



JANUARY 1985

WASHINGTON  
STATISTICAL  
SOCIETY

NEWSLETTER

CALENDAR

- 1. January 8 Tuesday Updating Seasonal Adjustment Factors While Preserving Historic Patterns: The Plant and Equipment Expenditures Survey
- 2. January 15 Tuesday Psychometrics in Personnel Selection
- 3. January 17 Thursday Problems Associated With Regulation Of Environmental Application Of Genetically Engineered Microorganisms
- 4. January 28 Monday The Data Adjustment System for the Consumer Expenditure Survey
- 5. January 30 Wednesday Some Experience With The UNIX Operating System
- 6. January 31 Thursday An Overview of Acceptance Control In Process Improvement

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**Random Bits: By Wendy Alvey, Chair, WSS Committee on Short-Courses**

The Committee on Short Courses would like to take this opportunity to thank all of those who took the time to answer our first membership survey on short courses. The responses showed a good deal of thoughtfulness and yielded many useful suggestions. It is certainly clear that there is a lot of interest in the WSS Continuing Education Program! Some Survey Results: About ten percent of the WSS Membership responded to the Short Course Questionnaire. The table below shows the proposed topics ranked in order of preference:

Proposed Topic	Percent of Respondents Definitely Interested*
Description of Microcomputer packages for Statistics.....	61
Exploratory Data Analysis.....	56
New Developments in Sampling Applications.....	45
Applications of Specific Computer Packages.....	41
Expert Systems and Use of Artificial Intelligence.....	29
Quality Control.....	23
Workshop on Improving Statistical Presentations.....	23
Survival Data Analysis.....	22
Questionnaire Design.....	22
Workshop on Writing Statistical Papers.....	19

\* This is the percent of respondents who answered yes, they were interested in attending. For each question, an average of another 10-12 percent indicated possible interest by responding "uncertain".

**WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS**

**Agri. & Nat. Res.**  
Fred Vogel 447-3638  
Gary Liberson 363-7140

**Phys. Sci. & Eng.**  
Seymour Selig 334-3522  
Nozer Singpurwalla 676-7515

**Short Courses**  
Wendy Alvey 376-0216

**Economics**  
Wray Smith 484-9220  
Bette Mahoney 695-9053

**Pub. Health & Biostat**  
James Dambrosia 496-5763  
Jai Choi 436-7047

**Methodology**  
Cathryn Dippo 523-1874

**Social & Dem.**  
Lee-Ann Hayek 357-1587  
Charles Mann 466-6161

**Stat. Computing**  
Harry Foxwell 872-8058  
Ron Steele 475-3483

**Newsletter**  
Julia Oliver 252-1121

**Employment**  
Evelyn Kay 223-2530

### Random Bits (Continued)

Generally speaking, there was an overwhelming preference for applied courses, as opposed to those focusing on theoretical aspects. While the level of the curriculum varied somewhat from one course to another, there was a slight tendency towards a mid-level orientation.

As to scheduling options, more than half of the respondents seem to prefer that courses be held during the workday week. There was also a strong preference for one whole day session, as opposed to courses split into consecutive or non-consecutive half days, or taking up more than one day in a week. There was however enough interest in weekend and evening schedules that we will continue to consider those options, especially for computer oriented courses.

The survey results also showed only minimal interest in Continuing Education credits. Furthermore, generally speaking, the most interest for courses was in the \$50 and \$100 ranges with close to half of the respondents indicating that they could probably get their fees reimbursed by their employer. Of course, as might be expected for the Washington, D.C. chapter, well over half of the respondents are Federal employees.

Future Plans: With the results of the survey and feedback from last year's expanded Continuing Education program, the Committee on Short Courses has been trying to pull together a program for the rest of the program year. Several sessions are now tentatively planned:

- 1) Around the end of February, Don King will re-offer a two day introductory course on Federal surveys for non-statisticians.
- 2) In early March, Terry Ireland and Bill Gale will conduct a one-and-a-half-day course on Expert Systems and the Use of Artificial Intelligence. The first half-day will lay the groundwork for this mid-level course.
- 3) Later in the spring, Harry Foxwell has agreed to present a one-day session on Statistical Packages for Microcomputers. A hands-on lab is tentatively planned to follow the lecture.
- 4) Also scheduled for spring is a Workshop on Writing and Presenting Statistical Papers. This is a combined workshop similar to those given separately in prior years.

