



American Society for Quality Control

P.O. BOX 444, POINTE CLAIRE — DORVAL H9R 4P3

0401

N E W S I E T T E R

MONTREAL SECTION

APRIL 1987

OFFICERS - 1986 - 1987

CHAIRMAN

Charles N P Cheun Eng
C P Rail
Mechanical Dept
Quality Assurance
RM 600 Windsor Station
Montreal, Que
H3C 3E4
(514) 395-7243

VICE CHAIRMAN & EXAMINING

Lin Humphries
Canadair Ltd
P O Box 6087
Station A
Montreal, Que
H3C 3G9
(514) 744 1511 (4109)

SECRETARY

Deborah Destailleurs
Canadair Ltd
P O Box 6087
Station A
Montreal, Que
H3C 3G9
(514) 744-1511 (3246)

AST SECRETARY & PUBLICITY

Dr David Tozer C O E
Quality Management Consulting
151 Stillview Rd
Pointe Claire, Que
H9R 2Y1
(514) 695-2028

TREASURER

R Stewart Lavoie
C.P. Rail
Mechanical Dept
Quality Assurance
RM 600, Windsor Station
Montreal, Que.
H3C 3E4
(514) 395-7843

OTTAWA SUB-SECTION CHAIRMAN

Anthony T. Don
Spar Aerospace Ltd
Defence Systems Div
P O Box 13050
Kanata, Ont
K2K 1X3
(613) 592-3430 (2210)

NOTICE OF MONTHLY MEETING

Spar Aerospace Limited

P.O. Box 13050
Kanata, Ontario K2K 1X3



DAVID FLORIDA LABORATORIES (OTTAWA)

This month, we will visit the David Florida Laboratories, part of the Canadian Defence Research Establishment. Our hosts will be SPAR AEROSPACE.

DATE: 29 April 1987

TIME: 7:00 PM

PLACE: DEFENCE RESEARCH ESTABLISHMENT
David Florida Laboratories
Ottawa, Ontario

DIRECTIONS: See the map on the reverse side.

Montreal members may hop on the ASQC bus at the main entrance of CANADAIR Ltee, on the corner of Poirier and Laurentian Blvd. Members ride free, guests will pay \$5. BUS LEAVES at 5:00 PM.

Please confirm your presence with Ms GIBBS at (514) 340-3132. Seats are limited.

COMMITTEE CHAIRMEN

MEMBERSHIP

George G Andrews
Canadian Marconi Company
Quality Assurance
2442 Trenton
Town of Mount Royal, Que
H3P 1Y9
(514) 341-7630 (4629)

EDUCATION

Alan Smith
Bendix Avalex Inc
P O Box 2140
St Laurent, Que
H4L 4X8
(514) 744-7456

NEWSLETTER EDITOR

Jean-Pierre Amiel
Canadian Marconi Company
2442 Trenton
Town of Mount Royal, Que
H3P 1Y9
(514) 341-7630 (4845)

PROGRAM

Edmund Ratney
Bendix Avalex Inc
200 Laurentien Blvd
St Laurent, Que
H4M 2L5
(514) 744-2811 (7231)

ARRANGEMENTS

Gerald Heilmann
Dometal Inc
2175 St Patrick St
Montreal, Que
H3K 1B4
(514) 935-1186 (31)

