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President's Letter

Dear Members,

Spring has sprung! We certainly deserve it because I'm sure that many were suffering from the winter "blahs". One can now look forward to all the blessings that Spring provides.

Your President and Vice-President attended the Presidents Winter Meeting in Monterey. An address by Howard Zinschlag, our Society President covered key issues and highlights of the sessions. Our own Howard, A.K.A. Howie Whitton, District 13 D.V.P. as well as the newly elected D.V.P. - Elect, again our own Jim Lomax attended as well. On behalf of the Sarnia Section, I would like to congratulate Jim on his selection to represent our District and offer our faithful support. Good luck Jim.

Someone said "change is good" and I agree with this statement. However, many fear change and I guess that one can say it's human nature to resist change. But change we must. We hear it all the time. We need to keep abreast of the changes taking place today. Change is most acceptable if in a trusting environment. We have to keep in step with change not just at your place of work but in our personal lives as well. Technology has provided many benefits but the introduction of same was met with many problems (now referred to as opportunities) that had to be addressed. We are very fortunate to have excellent educational outlets in our area. Let us take advantage of same and strive for superior performance. I.S.A. is also in a transition period but with good planning and management we can look forward to the future with optimism.

"Reshaping the future" is the theme for this year's Engineering week to be held at Lambton Mall, March 18 - 20. Volunteers are required to "man" our booth. Contact Bill Arundell at 337-2329.

The 1993 Lambton County Science Fair will be held April 16 - 17 at Sarnia Collegiate Institute and Technical School (S.C.I.&T.S.) at 275 Wellington Street. We will again be presenting six awards to students whose projects demonstrate ability to measure.

Brian Morin is the new student ISA Section President. Brian and his executive have many plans in the works and we shall be hearing great things from the Lambton College Student Section.

There will be a District 13 Workshop to be held at Niagara on the Lake on April 24 - 25. Kindly contact Rich Paterson for details at 336-7301.

Great things are happening by our Show Committee. The excitement generated by this group is contagious! I'm sure that all members are anxiously awaiting this event. The ISA Instrument show will be held May 11 - 12 at the Clearwater Community Centre and the organizers will be looking for your support. By the way Fred Sheane, Director for the Centre for Advanced Process Technology (CAPT) advises that he has had fantastic response to the courses being offered the week of the Instrument Show. Ron Thurier and Bruce Hein indicate that the mini seminars offered by Vendors at the Instrument Show have all been confirmed.

Irv Hawkes is looking for old photos for displaying at our booth during the Instrument Show. He would like to hear from you if you have a "gem from the past" for his montage.

Our Program Chairman Mike Murray has arranged for yet another great guest speaker for our Annual Spouses Night Dinner to be held at the Sarnia Golf and Curling Club on Monday, May 31st. I suggest you mark your calendars now. Fee will only be \$25.00 per couple which includes your favourite vintage wine. Jeff Ditmars will be presenting an address re the "Dangers of Level Railroad Crossings". DON'T MISS IT!

I would be remiss if I did not mention the great level of support by our membership. Your executive cannot accomplish very much without our dedicated members. The theme from ISA 92 "Remember the Member" is appropriate every year. Your membership chairman is charged with the task to come up with new ideas to retain our members and to attract new ones. The 1.S.A. show '93 team is an excellent example of volunteers in action.

Bob Kelly President ISA Sarnia Section



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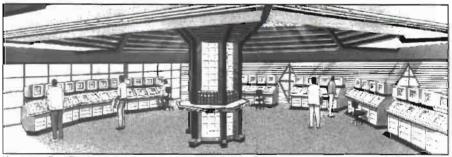
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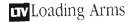
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by Lester G. Earle Staff Process Control Engineer Shell Canada Products



Shell Canada Products, Sarnia Manufacturing Centre, transfers liquid petroleum gasses (LPG's) via a six mile underground pipeline, which goes under the St. Clair River, to Consumers Power in Marysville, Michigan for storage, processing and delivery. As a precaution against leaks in this line, a leak detection system was installed. This system included a pressure, temperature, and density compensated turbine meter using a Daniel's Model 2500 Series Microcomputer at both the Sarnia Refinery and Consumers Power. A 1200 baud modem and a Motorola radio system is used to transfer the meter data from Consumers Power to a computer at Sarnia Refinery. Since this radio system involved Canada and the U.S.A., it was necessary to get approval of both the United States Federal Communications Commission (FCC) and the Canadian Department of Transport (DOT). This approval took two years.

