

# Washington Statistical Society

W.S.S. Newsletter—October 1981

## Calendar

### W.S.S. Sponsored:

**Topic:** Design and Methodological Issues in the 1979 Nonresidential Buildings Energy Consumption Survey  
**Speakers:** Lynn Patinkin, Energy Information Administration (EIA), Dwight French, EIA  
**Location:** Federal Building, 12th and Pennsylvania, Room 3000 A (Federal Triangle Metro Stop)  
**Date and Time:** October 15, 12:30 to 2:00 P.M.

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**Topic:** Understanding the Kalman Filter  
**Speaker(s):** Nozer D. Singpurwalla and Richard Mienhold  
**Location:** The George Washington University, Marvin Center, Rooms 402, 404, 406, 21st Street between H and I Streets, N.W., Washington, D.C.  
**Date and Time:** October 19, 1981, 12:00 P.M. - 1:15 P.M.

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**Topic:** A New Probabilistic Method of Company Estimates: Applications to Hot Deck 1G12 Deck, least squares 1 generalized least squares, change 1 optimal change  
**Principal Speaker:** James M. Lowerie, Federal Trade Commission  
**Topic:** An Air Traffic Control Application of a Bivariate Normal Integral  
**Second Speaker:** Arthur P. Smith, III, The Mitre Corp.  
**Location:** Forestall Building, 1000 Independence Ave., S.W., Washington, D.C., Room GJ015  
**Date and Time:** October 20, 1981, 12:30 - 2:00 P.M.

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## LUNCHEON WORKSHOP

On Thursday, October 29, 1981 from 11:30 a.m. - 2:30 p.m., there will be a luncheon workshop entitled "Current Nonprofit Sector and Pension Research." The workshop will feature summary/discussion of papers presented at the August 1981 American Statistical Association Annual Meetings in Detroit and will be held at the Empress Restaurant, 1018 Vermont Avenue, N.W. (near the McPherson Square subway station). A preliminary agenda is provided below.

Please make your *reservations including* payment with Bettye Jamerson on 376-0001 by COB October 19th. Price of the workshop is \$15.00 and includes lunch. Make checks payable to: Bettye J. Jamerson.

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**Topic:** The Role of Probability Models in Finite Population Inference  
**Speaker:** Richard Royall, Johns Hopkins University  
**Location:** Forestall Building, 1000 Independence Ave., S.W., Washington, D.C., Room GJ015  
**Date and Time:** November 4, 1981, 12:30-2:00 P.M.

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**Topic:** Smoothing, Roughing and Twicing: EDA on Standard Calls  
**Speaker:** Karan Kafadar, NBS  
**Location:** Department of Commerce Building, 14th and Constitution Ave., N.W., Washington, D.C. Conference Room D (on the First Floor)  
**Date and Time:** November 17, 1981, 12:30-2:00 P.M.



**Topic:** An Air Traffic Control Application of a Bivariate Normal Integral  
**Second Speaker:** Arthur P. Smith, III, The Mitre Corporation  
**Abstract:** A computer function of the U.S. air traffic control system which detects realtime conflicts depends on its ability to alert the controller in a timely manner to an impending conflict. The information on the positions of the aircraft is updated periodically by radar. These measurements contain some noise. Because of the resultant errors in position and velocity estimates, there may be a delay in detecting a conflict. The problem is to estimate the distribution of this delay. The errors in position and velocity are modeled as a bivariate normal. An approximation to the bivariate normal integral is used to evaluate the probability of missing the detection of a conflict from radar updates to radar update. These probabilities are used to estimate the delay distribution.

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**Topic:** The Role of Probability Models: Infinite Population Inference  
**Speaker:** Richard Royall, Johns Hopkins University  
**Chair:** Wesley Schaible, BLS  
**Discussant:** Frederick Scheudren, IRS, Robert Fey, Census  
**Abstract:** The prediction approach to finite population sampling theory makes inferences with respect to (superpopulation) probability models. The distribution generated by probability sampling plays no direct role in these inferences, because they are conditioned on the chosen sample. We will examine what the prediction approach reveals about variance estimation for the ratio, regression and Horvitz-Thompson estimators. The theoretical results will be put to an empirical test.