RELATIONS & Q P CORRESPONDENT

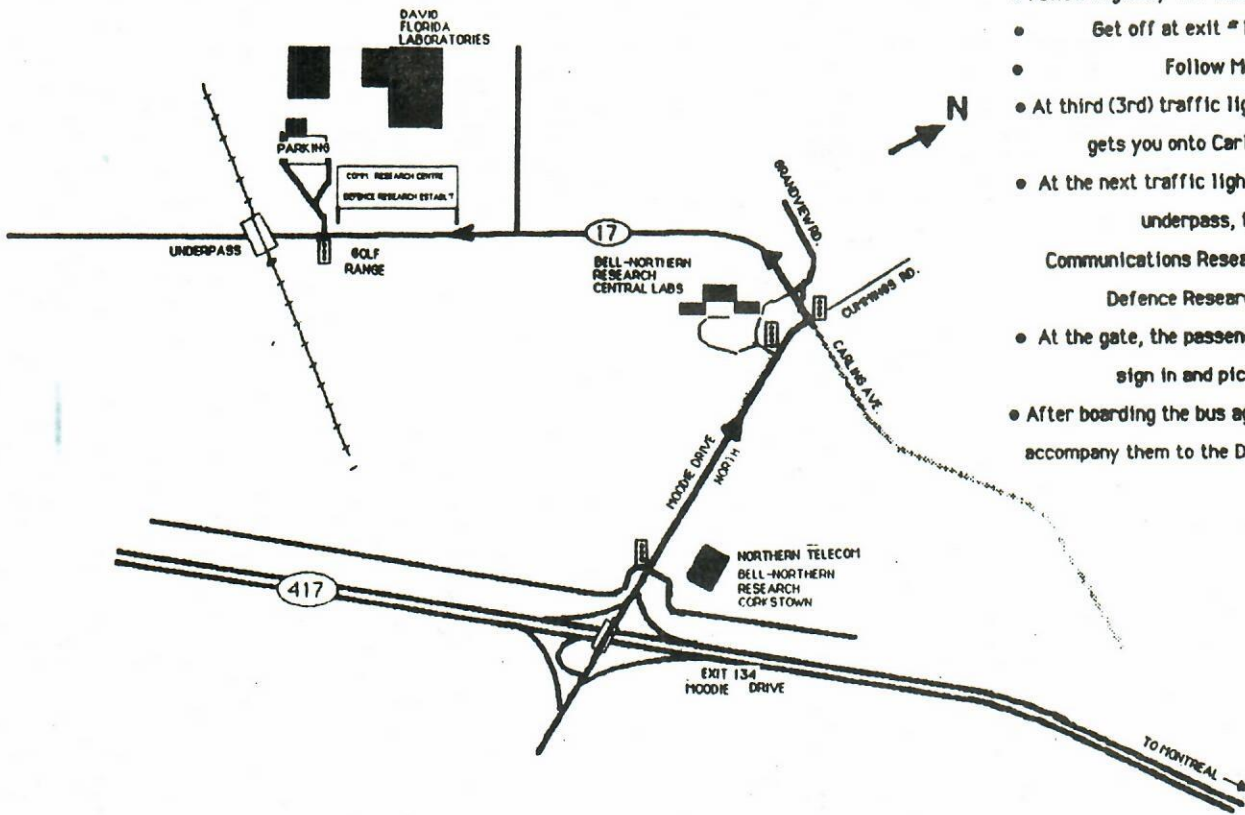
Denis M. Martin P. Chem
Gillette Canada Inc
5450 Cote De Lesse
Montreal, Que
H4P 1A7
(514) 340-2800 (2286)

SECTION MANAGEMENT AWARD

Lan Barth, Eng.
Quality Management Consulting
110 Grassmere Ave.
Pointe Claire, Que.
H9R 2Y8

ASQC APRIL 29 VISIT TO OTTAWA

- Follow highway 417 west through Ottawa
- Get off at exit #134, Moodie Drive
- Follow Moodie Drive North
- At third (3rd) traffic light turn left, this gets you onto Carling Ave. (Hwy 17)
- At the next traffic light, just before the underpass, turn left into the Communications Research Centre & the Defence Research Establishment.
- At the gate, the passengers will have to sign in and pick up their badges.
- After boarding the bus again, a guide will accompany them to the David Florida Labs.



A bit of a background:

The David Florida Laboratories (DFL) are owned and operated by government personnel, and rented out to private industry for their use.

Spar Aerospace Limited, your sponsor for the evening, has a full-time staff in residence, to integrate and test a large number of their space hardware, such as communication satellites, solar panels, remote manipulators etc.