The data from these two meters are fed into a Honeywell TDC 3000 Material Balance Model* (MBM). The MBM consists of a material balance process which detects leaks by comparing the pipelines inlet volume with output volume. The MBM calculations are performed on a number of different moving windows. The moving window algorithm allows pipeline imbalances to be detected as soon as possible. The smaller duration windows are intended to detect large leaks rapidly and the longer duration windows intended to detect smaller leaks over a longer period of time. At both Shell and Consumers there are Control Room activated quick shut-off valves should a leak be detected. An excellent side benefit is our ability to monitor the turbine meter at each location for this custody transfer. We can now tell within minutes when these meters are not agreeing with one another and request a proving or a meter overhaul.

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^{*} Originally this model was written by Quantel Engineering in Calgary to run on Intellution's FIX system using an IBM PC. However, the existing FIX system was replaced by a TDC 3000 where a similar model is now installed.

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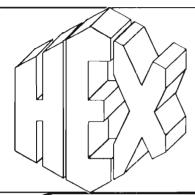
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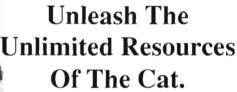
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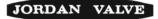
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The ISO standards are not permanent, and are reviewed on a five-year cycle. A review is currently in process, and another one will be conducted in 1997. ISO 9000 and ISO 9004 are advisory in nature. ISO 9000 serves as a road map for the use of the other standards in the series. ISO 9004 provides quality management and quality system element guidelines for use by any producer in developing and implementing a quality system and in determining the extent to which each quality system element is applicable.

There are three levels of certification:

- ISO 9001: Conformance is based on several stages including development, production, inspection, and service. It serves as a model for use when a contract between two parties requires the demonstration of a supplier's capability to design, produce, install, and service a product.
- ISO 9002: Conformance is based on production and installation.
- ISO 9003: Conformance is based on final inspection and testing.

The table below illustrates the areas covered by the standard as well as the differences between the three levels of certification. Although the first two levels are similar, ISO 9001 is the most comprehensive, covering all areas. Because the ISO 9003 standard is so limited in scope, there is very little interest or activity in this level of certification.

	9001	9002	9003
Management responsibility	X	X	X
Quality System	X	X	X
Contract (order) review	X	X	-
Design control	X	-	-
Document control	X	X	X
Purchasing	X	X	-
Purchaser supplied product	X	X	-
Product identification & traceability	X	X	X
Process control	X	X	-
Inspection & testing	X	X	X
Inspection measuring & testing equipment	X	X	X
Inspection & test status	X	X	X
Control of nonconforming product	X	X	X
Corrective action	X	X	-
Handling, storage, packaging & delivery	X	X	X
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Internal quality audits	X	X	-
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Based on article in "VMA" Valve Magazine Fall '92, Vol. 4, No. 4.

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GIVING PRESENTATIONS

An Important Skill for Every Business Executive

by Marjorie Brody

The ability to communicate effectively is described by many people in business as the single most important activity in the strategy for success. In today's business environment it is not uncommon to be called upon to make a presentation.

When making a presentation, being perceived as credible and conveying your message powerfully will enhance not only your image but also that of your organization.

Before planning your next presentation, the following steps will help you make the most of your skills and expertise.

1. Focus Your Topic:

Be clear about your objectives. Do you want to **Inform** or do you want to **Persuade** your audience?

2. Determine the Needs of your Audience:

Speaking is an audience centered sport. Each audience member is saying WIIFM (What's in it for me?). Thus, you must speak with WIIFT (What's in it for them?) What are the benefits of your presentation to the members of the audience?