More information on these courses will be made available shortly.

Also under consideration for later this year is a two-day video course on Generalized Linear Models and a session on Exploratory Data Analysis. Arrangements for both of these courses are still underway.

With these courses (and the sixty-eight other suggested topics) we hope to have a full Continuing Education program to offer for the rest of the year. Anyone with further suggestions - especially possible speakers - should contact: Wendy Alvey, Chair, WSS Committee on Short Courses, Statistics of Income Division, D:R:S, Internal Revenue Service, 1111 Constitution Avenue, N.W., Washington, D.C. 20224.

## PROGRAM ABSTRACTS

**TOPIC:** Updating Seasonal Adjustment Factors While Preserving Historic Patterns:  
The Plant And Equipment Expenditures Survey  
**SPEAKER:** John H. Gates, Bureau of Economic Analysis  
**CHAIR:** Betty Mahoney, Department of Defense  
**DISCUSSANT:** David Pierce, Federal Reserve Board  
**DATE AND TIME:** Tuesday, January 8, 1985; 12:30PM-2:00PM  
**LOCATION:** George Washington University, Room 309, Building C, 2201 G Street, N.W.  
**ABSTRACT:** The seasonal adjustment factors for the Plant and Equipment Expenditures Survey are updated once a year. When this is done, the output of the Census X-11 program is adjusted so that the seasonally adjusted quarterly estimates for each industry sum to the same annual value as the unadjusted quarterly estimates for that industry. The adjustment is made in a way that introduces as little change as possible in the historic pattern of the seasonally adjusted estimates. This presentation will explain the adjustment procedure used and will show that a generalized form of this procedure can be used whenever it is necessary to minimize the changes introduced by forcing a time series to satisfy on a priori constraint.

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**TOPIC:** Psychometrics In Personnel Selection  
**SPEAKER:** Max McDaniel, Morris and McDaniel, Inc.  
**CHAIR:** Charles R. Mann, Charles R. Mann Associates, Inc.  
**DISCUSSANT:** James L. Outtz, Howard University  
**DATE AND TIME:** Tuesday, January 15, 1985; 12:30PM-2:00PM  
**LOCATION:** Room BE-069, Forrestal Building, 1000 Independence Avenue, S.W.  
**ABSTRACT:** Increased pressure from the legal arena has led in recent years to an emphasis on the quantitative aspects of personnel selection. The speaker will address the relationship between the legal and technical requirements drawing examples from actual cases on which he has worked. He will consider such issues as establishment of validity, setting of cut-off scores, item-writing and screening, and the special concerns of working in the areas of litigation and regulation.

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**TOPIC:** Problems Associated With Regulation Of Environmental Application Of Genetically Engineered Microorganisms  
**SPEAKER:** Morris Levin, Environmental Protection Agency  
**CHAIR:** Robert Casady, NCHS  
**DISCUSSANT:** John Fowle, EPA  
**DATE AND TIME:** Thursday, January 17, 1985; 1:30PM-3:00PM  
**LOCATION:** Center Building, Room 1-23, 3700 East West Highway, Hyattsville, Maryland  
**ABSTRACT:** The science on which the emerging biotechnology industry is based will be briefly described as will the growth of the industry. Specific applications involving potential environmental effects will be described. The roles of various government agencies in regulating environmental applications and the science involved will be described.

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**TOPIC:** The Data Adjustment System for the Consumer Expenditure Survey  
**SPEAKER:** Judith H. Mopsik, ORI, Inc.  
**CHAIR:** Barry Ford, USDA  
**DISCUSSANT:** Chapman Gleason, Department of Justice  
**DATE AND TIME:** Monday, January 28, 1985; 12:30PM-2:00PM  
**LOCATION:** Martin Luther King Memorial Library, Room A-5, 901 G Street, N.W.  
**ABSTRACT:** The Data Adjustment System is a 50,000 line production system developed for the Bureau of Labor Statistics for processing information from the forty different sections of the quarterly Consumer Expenditure Survey. This session will describe the requirements for processing the survey. The details of the imputations methodologies will be discussed, along with the strategy used to make the computer programs generic rather than survey specific. The collapsing technique and allocation algorithms will be presented.