Hopefully, at the time of the visit, there may be some hardware to see, such as the Olympus solar-panel simulation, and a full-scale model of the satellite Spar built and developed for Brazil.

Of interest are the huge thermo-vacuum chamber, the enormous shake-table, and the largest wide-spectrum anechoic chamber in Canada, the state-of-the-art mass properties equipment, and the infra-red solar simulation technology developed by Spar.

It should be an evening of interest for all. Hope to see you there.

regards, 

A.T. Don
Ottawa sub section coord

YOUR OPINION

Well it's the time of year again where we at the executive do our retro and intro-spec. We are looking for section officers to continue and expand our work as well as bring in new ideas. If you want to join us, just give Charles CHEUN a call at (514)395-7243. Don't forget we want to start sub-sections too!

In the meantime, here is a bit of work for you. Please fill-in the small questionnaire below and return to me. I want to know what YOU want in YOUR Newsletter. I hope to read you very soon.

1. What type of news do you want to see in the Newsletter?

- | | YES | NO |
|------------------------|--------------------------|--------------------------|
| a) General technical | <input type="checkbox"/> | <input type="checkbox"/> |
| b) General scientific | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Quality | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Other ASQC Sections | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Courses | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Job opportunities | <input type="checkbox"/> | <input type="checkbox"/> |

2. How do you feel that the Newsletter should cover these items?

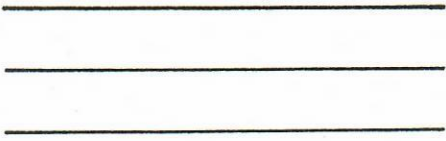
- | | MORE | LESS |
|------------------------|--------------------------|--------------------------|
| a) General technical | <input type="checkbox"/> | <input type="checkbox"/> |
| b) General scientific | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Quality | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Other ASQC Sections | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Courses | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Job opportunities | <input type="checkbox"/> | <input type="checkbox"/> |

3. How satisfied are you with the present Newsletter?

- | NOT | 1 | 2 | 3 | 4 | 5 | VERY |
|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------|
| SATISFIED | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | SATISFIED |