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**Topic:** Smoothing, Roughing and Twicing: EDA on Standard Calls  
**Speaker:** Karan Kafadar, NBS  
**Chair:** Joan Rosenblatt, NBS  
**Discussant:** James Malley, NIH  
**Abstract:** "EDA is an attitude, a state of flexibility, a willingness to look for things that we believe are not there, as well as for those we believe might be there." (Tukey, 1979 JASA, p. 121). One of its tools that assists in this exploration is the concept of smoothing a set of data and examining the residuals (the "rough") and resmoothing if necessary ("Twicing"). This principle has been applied to a set of voltage measurements from standard calls. In particular, median polish and a one-dimensional smoothing algorithm are applied and examined for their appropriateness in this context. Time permitting, some comments on extending the smoothing algorithm to two-dimensional situations will be made.

WORKSHOP AGENDA

- Chair:** John DiPaolo, Statistics Division, IRS
- Examining the Nonprofit Sector:**
- 1 "Nonprofit Organizations: An Examination of Information Returns Filed with the IRS" by John P. Sullivan and Keith Gilmour, Statistics Division, IRS
  - 2 "Private Foundations, Federal Tax Law, and Philanthropic Activity: An IRS Perspective" by Thomas B. Petska and Daniel Skelly, Statistics Division, IRS
- Discussant:** <sup>LAW</sup> Eugene Steurele, Office of Tax Analysis, Treasury Department
- Keynote Address:** Dallas Salisbury, Executive Director of the Employee Benefit Research Institute
- Current Pension Research:**
- 3 "Scale Economies in Single and Multi-employer Pension Plans" by Emily S. Andrews, Office of Research and Statistics, Social Security Administration
  - 4 "Pension Plans Termination Forecasting" by Ben Klotz, Pension Benefit Guaranty Corporation
  - 5 "Toward a National Retirement Income Policy: An Alternative Perspective" by Sylvester J. Schieber, Employee Benefit Research Institute
  - 6 "1977 Employee Benefit Plan Data—Form 5500 Series" by Nick Greenia and Daniel A. Rosa, Statistics Division, IRS
- Discussant:** Emily S. Andrews, SSA

FLOOR DISCUSSION

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Washington Operations Research/Management Science Council

**FOR IMMEDIATE RELEASE**

Policy and regulatory analysis, new quantitative techniques, and computer software will be the feature topics in the Fall Symposium of the Washington Operations Research/Management Science Council (WORMSC). The Symposium will be held from 8:30 a.m. to 5:30 p.m., Monday, November 2, at George Washington University's Marvin Center.

The Symposium theme is "New Directions, New Techniques." Featured speakers are Dr. Jack Borsting, Assistant Secretary of Defense (Comptroller); Dr. Paul Craig Roberts, Assistant Secretary of the Treasury for Economic Policy and one of the leading theorists in "supply-side" economics; and Dr. Kenneth Hunter, Associate Director, Program Analysis Division, Government Accounting Office.

Topics of technical sessions include cost-benefit analysis, regulatory impact analysis, management of technical support for litigation, new defense technologies, decision science, stochastic processes, optimization, forecasting, OR/statistics software, management of large computer projects, and decision support systems.

For Further information, write:  
WORMSC Symposium  
P.O. Box 23730  
L'Enfant Plaza Station  
Washington, DC 20024



From the Membership Chairman:

### **WHAT CAN WSS DO FOR YOU?**

The membership survey we conducted last year seemed to indicate that WSS' programs meet the members' interests fairly well. I don't believe it. I think the 300 or so who responded to the survey are probably the ones who have been coming to programs. What about the rest of you?

The dinner for the Chinese statistical delegation drew 170 people, most of whom hadn't been to another WSS event for at least a year. The success of the Washington Alliance of Statisticians is gratifying, but also disappointing in a way: why didn't WSS fill younger statisticians' needs? Are there still more members and potential members we just aren't reaching?

Our programs are our main attraction, perhaps our only attraction. We don't have a journal or an employment service. Yet something like three-fourths of our members don't attend programs. How can we keep members, let alone attract new ones, without offering them something of value to them?

If you have suggestions for things we can do to involve more of our members, please let me know. If you know of new people we ought to try to attract to WSS, please tell me who they are and what they might be interested in. WSS wants to serve its members better. What can WSS do for you?

Doug Samuelson  
3443 Skyview Terrace  
Falls Church, Virginia 22042

### **WSS SECRETARY FILES**

Below are listed the files which are currently maintained by the Washington Statistical Society Secretary. Most historical files have been reviewed in order to remove duplication materials and to order materials as much as possible.