## PROGRAM ABSTRACTS (Continued)

TOPIC: Some Experience With The UNIX Operating System  
SPEAKER: Brian Carney, USDA  
CHAIR: Ron Steele, USDA  
DISCUSSANT: Harry Foxwell, American Chemical Society  
DATE AND TIME: Wednesday, January 30, 1985; 12:30PM-1:30PM  
LOCATION: Martin Luther King Memorial Library, Room A5, 901 G Street, N.W.  
ABSTRACT: The UNIX operating system has received wide attention as a standard for small and medium size computers. How useful is it in a research environment? What software is available? The experiences of the Statistical Reporting Service, USDA will be highlighted.

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CO-SPONSOR: George Washington University  
TOPIC: An Overview of Acceptance Control in Process Improvement  
SPEAKER: Edward G. Schilling, Rochester Institute of Technology  
CHAIR: Seymour Sellig, National Academy of Science  
DATE AND TIME: Thursday, January 31, 1985; 12:30PM-2:00PM  
LOCATION: George Washington University, Marvin Center, Room 404, 800-21st Street, NW  
ABSTRACT: Statistical acceptance sampling procedures can be utilized in a program of acceptance control to achieve better quality at lower cost, increase productivity, and improve control of products and processes. An overview of modern acceptance sampling plans, schemes and systems will be presented with emphasis on their use with process control in pursuit of the goal of continuing quality improvement.

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### Notes From the November Board Meeting

One item of new business at the November meeting of the Board of Directors was the interim report of the ByLaws Review Committee. A number of minor changes are needed to bring the ByLaws into conformance with the revised WSS Constitution and the American Statistical Association rotating membership year. The one significant change suggested by the Committee was to disband the Methodology Section and continue it as a normal program committee (see below). In other actions the Board passed the following non-commercialization resolution:

"The primary emphasis of Society programs shall be directed toward the fostering of statistical knowledge, statistical research, and the professional, technical and career interests of the members of the Society and the statistical profession. No talk, or session, shall promote, or give the appearance of promoting, the sale of a commercial product such as a book, a seminar or short course, or software for large or personal computers. This shall not preclude evaluations of specific products, or a class of products, in sessions where one of the speakers or panelists may be the author or creator. Other activities of the Society, such as articles in the Newsletter, shall follow the same non-commercial guidelines."

### Proposal to Disband Methodology Section

The Constitution and ByLaws of the Washington Statistical Society specify procedures for the establishment and operation of Sections of the Society. The only Section which has been created is the Methodology Section which was established in 1962. However, at least in recent years, Methodology has not operated as a formal section with annual meetings and other provisions of the ByLaws.

Methodology has kept the tradition of nominating and electing a Section Chair-elect each year but procedures have not been maintained to define members of the Section and to insure that only Section members vote in the election.

(Continued)

## Proposal to Disband Methodology Section (Continued)

The Committee which is currently reviewing the ByLaws proposes that the Methodology Section be disbanded. It will be maintained as a program Committee and will keep the approach of naming a new program chair each year. This item will be discussed at the Washington Statistical Board of Directors meeting January 29, 1985. Any comments on the proposal should be sent to Washington Statistical Society, P.O. Box 23502, Washington, D.C. 20026 by January 15, 1985.