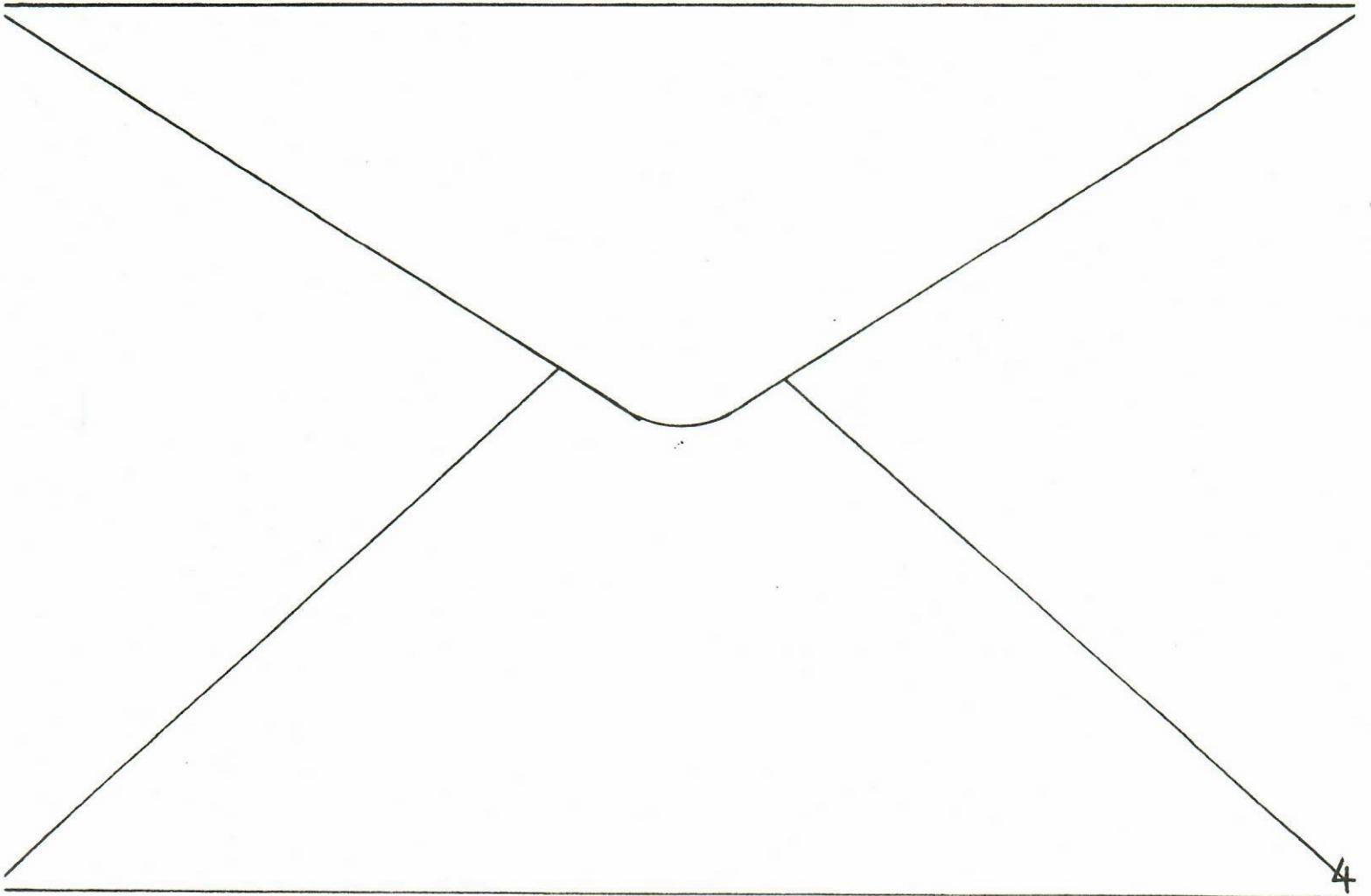
4. What changes would you like to see in the Newsletter?

Thank-you for your participation. Just fold and mail to us.



Please
put a
36 ¢
stamp

CANADIAN MARCONI COMPANY
C/O JP AMIEL BOX 94
2442 TRENTON AVE
MONTREAL
H3P 1Y9





American Society for Quality Control
P.O. BOX 444, POINTE CLAIRE — DORVAL HTR 4P3

NEW MEMBERS' CORNER

MONTREAL SECTION

0401

NEW MEMBERS CORNER

We wish to welcome the following new members to the Montreal Section:

Alain BRAULT
QC Director
WOODRIDGE FOAM Corp
St Jérôme, Québec

David DOLE
QA Coordinator
MICHELIN TIRES CANADA
Bridgewater, Nova Scotia

Frederik HARVIE
Production Manager
MICHELIN TIRES CANADA
New Minas, Nova Scotia

Jack PASTUSZKO
QA Technologist
CIRCOCRAFT
Pointe Claire, Québec

André PAYENAUDE
QA Manager
COMPAGNIE ELEC PIONEER DU PQ
Granby, Québec

Transfer: Richard BAYLIS
Manager QA
SPAR AEROSPACE
Montreal, Québec

LETTERS TO THE EDITOR:

o Send all your letters and articles to:

JP AMIEL, BOX 94
C/O CANADIAN MARCONI COMPANY
2442 Trenton Ave
MONTREAL H3P 1Y9
514-341-7630 Ex 4845

EXECUTIVE COMMITTEE MEETINGS

The executive committee meetings are open to all members and are held usually once a month, to discuss the upcoming activities, new ideas and programs. To attend a meeting, contact the Secretary, Debbie Deslauriers, at 744-1511 ext. 3246, for details of the upcoming meeting.

QUALITY SAMPLES

B-1B bomber feels big chill during environmental tests in Florida

▲ THE B-1B, the USA's new strategic penetrating bomber, gets a touch of 'Florida's arctic' in the McKinley Climatic Laboratory, Eglin AFB, where it is undergoing 18 weeks of intense environmental testing.