3. Collect and Organize Your Material:

Confirm that your data is relevant and on the level of the people in your audience. Keep your language simple, avoid jargon and buzz words. Use lots of examples to highlight two or three key points.

4. Write Your Introduction and Conclusion:

These are the most important pieces of your presentation because the audience will remember what they hear first and last. The introduction will get your "buy in" and gives you the opportunity to let the audience know the benefit you are presenting. In the conclusion, summarize your key points and end with a punch.

5. Practice:

Stand up, practice giving your presentation at least 3-6 times. After the third practice, tape-record yourself and take notes on what you hear. If you are satisfied with your presentation, you are ready.

6. Delivery:

Use an outline to guide yourself through your material. Remember the audience focuses on the visual and vocal aspects of your delivery, so remember to look your best and speak passionately.

In summary, knowing how to design and deliver an effective presentation will enhance your ability to project a positive image of yourself and your organization. The ability to communicate effectively in today's business environment is a skill that every executive needs to develop. Speaking is a learned activity; everyone can improve.

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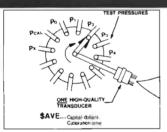


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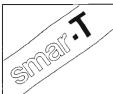
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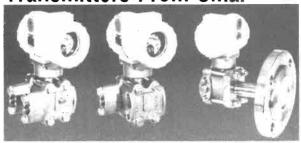
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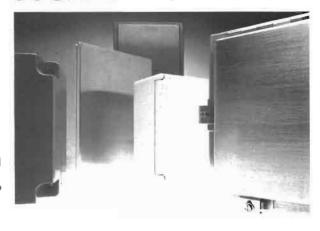
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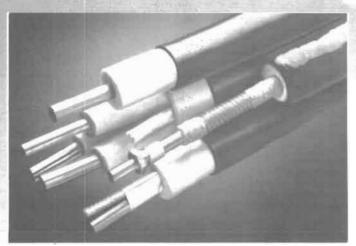
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Meet our "Welcome Committee", Dave Scarlett, Dave Gooch, and Brian Smith.





Bob Devine - Newsletter - and Irvin Hawkes - Program Assistant.

Cont. on Page 47



Instrument Society of America

SARNIA SECTION

January, 1993 Dinner Meeting Highlights

The first Dinner Meeting of 1993 was held on January 25th, at the Sarnia Golf and Curling Club. President Bob Kelly welcomed the 81 members, students and guests who enjoyed the steak dinner.

Following the meal, Ron Thurier gave an update on the education sessions and technical seminars that will be presented during our 1993 Show Week in May. 42 participants have already registered for the education sessions.

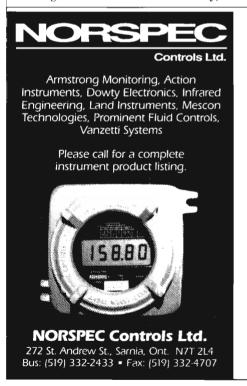
Ian Shouldice, Show Chairman gave a update of the upcoming Sarnia ISA Show. A reminder to all suppliers to get their registration in as early as possible to help us finalize plans and details

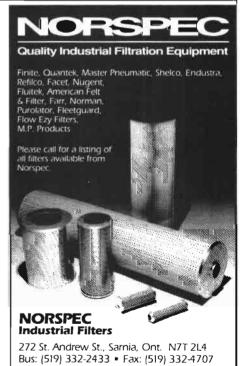
Brian Aitken, Student Section Faculty Advisor displayed the set of ISA Standards and the ISA Specifications Computer Program that were donated by the Samia Section to Lambton College. Brian thanked the Section for its continued support of the college and Student Section.

Mike Murray introduced the guest speaker, Brent Carpenter of Micro-Motion from Boulder, Colorado who did an excellent presentation with his topic "Chooses the right material for Coriolis Mass Flowmeters". The presentation explained details on materials and their selection to address problems of fatigue and corrosion so that Coriolis meters are not stressed beyond their endurance limits.

The next dinner meeting is March 29th at the Sarnia Golf and Curling Club. Please make reservations if you plan to attend and cancel your reservation if their is a change in your schedule.

