

**AMERICAN STATISTICAL ASSOCIATION
ALASKA CHAPTER
NEWSLETTER
May 14, 1991**

VIDEO TAPE SHORT COURSE

By Linda Brannian

The Chapter will be showing the ASA video short course titled "Analysis of Survival" Data by David R. Cox and David Oakes. The presenters of this 2-day course provide a connected account of methods for the analysis of survival data, including discussion of recent developments. The Course, while self-contained, will be based on the book, "Analysis of Survival Data" by David R. Cox and David Oakes (London: Chapman and Hall; New York: Methuen, 1984). The course is intended primarily for applied statisticians in research organizations and others conducting advanced applied statistical work. No detailed previous knowledge of the subject will be assumed. Some familiarity with multiple regression, the analysis of contingency tables and the method of maximum likelihood would be useful. While the underlying concepts and assumptions will be discussed, the emphasis will be on specific statistical techniques for analyzing data, not on mathematical theory.

Survival data arise often in medical contexts and in connection with industrial life-testing and reliability. They occur also in other fields, ranging from econometrics (duration of periods of unemployment) to physics (length of particles tracks). The essential feature is a response variable that is a positive (usually a duration in time), and frequently subject to right censoring. The duration of survival time can be of interest in itself; or, more commonly analysis can focus on the effect on survival time of assigned treatments and/or uncontrolled covariates.

This video will be shown June 3-4 (Monday, Tuesday) in Anchorage at the Alaska Department of Fish and Game office, 333 Raspberry Road. For more information concerning room location and time, contact Linda Brannian at 267-2118. The video will be viewed the week of June 17 in Juneau. For information on actual date, time, and location contact Jim Blick at the Alaska Department of Fish and Game 465-4253. The fee for viewing the Video is \$75 and includes a copy of the notes.

ANNUAL CHAPTER MEETINGS

By Douglas Pengilly

We have a guest speaker and dates lined up for our 1991 chapter meeting in Juneau. The meeting dates have been set at 16 and 17 September and we have arranged for Dr. Robert V. Hogg (University of Iowa) to present a tutorial on Robust Statistics. Besides being a notable statistician, Dr. Hogg has had extensive involvement with ASA (e.g., he is a recent past President). Those who have seen presentations by

Dr. Hogg characterize him as an outstanding speaker. Also, the topic should be of great interest to most chapter members since we tend to be in applied statistics and often deal with data that tax the limits of "robustness."

I have only a passing familiarity with what sort of accommodations in the Juneau area are available for a meeting site and for housing/entertaining Dr. Hogg. I'd welcome (in fact, I plead for) any suggestions and help from chapter members in the Juneau area on this.

Finally, we do have a commitment from Dr. Robert J. Tibshirani (University of Toronto) to be our guest speaker at the 1992 chapter meeting in Anchorage. No dates have been set yet. He could do a treatment on bootstrapping, but we should seriously consider having him give an introduction to generalized additive models based around his recent book co-authored with T. J. Hastie. If you have some general or specific preferences/avoidances on subjects and dates, it is time to start letting them be known.

SESQUICENTENNIAL AWARD

At our 1989 annual meeting, this chapter established an award in honor of the sesquicentennial of the American Statistical Association. The award is to be presented for the statistical manuscript judged to be of greatest value to statistics in Alaska. Publication must have been within the previous ten years. Until very recently no papers had been nominated for this award. That now has changed; a paper has been nominated. This award will be presented at the 1991 annual meeting in Juneau. Please submit additional nominations to Don Marx whose address and phone number appear at the end of this newsletter.

DEMING'S PHILOSOPHY

by Don Marx

When I went to the Center for Quality and Productivity Improvement at the University of Wisconsin - Madison last August I knew very little about what was going on in the area of quality assurance; I did feel a strong need to find out. What I found was extremely enlightening. The continuous quality improvement movement stimulated by Dr. W. Edwards Deming has become accepted by many organizations throughout the country. Deming's management philosophy goes well beyond statistics, but the use of simple statistical methods by everyone in the organization is an important part of it. The acceptance of his ideas is not limited to the manufacturing industries; they are being successfully applied in health care, education, and other service industries and government organizations. There are some excellent examples of the application of continuous quality improvement methods right here in Alaska.