Tests are being conducted to evaluate the aircraft's ability to function in the full spectrum of environmental extremes and operating conditions to be encountered around the world. Each of the aircraft's 15 major systems is being subjected to three weeks of extreme cold (-65°F); two weeks of icing, blowing snow and rain (76 mm/hour), three weeks of heat (165°F) and two weeks of high humidity.

To date, 14 B-1Bs have been delivered to the air force. Eleven are now operational at Dyess AFB, Texas.

o AIR FORCE BOASTS HIGH ELECTRONIC RELIABILITY

Six hundred years ago, during the Ming Dynasty, the Chinese built the Nanjing city wall to repel invading armies. The names of the bricklayers were inscribed on every brick laid in the main fortress area. If it later crumbled or bricks were found to be placed improperly, the responsible people were executed. The quality control procedure seemed to work; today the wall is remarkably intact.

This is the story told by Gen. Lawrence A Skantze, commander of the Air Force Systems Command, to illustrate the importance of quality in Air Force weapons systems. Skantze has not yet advocated such a quality control procedure for microwave engineers, perhaps because he is generally pleased with the trends towards high reliability in electronic systems used by the Air Force's operational aircraft.

He provides an example in the F-15 radar. It has half the malfunctions per flying hour as the older F-4 radar. Their radios also offer a good point of contrast. With the newer F-16 electronics, the radio not only breaks less often, but when it does, one person can replace it in five minutes, compared to three technicians in one hour required for a comparable task on older F-4s.

MILITARY

MILITARY CHIP STANDARDS FACE SWEEPING OVERHAUL

By M. Y.

The Pentagon is very quietly preparing to overhaul completely its qualification standards and procedures for procuring microcircuits and to replace them with a generally applicable set of generic qualifications and procedures.

Operating with funding from the Very High Speed Integrated Circuits program, the Rome Air Development Center, an Air Force installation in Rome, N.Y., signed a \$5.24 million contract with General Electric, AT&T, and Honeywell last month to draft new standards and procedures. Design, fabrication, and test phases will all be affected.

The contractors will "revise our microcircuit qualification procedures and standards to make them more compatible" with application-specific integrated chips, says Maj. Rudolf Konegen, direc-

tor of the VHSIC program at RADC. "We're embarking on a program to make the Joint Army-Navy procedures generic in the sense of process, test, and production."

The targets of these revisions are specifications prescribed by three standards. MIL-M-38510 is a general set of specifications; MIL-STD-883 covers procedures and standards for chip-fabrication facilities; and MIL-STD-883 requires that parts withstand certain environmental conditions, such as heat and humidity, and specifies test methods.

These standard procedures are time-consuming, expensive, and, some say, not necessarily the best way to guarantee that a given device will perform on the battlefield. "The old visual inspections at 100 X or 200 X are worthless. Some methods will not apply to VHSIC."

says Bill Kritzier, the GE engineer who managed the contract proposal for the three companies and will now manage the program.

In addition, Kritzier says eliminating qualification testing, in which as many as 200 parts might be destroyed, could lead to shorter delivery cycles, lower-cost parts, and higher reliability. "The objective of the program is to tailor Mil Specs to the VHSIC world, to provide devices more cheaply and in a shorter time" by emphasizing procedural standards where parts are designed, rather than where they are fabricated, he says.

SOFTWARE MODELING. The program aims to use high-level software simulation and modeling in the qualification process so parts can be proven prior to manufacture. "With VHSIC, you don't get 140 parts to destroy during testing," Kritzier says. "Your lifetime order may only be about 140 parts."

A revised set of standards is due in September 1988, and within six months at least three VHSIC-class fabrication lines will be operating under the amended procedures.

■ **Beginning March 31, what will you receive when you recruit a new member to ASQC? A very special ASQC coffee mug—that's what! And, what would you name such a membership recruitment drive? What else! The Mug-A-Member Campaign.**

Every member of ASQC who recruits a new member before June 30, 1987 will receive a specially designed ceramic coffee mug in recognition of his/her efforts.