Program Committee: Mike Murray, Irvin Hawkes





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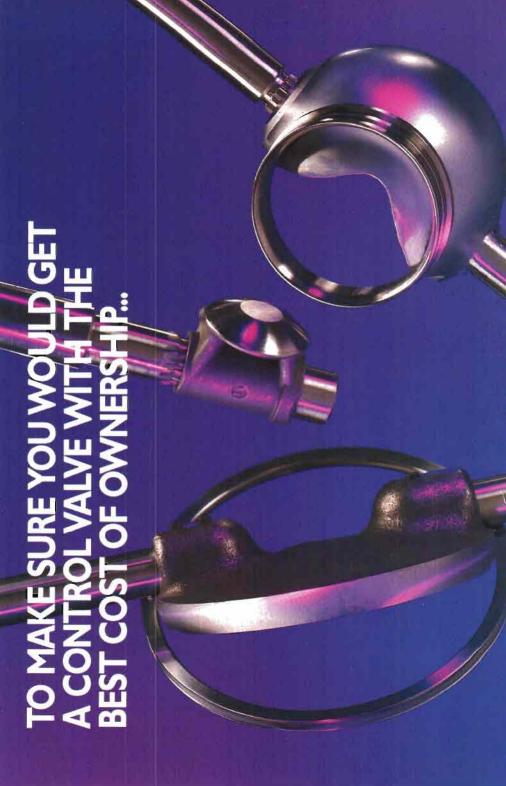
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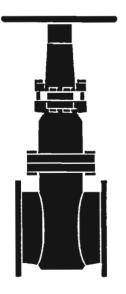
MEMBERSHIP DINNER MEETINGS

Date	Place	
September 28, 1992	Sarnia Golf & Curling Club	
November 30, 1992	Sarnia Golf & Curling Club	
January 25, 1993	Sarnia Golf & Curling Club	
March 29, 1993	Sarnia Golf & Curling Club	
May 31, 1993	Sarnia Golf & Curling Club	

Time: Cocktails @ 6:00 p.m. Dinner: @ 7:00 p.m.

Executive Meetings

Date		Place
July 27, 1992		Drawbridge Inn
September 14, 1992		Drawbridge Inn
November 9, 1992		Drawbridge Inn
January 11, 1993		Drawbridge Inn
March 1, 1993		Drawbridge Inn
April 26, 1993	Time: 7:00 p.m.	Drawbridge Inn



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Dinner Meeting Notice

The fourth ISA Dinner Meeting will be held on Monday, March 29, 1993 at the Sarnia Golf and Curling Club, 500 Errol Road West, Point Edward. The cocktail hour will begin at 6:00pm followed by dinner at 7:00pm.

Our guest speaker for the evening will be Martin Golding. Martin is the Product Manager of Fisons/VG's Gas Analysis Group in Canada. Martin's presentation for the dinner meeting will focus on; Who is Fisons/VG? What is mass spectrometry and how do the various types differ? Why are people now considering Process Mass Spectrometry in their plants? What are some traditional as well as recent process applications that process mass spectrometry is being implemented into?

Please contact one of the following no later than Friday, March 26th, 1993, to make your reservation.

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ISA PERSPECTIVES

Cont. from Page 31



Bob Kelly greets John Tranter, one of our Past Presidents, 1983/84.

Brent Carpenter of "Micro-Motion" Boulder Colorado, and Mike Murray, Program Chairman. Brent gave a presentation on material selection for "Coriolis Mass Flow" meters.





Ron Thurier, Continuing Education Assistant for the upcoming ISA Show and Fred Sheane, Centre for Advanced Process Technology / C.A.P.T.

Cont. on Page 49





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Our aim? To keep customers at the competitive edge. Their Honeywell systems can be integrated with Tomorrow's products.

Fact

- Over 4,000 TDC 3000 systems are installed worldwide
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From sensors to the boardroom

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For accurate, dependable and cost-effective field instrumentation it's hard to beat the SMARTLINE family of 'Smart' pressure, temperature and flow transmitters.