#### **CURRENT FILES**

These files are maintained at the Secretary's desk and most are brought to each WSS Board of Directors meeting.

- Board Minutes—current year
- Board Minutes—past year
- WSS Newsletters—current year
- WSS Newsletters—past year
- Board Directories
- Local Associates
- General Correspondence
- Building Representatives
- Student Scholarship Program
- Shiskin Award Program
- Program Planning (copies of grids showing recent years' programs)

## HISTORIC FILES

These files are maintained in boxes in the Secretary's office. Files are accessed once or twice a year for filing new materials and are accessed as needed for research purposes. Since some file headings are not self-explanatory notes are included about contents of many of these files.

National Society (ASA) (material from 1960)  
Annual Reports of ASA Chapters (material from 1958)  
National Council of Associations for Policy Sciences  
WSS Membership Survey 1981  
Julius Shiskin Award  
WSS Review Committee 1980  
Graduate Scholarships  
ASA Local Arrangements 1979  
Interchapter Communications  
Annual Report, President (material from 1967-68)  
Annual Report, Secretary-Treasurer (material from 1952-53)  
Methodology Section (material from 1963)  
Agriculture Committee (material from 1978 only)  
Arrangements Committee (material from 1968)  
Audit Committee (material from 1973)  
Computer Technology (material from 1969-1979)  
Economic Statistics Committee (material from 1968)  
Employment Committee (material from 1968)  
Fellows Committee (material from 1969)  
Finance Committee (material from 1965 only)  
Interprogrammatic Committee (material from 1967)  
Membership Committee (material from 1970)  
Nominations & Elections (material from 1957)  
Physical Sciences & Engineering (material from 1968)  
Program Committee (Special Review in 1965)  
Public Health & Biostatistics (material from 1964)  
Publicity Committee (material from 1961)  
Social & Demographic Statistics (material from 1965)  
Annual Dinner (material from 1962)  
M1 Minutes of Board Meetings Up to 1965  
M2 Minutes of Board Meetings 1965-1970  
M3 Minutes of Board Meetings 1970-1974  
M4 Minutes of Board Meetings 1974-1976  
M5 Minutes 1967-1977  
M6 Minutes 1977-1978  
M7 Minutes 1978-1979  
M8 Minutes 1979-1980  
N1 WSS Newsletters 1943-1966  
N2 WSS Newsletters 1966-1972  
N3 WSS Newsletter 1972-1977  
N4 Newsletters 1977-1978  
N5 Newsletters 1978-1979  
N6 Newsletters 1979-80  
Agency Representatives  
District Representatives  
Officers and Board of Directors  
Constitution & By-laws  
Organizational Manual 1979

WSS-ASQC Award (Award presented in 1973)  
Awards Committee (Outstanding Paper Award Abolished 1972)  
Applications for Meeting Space (Mostly 1970 or before)  
Plaque to Past Presidents (1970 Correspondence when plaques originated)  
Other Organizations (Federal Research Service-The Sociologist)  
Chapter Development (Material from 1963-1970)  
Statistics and the Environment (Material during 1972-1974)  
WSS Future Activities (1964 material)  
WSS Activities for Young Statisticians (material from 1968-1972)

### OTHER MATERIALS

In addition to the files listed the Secretary maintains application forms for ASA membership and WSS Local Associate membership, forms and nominations received from the Shiskin Award Program, and blank certificates for the annual presentation to the Past President.

### EMPLOYMENT COLUMN

Deadline for inserting notices  
is the 10th of the month  
preceding the publication date

Send notices and requests to:  
Evelyn R. Kay  
National Center for Education Statistics  
400 Maryland Avenue SW  
Washington, D.C. 20202

301/436-6791

### JOB OPENINGS

**Mathematical Statistician**  
**GS-1529-11/12/13**

Three permanent full-time positions are open for applicants with a Ph.D or equivalent experience in statistics. Must have a strong background or interest in design and analysis of clinical trials. For these positions, send SF 171 to Gordon Pledger, HFD 232, Room 18B45, Food and Drug Administration, Fisher's Lane, Rockville, MD 20857, or telephone 301/443-4594.

# Washington Statistical Society

*(Mailed 10/9/81)*

CHAPTER • AMERICAN STATISTICAL ASSOCIATION



**AMERICAN STATISTICAL ASSOCIATION**

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