It's a fun, light-hearted approach to recruiting members that has had such great success in other associations that we decided to adapt the theme for ASQC. In fact, the results reported by one association were twice the national average for recruitment campaigns. We feel this campaign will be an interesting way to potentially increase our recently plateaued membership level.

The Mug-A-Member Campaign will begin March 31, 1987 and continue through June 30, 1987. To help promote the campaign, each section chair, regional and deputy director will receive a sample ASQC Mug-A-Member mug along with special brochures. All membership renewal mailings for 1987-88 will also include a Mug-A-Member brochure.

During this special offer, it will be easier than ever to recruit new members and receive your campaign mug! All you will need to do to sign up a new member is to fill in the coupon included in the Mug-A-Member brochure.

The coupon asks only for name, one address, category of membership, and preferred division affiliation. The new members (Mugges) can use their credit cards or give their Muggers a check for the total membership fee. The entire procedure goes like this:

1. Fill out membership coupon.
2. Attach membership fee (or credit card number) from new member as calculated on membership coupon.
3. Mail coupon and fee to ASQC.
4. Muggers (recruiters) must include their names and member numbers at the bottom of the coupon. Specially designed ASQC

mug(s) will be sent to recruiters at the conclusion of this offer, July 1, 1987, based on address information in the recruiter's membership file.

5. There is no limit to the number of mugs you can receive (six makes a nice set).
6. **DOUBLE BONUS!!!** The Mug-A-Member recruitment totals will be applied to the ASQC Personal Touch Program.

Special Bonus for New Members

Mug early! New members will receive additional benefits prior to July 1, 1987 (at which time their membership year officially begins). Membership applications will be processed upon arrival at ASQC headquarters. Remember, it is not necessary to fill out a customary application form for this special recruitment campaign.

It really couldn't be easier! So, get out there and start mugging!

■ **Q. What is The Quality Review?**

A. It is ASQC's new publication for senior executives in business, industry, government, and the media.

Q. How big is it?

A. 32 pages, plus cover. It will look like many corporate annual reports.

Q. When will it be available?

A. Premier issue, March 16, 1987; summer issue, May 15; fall issue, September 1; winter issue, December 1.

Q. Who is sponsoring the magazine?

A. AT&T, General Motors, American Express, and Corning Glass Works will each be the sole advertiser for one of our first four issues.

Q. Who will receive it?

A. The magazine will be distributed free of charge to 50,000 individuals, including: the chairmen, CEOs, chief financial officers, and vice presidents of marketing, human resources, and corporate affairs of the top 1,000 service and the top 1,000 industrial companies in the United States; the chairmen and CEOs of the top 500 international companies; financial analysts and senior executives in the federal government (approximately 3,000 people); members of Congress; governors and top state officials; mayors and senior officials in the top 100 cities; radio and TV stations; plus business writers, ad agency heads, labor unions, and business and graduate school heads.

Q. Will ASQC members receive The Quality Review?

A. Basically, no. It will be given to section chairmen, division officers, regional directors, board members and sustaining member representatives of the Society, and other selected ASQC officials.

Q. How can someone submit an article for publication in The Quality Review?

A. All articles for the magazine are commissioned by the editors. Story ideas may be submitted to the editors, but only those that are accepted will be acknowledged.

Currently, the magazine is seeking two provocative commentaries for publication. Any ASQC member is invited to submit entries on any topic related to quality or quality improvement. This is your unique opportunity to tell decision makers in business, labor, government, and the private sector what you think should be done to enhance quality, productivity, profitability, and competitiveness. Entries must be between 800 and 850 words and typed double spaced on plain white paper. Mail along with your (the author's) name, title, address, member number, and telephone number, to: Editors, *The Quality Review*, 253 W. 73rd, #2C, New York, NY 10023. Entries should be postmarked no later than June 1, 1987.

