

President: Morris Goldman
V.P. & Pres.-elect: Marie Eldridge
Past President: Joseph Waksberg
Sec.-Treas.: Charles Jones
Representatives-at-large:
Barbara Bailar
David Hulett
Joseph Steinberg
District 3 Rep. to A S A:
Beatrice N. Vaccara
Methodology Section:
Chair: Jay Herson
Program: Frederick Scheuren

Washington Statistical Society

CHAPTER • AMERICAN STATISTICAL ASSOCIATION



Program Committees:
Agriculture: Fred Vogel
Computer Technology: Richard Taeuber
Economics: Jerome Mark
Phys. & Engrng: Seymour Selig
Public Hlth & Biost.: Tavia Gordon
Soc. & Dem.: Daniel Levine
Arrangements Comm.: Solomon Loew
Employment Comm.: Marie Eldridge
Membership Comm.: Harold Nisselson
Publicity Comm.: Maury Cagle

NEWSLETTER - NOVEMBER 1975

- November 13 - Dogfights Modelled as Semi-Markov Processes
- November 19 - Applications of Markov Renewal Models to Traffic Engineering Problems
- November 25 - Multiple Frame Surveys - Some Problems in Application

METHODOLOGY PROGRAM

Topic: Dogfights Modelled as Semi-Markov Processes

Speaker: Dr. Walter Nunn
Center for Naval Analysis

Chairperson: Professor Ryszard Syski
Department of Mathematics
University of Maryland

Discussant: Robert Corn, Deputy Director
Operations Evaluation Group
Center for Naval Analysis

In recent years, semi-Markov processes (SMP's) have found frequent application in modelling problems in management science, operations research and statistics.

The speaker will discuss how a certain class of "combat" situations can be modelled as a SMP and will then derive the necessary methodology. An example of a combat situation that could be treated as a semi-Markov process would be one round of a boxing match. A military example would be a dogfight with modern jets.

When and Where: Thursday, November 13, 1975, 12:30 to 2:00 p.m.
Center for Naval Analysis
1401 Wilson Blvd.
Rosslyn, Virginia

PHYSICAL SCIENCE AND ENGINEERING PROGRAM

- Topic: Applications of Markov Renewal Models to Traffic Engineering Problems
- Speaker: Gerald R. Stewart, U.S. Department of Transportation
Federal Highway Administration
- Chairperson: Seymour M. Selig, Office of Naval Research

Analytical and computational properties of Markov Renewal Models are useful for capturing the essence of many traffic phenomena which are observed as dependent systems in practical traffic engineering problems. Methods of Statistical inference for Markov Renewal Models of traffic on freeways and at signalized intersections are discussed in terms of comparisons between simulated traffic data and observed traffic data. Inversion of Laplace-Stieltjes transforms is used in the development of statistical tests of comparison based on several independent realizations from Markov Renewal Processes.

- When and Where: Wednesday, November 19, 1975, 12:30 to 2:00 p.m.
Main Commerce Bldg., Room 2062
14th Street between Constitution and E Streets

METHODOLOGY PROGRAM

- Topic: Multiple Frame Surveys--Some Problems in Application
- Speaker: Frederic Vogel, Statistical Reporting Service, Department of Agriculture
- Chairperson: Joseph Steinberg, Survey Design Inc.
- Discussant: Easley Hoy, Bureau of Labor Statistics

Multiple frame surveys are subject to all the operational problems that plague single frame surveys. However, by their very design, problems unique to multiple frame surveys also occur. In particular, some time during the survey process it is necessary to determine for every sample unit whether it could have been selected from another frame also being used. The available theory does not tell us exactly how this is to be done--it only gives us alternative estimators to use once the determination has been made.

The speaker will examine some of the problems involved in the overlap determination, and how they can be considered in the estimation process. The discussion will be in terms of a multiple frame survey of farm operators.

- When and Where: Tuesday, November 25, 1975, 12:30 to 2:00 p.m.
Martin Luther King Library, 9th & G Sts., N.W.
Auditorium Room A5.

JOB APPLICANT

Listed below is a brief description of the qualifications of an individual submitting an application seeking employment. Any employer interested in interviewing an applicant should notify Mrs. Marie D. Eldridge of their interest by Code Number. The notification should be by mail and should include the employer's name, organization, and telephone number. The employee will be notified of the employer's interest and initiation of any further contact will be left to the employee. All contacts will be confidential. Mrs. Eldridge's address is: Director, Office of Statistics and Analysis, Research and Development, National Highway Traffic Safety Administration, U.S. Department of Transportation, 400 Seventh Street, S.W. Room 5125, Washington, D.C. 20590.

Code NumberApplicant

164-10-75

(1) B.A. Political Science, M.A. International Relations; (2) Statistics, Correlation Coefficients, Regression, Computer System Analyst, and Data Processing; (3) Four years Government and Industry; (4) GS7-9 or equivalent; (5) Government or Industry D.C. Area.

Code:

- (1) Education
- (2) Fields of Competence
- (3) Years of Experience
- (4) Salary or GS Level Requirement
- (5) Type of Employment and Geographic Area

WASHINGTON OPERATIONS RESEARCH MEETING

On Thursday, November 13, Ray Sheppach of Jack Faucett Associates will speak on "Input-Output Models in Transportation" at 8:00 P.M., 7th floor Auditorium, Center for Naval Analyses, Rosslyn, Virginia.

LOOKING AHEAD

In early December two interesting programs are being planned for the society as follows:

Dec. 3 - Panel discussion on the Statistical and Policy Implications of Public Law 93-380, Education Amendments of 1974.

Dec. 4 - Controlled Selection - Recent Developments and Applications.

Make plans now for attending these sessions. Additional details will appear in the December Newsletter.