Fact

 13 of the top 15 North American pulp and paper manufacturers use the Honeywell ST 3000 pressure transmitter For standalone applications, the LEADER-LINE family of controllers and recorders is fast gaining a reputation for its impressive selection of cost/performance alternatives.

And of course, TDC's plant-wide automation architecture can connect all levels of information from the sensor to the boardroom. No other supplier can provide the broad range of truly integrated process-level and business-level system solutions.

Total support programs

Honeywell offers a portfolio of services that optimize system performance, maximize the use of all system features and extend system life.

System support ranges from on-call services to fully-defined support packages that provide comprehensive hardware and software support. On-site and classroom training is also available for successful implementation of automation projects.

In addition to system and product support of Honeywell equipment our BLANKET SERVICE™ program offers third party system service support on other manufacturers' industrial-related computers, PCs, PLCs, printers, terminals...you name it.

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Fact

- Honeywell has over 70 years experience in the support of process control and factory automation systems.
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LAMBTON COLLEGE: STUDENT ISA SECTION STUDENT REPORT

The ISA student section is alive and well in Sarnia and going forward at full pace. Another group of graduates have left the college in search of a career, while some of us remain here to finish our education. Our academic future remains bright, especially with the pending completion of the Centre for Advanced Process Technology. This will undoubtedly prove to be one of the outstanding process training facilities in North America, and it's quite an honour to have it built right here in Sarnia. There will be many people from the valley involved with further training and skills development as well as student advancements in process control.

The student section has undergone some executive changes since the last newsletter entry. The present ISA Student Section Executive list reads as follows:

President: Brian Morin, 2nd year

Vice President (activities): Rick Bouterse, 3rd year

Secretary/treasurer: Rae Brandon, 2nd year Newsletter Editor: Roger Allen, 2nd year

3rd Year Rep: Roger Hazzard 2nd Year Rep: Scott Crawford 1st Year Rep: Taryn Ployart

Kates Report Coord: Yet to be determined

During the fall term of 1992, the students took a trip to the Bruce Nuclear Plant. It was an interesting day trip, providing the students with a view of nuclear-powered generators and their accompanying operating systems. Attendance was great and the whole day proved to be a success. Other trips included a visit to ICI Nitrogen Products which provided a terrific first-hand view of instrumentation at work. There are other trips in the works for the spring, however details are not yet finalized.

Those who could attend enjoyed the last few ISA dinner meetings. The students were introduced to the ISO 9000 standards concept a few months back, as well as other topics such as coriolis flowmeter materials.

The spring should hold in store some good things for those venturing out into the working world, be it co-op or permanent. It was refreshing to see a few job postings on the co-op board at the college; sure hope it continues!

ISA STUDENT SECTION MEMBERSHIP BENEFITS LAMBTON COLLEGE STUDENT ISA SECTION

Through the support of the ISA organization and in particular the ISA Sarnia Section, there are many benefits of becoming a student member in the Instrument Society of America.

- Student members receive INTECH, and are eligible for the same publication discounts as regular members.
- Student members many participate in student paper competitions, with possible cash awards and trips to receive the awards.
- Student members become familiar with the ISA organization, and the running of a small section, particularly those that are elected to executive positions.
- The student section organizes social and professional events, such as sports events, and trips to industries.
- 5. The students receive a copy of the regular section newsletter, the "Annunciator", which contains a student section report.
- 6. The Sarnia section provides students with memberships at no charge. This includes the first year of membership in the Sarnia section upon graduation.
- The Sarnia section donates learning materials, such as books, videos, and software to the college resource centre.
- The Sarnia section sponsors students at regular dinner meetings, encouraging them a chance to network with regular members. This provides valuable contacts for both students, and regular members.
- Local funding from sources, including the college and the ISA Sarnia section, allow the students
 to organize bus trips to various industries.
- 10. The students have the opportunity to volunteer to help out with professional display activities including ISA shows, Engineering Week, Career Fairs, and local science fairs.
- 11. The student executive are provided opportunity to participate in District leadership workshops.



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1950/51		1973/74	Stan Thrift
1951/52	Ken Goldring	1974/75	E.A. Comello
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