Advanced liquid filling system

NEW YORK, N.Y.—Adtech, Inc. has developed a significant departure in check-weigh liquid filling systems—a computer-controlled, electronically self-correcting multiple-head liquid filling system.

A computer provides filling within an extremely accurate 100-microsecond time base, continuous self-correction, on-line computerized check-weighing for reliability and statistical reports.

The computer automatically tracks each container, compares weight before and after filling and automatically corrects the filling heads to stay within limits.

The system can be used with any liquid, ranging from isopropyl alcohol to highly viscous materials. High system accuracy is essential where critical dosages are required, as with toxic materials, pharmaceuticals and diagnostic test liquids.

HISTORY BOOK

I had the opportunity to read Len BARTH's work on the upcoming HISTORY OF THE MONTREAL SECTION. Len is our section's historian. It is a lot of work and he is doing a good job. So far, Len has managed to record events from 1949 to 1974. Almost there Len, don't give up.

For the benefit of all of you, I have put together a brief summary of some of the highlights of our section's history.

- o The Montreal Section was formed in 1949 by a group of people in local Quality Control Societies. Their leaders, Ben LLOYD (LEETHAM SIMPSON Ltd), Bruce LEADBETTER (BELL TELEPHONE Co), Roger LESSARD (ECOLE POLYTECHNIQUE) and John PRINGLE (BELL TELEPHONE Co) decided to join the American Society for Quality Control (itself created in 1946). This was finalized the following year (1950) and Montreal became the 43rd section of the Society.
- o The first evening course, sponsored by the Section, was started in 1951. It was called "Quality Control by Statistical Methods" and was offered at the École Polytechnique.
- o In 1956, the ASQC Annual Technical Conference was held in Montreal, the first time ever outside the US, at the Montreal Convention Centre on Berri St. It was deemed a resounding success.
- o The first All-Day Forum of the Montreal Section occurred in October 1957 at the Sheraton Mt Royal Hotel. Admission was \$10 for members and \$12 for non-members. Over 200 guests attended the program of 5 speakers, a panel discussion on starting a QC Program and a film on Modern Quality Control. The guest speaker was Peter WILSON of CANADIAN NATIONAL. Quoting Len "...this event effectively put Montreal on the map, quality-wise that is."
- o In 1958, the Montreal Section took the first steps to starting sub-sections in the Ottawa and then the Brockville-Kingston areas.

That year was also the one in which the Section won the SADDORIS AWARD under the chairmanship of Claude TAYLOR of then TRANS-CANADA AIRLINES. At that time the ASQC numbered 110 sections. The award was presented to the section in 1959 at the National Convention in Cleveland, Ohio.

That year, 1959, the Montreal Section won second place in the Sadoris competition.

- o By 1960, the curriculum of sponsored courses in Quality had been increased to four; a Basic Appreciation Course, two Elementary Courses (Parts I and II) and an Advanced Course.
- o Due to the lack of member's interests in the Ottawa and Brockville-Kingston sub-sections, the Executive Committee of 1961 decided "...to drop the subject."

Meanwhile four members of the Section participated in the Canadian Standard Association's "Sampling Meetings" held in Toronto. This was later to become the CSA Special Publication Z90-1967, Sampling Procedure.

- o Throughout these years membership increased from 60 in 1952, to 252 in 1966.
- o In 1972, after negotiations with ASQC Headquarters, 37 members of the Montreal Section, rallied for the establishment of "La Section Québécoise à Montréal de l'ASQC", under the chairmanship of Denys PILON. This was approved by ASQC in 1974.

As for the years 1975 to 1987, we shall have to wait for Len to complete his book. When I joined the Society in 1970, Len was teaching Quality Control at CEGEP Vanier. Obviously, with the establishment of the Certificate Programs at Concordia University, and later at the École de Technologie Supérieure, a number of other All-Day Forums and other activities, there are still many things to say about our Montreal Section.

to be continued.....