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## Census Bureau Holds First Annual Research Conference

The Bureau of the Census will hold its First Annual Research Conference on March 20, 1985, at the Sheraton International Conference Center and Hotel in Reston, Virginia. Session topics include automation, survey design and estimation, statistical computing, evaluation of data quality, confidentiality issues in Federal statistics, improving National population projections methodology, total survey design approach for telephone surveys, valuation of noncash benefits, the underground economy, non-response adjustment procedures in sample surveys, statistical standards, and quality issues and experiences. The conference also includes a Shirley Kallek Memorial Lecture delivered by Alan Greenspan former Chairman of the Council of Economic Advisers, and presentations by Sidney L. Jones, Under Secretary for Economic Affairs, Department of Commerce, and Janet Norwood, Commissioner, Bureau of Labor Statistics. The cost of the conference is \$75. For additional information and/or reservations, contact the Conference Coordinator, Carolee Bush, Center for Survey Methods Research, Bureau of the Census, Washington, DC 20233, 301/763-7976.

## WSS Information For Visiting ASA Members

Short-term job assignments in the field of statistics often bring visiting statisticians, economists and social-scientists to the Washington, D.C. metropolitan area. WSS would like to invite these visitors to participate in the activities of our chapter. Contact Edith McArthur at 401/963-5158 if you are aware of visitors to our area that might like to participate in WSS activities and receive the monthly newsletter.

## EMPLOYMENT COLUMN

Deadline for inserting notices is five (5) weeks before the month of publication.

Send notices and requests to:  
Evelyn R. Kay  
520-22nd Street, N.W.  
Washington, D.C. 20037 202/331-1153

## JOB OPENINGS

**Senior Statistician** Demonstrated experience in sampling design and applied statistics needed. Desire demonstrated knowledge of energy and environmental issues. Forward resume to Personnel A-1, Applied Management Sciences, Inc., 962 Wayne Avenue, Suite 701, Silver Spring, Maryland 20910.

**Statisticians** Seeking statisticians at the BS, MS and Ph.D levels with background in any of the following areas: environmental issues, engineering/laboratory data analysis, biostatistics, risk assessment, policy or regulatory analysis, occupational safety and health. Also seeking experienced statistical programmers, preferably with microcomputer or SAS expertise. Send resume and salary requirement to Karen Wise, JRB Associates, 8400 Westpark Drive, McLean, Virginia, 22102.

## JOB OPENINGS (Continued)

Statisticians  
Columbus, Ohio;  
and Washington, D.C.

Battelle Columbus Laboratories, a world leader in contract research and development, has positions available for statisticians. Positions require an MS or Ph.D in statistics or a related field, experience in FORTRAN programming and use of statistical software packages, and good communication skills. Work with experienced research staff using experimental design, statistical modeling and data analysis techniques to solve quantitative problems in engineering and the physical sciences. Competitive salaries and comprehensive benefit package. Contact: Estella Brown, Department S-4, Battelle Columbus Laboratories, 505 King Avenue, Columbus, Ohio 43201.

Survey Statistician/  
Associate Director of  
Sampling

Masters Degree or Ph.D in statistics with specialization in sampling, and 4 years or more experience in sampling. Responsibilities include: serving as a sampling statistician on a wide variety of government contracts; writing sampling sections for proposals; attending best and final briefings; working with the Director of Sampling to expand organization's sampling capabilities; working on survey design issues; and analyzing survey data. Skill prerequisites include: sample design and implementation; weighting; nonresponse and imputation adjustments; standard error estimation; and proposal and writing skills. Contact Debbie Harding, Abt Associates, Inc., 4250 Connecticut Avenue, N.W., Washington, DC 20008, 202/362-2800.

## JOB APPLICANTS

Listed below is a brief description of the qualification of an applicant seeking employment. Employers interested in interviewing applicant should notify Mrs. Kay of their interest by CODE NUMBER. The request should be by mail and should include the employer's name, organization and telephone number. The applicant will be notified of the employer's interest, and initiation of any further contact will be left to the applicant. All contacts will be confidential.

CODE NUMBER: 85-03

Position Wanted:

Applied statistician in metro area.

Education:

M.A., Applied Statistics, California State University at Long Beach, 1978; prior emphasis on social science, linguistics and Zoology.

Experience:

Multivariate research, software development. Statistical packages, FORTRAN and BASIC. Also publishing, teaching, management, and small business.

Area of Interest:

Multivariate research, software development.



P.O. Box 23502  
Washington, D.C. 20026

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