of Experiments Conference, and ARO Workshop on Robustness in Statistics, 1980. Presented technical papers at the 27th, 28th, 29th, and 30th DOE Conferences. Recent important contribution at USAMMRC, Watertown, in analyzing failure data of composite materials used in special high stress Army applications. This work is based on his recently developed methods under ARO contract (7 years).

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C. F. JEFF WU

PROFESSOR OF STATISTICS, UNIVERSITY OF WISCONSIN AND MRC

SCIENTIFIC CONTRIBUTIONS Winner of A. P. Sloan Fellowship for outstanding research in statistics for 1983-85. Associate editor of Annals of Statistics. Research interests include design of experiments, survey sampling and regression theory. Also bootstrap and sequential methods. Fellow, RSS.

PUBLISHED WORK More than 30 papers in refereed journals. Co-editor of "Scientific Inference, Data Analysis, and Robustness" (with G. E. P. Box)

ARMY INTERACTIONS Fundamental contributions to sequential designs for sensitivity testing, related to K/E penetrator problems. Worked on Army truck maintainability problem at Tank Automotive Command (with George Box and Mike Robinson). Provided solution to a statistical/ballistic problem in OCDS RDA, 1982-83. Member of K/E Penetrator Working Group at 27th DOE meeting.

Wilks Sub-subcommittee  
Statistics and Probability Subcommittee  
The AMSC

Dear Committee Member:

The votes are in on the 1985 Army/Wilks winner. The votes are as follows: (in alphabetical order)

Harris	Launer	Singpurwalla	Tang	Taylor
Parzen	Parzen	Parzen	Parzen	Parzen
Barlow	Barlow	Barlow	Crow	Crow
Wu	Crow	Crow	Wu	Barlow

The winner is Emanuel Parzen of Texas A&M University. Thank you all for your participation. I hope to see all of you in Madison in October. Since this is my fifth and final year as chairman of this subcommittee, I wish you all good luck in the years to come.

Sincerely,

Robert L. Launer