JP Amiel

Chinese Delegation Visits ASQC

From January 11 through 14, ASQC hosted a delegation from the Republic of China. The six-member group, which was touring the U.S. and Canada to learn about training for quality control personnel, included representatives of China's State Economic Commission and educational ministries.

On January 11 and 12, the delegation was in Chicago, where they were hosted by Region 12 Director Mae-Goodwin Tarver. On January 13 and 14, the delegation visited Milwaukee, where they were hosted by ASQC headquarters staff. During their two days at headquarters, the Chinese visitors met with Mike Thiel, acting executive director, Paul Borawski, director of programs, Debra Owens, manager of special projects, and Steve Gordy, manager of professional development. Highlights of the Milwaukee visit included a dinner at the home of an ASQC member, a plant tour of the Allen-Bradley Company, and an educator's panel convened by the University of Wisconsin-Milwaukee.

This international exchange, arranged by H. James Harrington, chairman of the board of ASQC and a senior quality official at IBM Corp., was a follow-up to a top management seminar on quality control that Harrington and others conducted last September in Wuxi, China.

Sound waves detect concrete flaws

GAITHERSBURG, Md.—A nondestructive method to detect flaws in concrete known as "impact-echo" works similar to sonar used to locate submarines. An impact on the concrete generates sound waves that are reflected by concrete flaws. The reflected sound is picked up by a receiver mounted on the surface of the concrete, locating the flaws. The technique can be used in either plain or reinforced concrete.

"There is a need for a reliable, easy-to-operate nondestructive concrete flaw detection system. We think the impact-echo method can fill this need," says Dr. H.S. Lew, head of structural evaluation at the National Bureau of Standards (NBS).

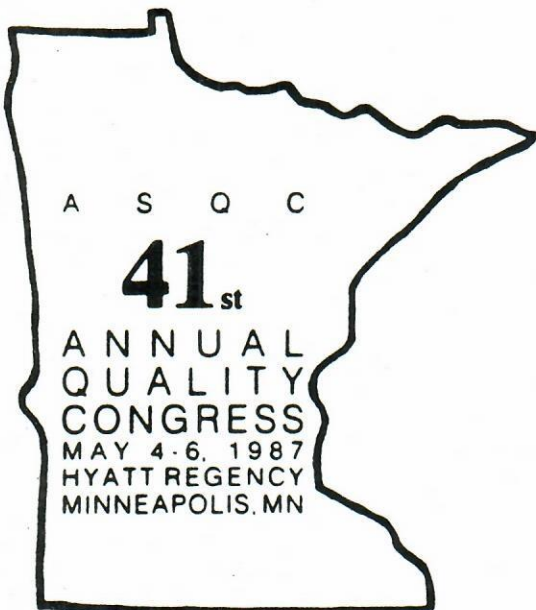
Impact-echo has been used successfully in a field study but, for general use, a more rugged transducer that can be easily coupled to horizontal or vertical surfaces needs to be developed, according to NBS.

HELP HELP HELP HELP HELP HELP HELP HELP HELP HELP HELP HELP HELP HELP

o We are looking for companies to sponsor the publishing of the Newsletter. We'll be glad to PROMINENTLY state the fact that you or your company has sponsored the Newsletter.

ADS, YOU SAY ??

Yes, we will publish ads in our Newsletter.
Contact our PUBLICITY man, David Tozer at 695-2028.



41st Annual Quality Congress

The Minnesota Section Host Committee is personally inviting you to attend the 41st AQC. The Congress will be held May 4-6, 1987 at the Hyatt Regency Hotel in downtown Minneapolis. Registration costs are the same as the 40th AQC. Again a fine slate of speakers and plant tours are on the program. Please refer to the December issue of Quality Progress for complete program and registration information. Additional copies are available from ASQC Headquarters. Request one for your boss, suppliers or other colleagues by calling ASQC at (414) 272-8575. Plan now to attend the Congress and visit our beautiful city.



MONTREAL SECTION

P.O. BOX 444, POINTE CLAIRE
DORVAL H9R 4P3

To :