The Anchorage office of the Xerox Corporation participated in the efforts that resulted in that company recently receiving the Malcolm Baldrige National Award for Quality. The Alaska Native Medical Center in Anchorage is actively implementing

continuous quality improvement methods. David Langford and his colleagues at Mt. Edgecombe High School in Sitka have received national recognition recently. A recent meeting of Deming enthusiasts in Minnesota featured their work, and Mr. Langford and some of his students were featured at a recent meeting of the Madison Area Quality Improvement Network in Madison, Wisconsin. The Sitnasuak Native Corporation in Nome is adopting the Deming management philosophy. I suspect there are additional applications of which I am not aware.

In recent weeks I have met with several Anchorage area business people that have expressed some interest in organizing a local network of individuals and organizations that are interested in continuous quality improvement methods. It is too early to say that such a group will become a reality, but I think it has a fair chance for success. The purpose and scope of the network have not yet been defined, but some elements of a mission that have been mentioned are to promote continuous quality improvement methods, to share experiences with its implementation, and to either provide or coordinate opportunities for training. Since the continuous improvement methods are data based there may be considerable opportunity here for statisticians to get involved. I would appreciate hearing from any of you that are interested in this area.

For those of you that might be interested in an introduction to the idea of continuous quality improvement and the Deming philosophy, I recommend the following reading material:

Mary Walton "The Deming Management Method"
Masaaki Imai "Kaizen: the Key to Japan's Competitive Success"
Kaoru Ishikawa and David Lu "What is Total Quality Control?"

HIGHLIGHTS FROM THE NATIONAL OFFICE

The National Office of ASA has approved the assessment of a \$1.00 fee per chapter member for collection of chapter dues. This policy is now in effect. Currently members of the Alaska Chapter have the option of paying their dues either directly to our Secretary-Treasurer Linda Brannian or to include it in their payment to the National Office. Whether we continue to offer the latter alternative will be discussed at our annual meeting this year. Regular annual membership in the Alaska Chapter is \$10; the student fee is \$1.

The ASA is now operating under its new constitution. One feature of the new constitution is an "affiliate" membership at \$30 per year. This new membership class includes subscription to Amstat News and listing in the ASA Directory. Chapter membership is required. We will provide further information about this new class of membership as it becomes available.

The new constitution is consistent with the old one in requiring that the President, Secretary, and Chapter Representative be regular full ASA members. The Council of Chapters also recommends strongly that the Chapter Treasurer be a full ASA member. The Alaska Chapter Constitution is consistent with these requirements. There may be other areas, however, where our constitution is not in conformance with the new Association-wide structure. It will be necessary in the near future to review our constitution and bring it into conformance with the national constitution.

NEW MEMBER

We welcome **Askar Choudhury** to our chapter. Askar is a recent Ph.D. graduate of Arizona State University. He has joined the faculty in the School of Business at the University of Alaska Anchorage.

POSITION AVAILABLE

The Division of Commercial Fisheries has an opening for Biometrician 1. Contact Brian Bue at the Department of Fish and Game, 333 Raspberry Road, Anchorage, AK 99578 or at (907) 267-2123.

President: Don Marx, School of Business, University of Alaska, Anchorage, AK 99508, (907)786-1755
Vice President: Doug Pengilly, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Rd., Kodiak, AK 99925-0101, (907)486-4791,
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Ex. Comm: Jim Blick, Alaska Department of Fish and Game, Division of Commercial Fisheries, 802 3rd St. Douglas, AK 99824, (907)474-6550.
Ex. Comm: Pham Xuan Quang, Department of Mathematical Sciences, University of Alaska Fairbanks, AK 99775-1110, (907)474-6550.
Representative: Alan Johnson, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Rd., Kodiak, AK 99925-0101, (907)486-4791.