## **ASQ Statistics Division Newsletter**

#### Volume 4, Number 1, February 1983

### **Contents**

- Statistics Division Leadership
- Survey Results
- Innovative Ideas
- Standards
- ASQC Basic References in Quality Control: Statistical Techniques
- Chairman's Corner

## **Statistics Division Leadership**

Chairman

Frank B. Alt

Department of Management Sciences and Statistics

University of Maryland

College Park, Maryland 20742

Vice Chairman

John S. Ramberg

Dept. of Systems & Industrial Engineering

University of Arizona

Tucson, AZ 85721

Secretary

William M. Mead

Babcock & Wilcox

P. O. Box 785

Lynchburg, VA 24505

Treasurer

Peter J. Jacobs

3M

224 - SW 3M Center

St. Paul, MN 55144

## **Survey Results**

Survey results are based on 268 responses. Most desired were Minipapers on successful, unique implementation of statistical OC techniques. Lists of new publications placed second. The Ask Carlos column, conference announcements, Statistics Division program listings and CQE Exam questions also received favorable ratings.

Unfortunately, I have had difficulty in convincing prospective authors to write suitable minipapers. I hope the strong interest demonstrated by the readers will encourage those considering authorship to proceed. If you have any interest in writing a minipaper for the newsletter, please let the editor know. As mini implies, papers need not and should not be long, just clearly written and of interest to the readers. This would be an excellent mechanism for obtaining professional recognition for your work and perhaps for getting in touch with others interested in the same area. All printed papers will carry a footnote stating that the views expressed are those of the author(s) and not necessarily those of the Statistics Division.

For those of you interested in CQE Exam questions, I have been asked to direct you to the biannual publication of exams and solutions in Quality Progress.

#### **Innovative Ideas**

GOAL, Growth Opportunity Alliance of Greater Lawrence, is. a non-profit <u>Massachusetts</u> corporation founded by Mayor LeFebre in 1978 for the purpose of improving the local economic climate. To accomplish this task, GOAL provides educational and consulting services for improving productivity through statistical quality control and employee involvement programs. Employee Involvement Services include:

- 1. On-site consultation services for program start-up and maintenance.
- 2. Seminars providing interfirm interaction of programs and training.
- 3. Training material assessment and recommendation.

Additionally, the Deming Project is a series of short courses, kicked off by Dr. Deming; to undertake the extensive educational effort required for improved performance.

For more information, write or call: G.0.A.L. 28 Stafford Street Lawrence, MA 01841 (617) 685-3900

## **Standards**

World Standards Day, October 14, 1982 has been recognized for 13 years. It is celebrated by the 89 national standards bodies of the International Organization for Standardization (ISO) and is marked throughout the world with conferences, exhibitions and special media campaigns. Since 1947, ASQC has recognized the need to standardize quality control definitions, terms and symbols. In 1977 ANSI approved ASQC to develop and approve Standards by the accredited organization method.

The American National Standard, ANSI/ASQC zl.9-1980 "Sampling Procedures and Tables for Inspection by Variables for percent Nonconforming" is the most recent approved standard. This standard is a modernization of MIL-STD-414 in language and content. Effective and efficient acceptance sampling is facilitated with this new document. To order, contact Sandra Shed, Technical Literature Sales Coordinator at ASQC Headquarters. Currently, the list of completed projects includes:

Title	Member Price N	Nonmember Price
2 ANSI/ASQC Standard A1-1978	\$7.00	\$8.00
"Terms, Symbols and Definitions for Acceptance Sampling"	Ψ7.00	ψ0.00
4 ANSI/ASOC Standard A2-1978	\$7.00	\$8.50
"Terms, Symbols and Definitions for Acceptance Sampling"	47.00	<b>40.0</b> 0
6 ANSI/ASQC Standard A3-1978	\$5.75	\$7.00
"Quality Systems Terminology"	1-11-	1
9 ANSI/ASQC Standard Al, A2, A3	\$15.00	\$18.50
(as a set)	4-000	7 - 5 - 5
11 ANSI/ASQC Standard B1 & B2		
"Guide for Quality Control-Control Chart Method of Analyzing	\$7.00	\$8.00
Data" 1958		
13 ANSI/ASQC Standard B3-1958	\$7.75	\$9.00
"Control Chart Method for Controlling Quality during Production"	Ψε	42.00
16 ANSI/ASQC Standard C1-1968	\$3.00	\$3.50
"Specification of General Requirements for a Quality Program"	40.00	7-3-3
20 ANSI/ASQC Standard z1.15-1980	\$8.75	\$10.50
"Generic Guidelines for Quality Systems"	7 3 1 7 2	7 - 3 3 3
21 ANSI/ASQC Standards z1.15 & A3	\$10.50	\$13.50
(as a set)	¥ - 3 1 2 3	7 -2 32 3
22 ANSI/ASQC Standards Al, A2, A3	\$21.50	\$27.50
& Z1.15 (as a set	Ψ=1.0 σ	Ψ=1.00
24 ANSI/ASQC Standard z1.9-1980		
"Sampling Procedures and Tables for Inspection by Variables for	\$10.00	\$12.00
Percent Nonconforming"		

# ASQC Basic References in Quality Control: Statistical Techniques

The basic reference booklet series is moving ahead. Current status is as follows:

- Vol. 1: How to Analyze Data with Simple Plots by Wayne Nelson (available)
- Vol. 2: How to Perform Continuous Sampling (CSP) by Kenneth S. Stephens (available)
- Vol. 3: How to Test Normality and other Distributional Assumptions by Samuel S. Shapiro(available)
- Vol. 4: How to Perform Skip-Lot and Chain Sampling by Kenneth S. Stephens (available)
- Vol. 5: How to Run Mixture Experiments For Product Quality by John A. Cornell (available early 1983)
- Vol. 6: Basics of Life Data Analysis by Wayne Nelson (available mid 1983)
- Vol. 7: How and When to Perform Bayesian Acceptance Sampling by Thomas W. Calvin (available mid 1983).

Authors are still needed for several booklets. Interested individuals may contact either John A. Cornell, 219 Rolfs Hall, <u>University of Florida</u>, <u>Gainesville</u>, <u>FL</u> 32611 or Samuel S. Shapiro, Dept. of Math Sciences, <u>Florida International University</u>, Tamiami Trail, <u>FL</u> 33199. Copies of the booklets may be obtained from ASQC Headquarters 230 West Wells St., Milwaukee, WI 53203 (see <u>Quality Progress</u> for order forms).

## **Chairman's Corner**

In structuring the activities that I perceive the Statistics Division should pursue during my term as chairman, I referred to the Guiding Policy established by Prof. William Hunter in 1980, when he served as first chairman. Although this appears in the February, 1981 issue of <u>Quality Progress</u>, I have reproduced it here. I have primarily concentrated on points 2 and 3.

Considerable energy was expended in preparing the program for the 37th Annual Quality Congress. The content for the sessions sponsored by the Statistics Division appears in this newsletter. Hopefully, the papers will appeal to the diverse backgrounds of our members. Prof. Ron Askin, who is currently newsletter editor, has consented to serve as Program Chairman for the 38th Annual Quality Congress.

The Statistics Division has reaffirmed its intent to be a cosponsor of the Annual Conference on Applied Statistics, formerly called the Princeton Conference. As a cosponsor, we designate a speaker and moderator for one session. Prof. Sam Kotz of the <u>University of Maryland</u>, who is widely recognized for his books on statistical distributions and, more recently, the 8-volume <u>Encyclopedia of Statistical Sciences</u>, has agreed to be the speaker for the next conference. We have also been asked to provide a speaker for a preconference short course. Although I have requested more extensive participation, that request has been denied at this time. However, by a special arrangement with the Metropolitan Section, I have purchased multiple copies of several different books at substantially reduced prices. These discounts are being passed on to members of the Statistics Division. Details are in the newsletter.

The Statistics Division participated in one session of the 26th Annual Fall Technical Conference held on October 21-22, 1982 at <u>Atlantic City</u>. Dr. Robert L. Perry gave an excellent tutorial on Non-Standard Sampling Plans. I had the pleasure of serving as moderator. More extensive participation at future conferences is being discussed with the <u>Chemical Division</u> and the <u>Section on Physical and Engineering</u> Sciences of ASA.

In what I am hoping to be an annual event, I have arranged with Dr. W. Edwards Deming to present a one-day seminar on Saturday, March 5, 1983, at the <u>University of Maryland</u> in College Park. Please plan to attend.

At this point, I became especially concerned with point 3 in the Guiding Policy. How many more projects should we undertake? I have received several more requests for conference participation. Prof. John Ramberg, who is Chairman-Elect, and I have discussed this at some length. We are still weighing the alternatives. I would certainly welcome your input on the activities that I have undertaken and any future directions that I might explore. My mailing address is:

Frank B. Alt
College of Business and Management
University of Maryland
College Park, Maryland 20742