



Institution of Engineering and Technology

IET Ottawa

February 2007 Newsletter

Web Site: www.iee-ottawa.org

Branch email address: ottawa@iee.org

Secretary: Martyn Delbridge,

February Technical Meeting:

“Networked Hi-Density Smart Meters for Power Management”

Wes Biggs - VP, Engineering & Operations, Triacta Power Technologies

Courtside A Room, RA Centre, 2451 Riverside Drive

Thursday 15 Feb. 2007, 6.00 pm for optional dinner - 8.00 pm for the meeting

The Province of Ontario has established targets for the installation of 800,000 smart meters by December 2007, and installation of smart meters for all Ontario condominium corporations by December 2010. In Ontario there are over 1,400,000 condominium and apartment dwellers who share a common electricity meter for billing purposes. Wes will detail the Triacta Hi-Density Smart Meter Hardware and Meter Management Software and how this local company is leveraging its networking roots to architect a next generation smart meter solution for the multi-tenant market. He will include as well anecdotal evidence on who might win, who might lose in the roll-out of smart meters and what additional benefits can be derived from a ubiquitous deployment of smart meter technology across the province.

The presenter, Wes Biggs, is a technology company veteran with over 20 years of senior executive experience in leading companies such as Newbridge, Mitel and Nortel. His varied experience includes Product

Development, Product Management & Operations. Most recently, Wes was co-founder, President and CEO of Meriton Networks. He is a Professional Engineer and holds a bachelors degree in Electrical Engineering from the University of Ottawa.

The presentation is open to all. Please reserve (state if dinner is required) by contacting Hugh Reekie max-com@allstream.net or phone 613-728-5343.

Social hour in Courtside A 6 pm; Dinner 6.30 pm in the Field House Restaurant, presentation in Courtside A at 8 pm. Bar available.

Park in the East lot of the RA Centre and enter by the corner door. Dinner reservations appreciated by 13 February, but walk-in dinners without reservations are acceptable.

How to get there:

The RA Centre is located near Bronson and Riverside Drive.

February Site Visit:

“Visit of the IET Ottawa Branch to RBR Ltd”

Hosted by Frank Johnson - President, RBR Ltd.

27/25 Monk St, Ottawa K1S 3Y7

Thursday 22 Feb. 2007, 7.30 pm

RBR Ltd makes high accuracy oceanographic recorders, with sales throughout the world of over 600 instruments per year. All of the calibration of these instruments is carried out at the works contained in two private houses on Monk Street.

The main physical parameters measured include temperature, depth, and conductivity. From these may be derived the salinity of the water. Further sensors are offered for dissolved oxygen (DO), pH, turbidity, and a range of optical measurements.

Calibration is carried out to an accuracy of $\pm 0.002^{\circ}\text{C}$ for temperature by using our own primary standards; $\pm 0.05\%$ of range for depth using a deadweight tester; $\pm 0.003\mu\text{S/cm}$ for conductivity using a convoluted method which involves IAPSO Standard Seawater. The latter measurement corresponds to measuring the resistance of a sample of seawater of about 50Ω to an accuracy of $\pm 0.003\Omega$. Sensors for DO, pH and turbidity are also calibrated in house.

Some of the technical and business challenges which face the company will be discussed, and a summary of the major application areas for such instruments will be presented.

Attendance limited to 12 members. Please reserve by calling 613 233 1621, preferably during office hours.

How to get there:

Monk Street runs parallel to Bank Street between fifth. Avenue and Holmwood Avenue. Take 5th. Avenue West from Bank Street and then turn south (left) down Monk Street. Parking is usually available in one of the streets that runs west off Monk Street.

Preliminary 2007 Program:

Mar 15th. 2007	Highlights from a Career in Military Aviation: RA Centre – Optional Dinner 6:30; pm, Meeting 8 pm. Presentation: Alan James – Royal Air Force
April 19 th . 2007	Light Rail in Ottawa: RA Centre – Exhibition from 6pm; Optional Dinner 6:30 pm, Meeting 8 pm Presentation: David Jeanes, P.Eng. President, Transport 2000 Canada
May 17 th . 2007	Annual General Meeting

Report on the January 2007 Technical Meeting

“Barcodes, RFID and handheld computers - How to track anything” by John Rivenell

prepared by John Vines, Ottawa Branch

Radio Frequency Identity (RFID) Tags are changing the way we do things. John Rivenell’s presentation provided a walk through the world of Auto ID (automatic identification) ranging from the origins of the barcode to the current capabilities of a hand held computer/ barcode reader, including some of the uses (and potential abuses) of the system. John noted that over 90% of what you have read about RFID is nonsense, but the 10% that is true is going to have a huge impact on our lives.

John demonstrated how we could put a unique RFID tag on every hair on every head of every human on this planet, noting that we could do that with barcodes too. John’s discussion was supported with many samples of the current codes in use and an assortment of RFID and barcode readers. We had plenty of toys to play with! The questions and discussion ranged from the technicalities of the scanning type identification systems to the social and ethical aspects of introducing the technologies into society. A very fine presentation. Thank you John and your team.

Chairman’s Column - A membership drive?

The monthly meetings at the RA Centre have settled down to the same, flexible format. There is a Social hour from 6 to 6.30pm, in the lecture room. Usually, there is an opportunity to meet the speaker and perhaps look at a sampling of equipment relevant to the 8 pm presentation. There is also a publications table; members of our local Ottawa Executive bring along recent copies of the various IET publications that they receive.

This last month, John Rivenell had quite a number of his barcode and RFID “Toys” on display from 6pm. There were around 10 of us for the pub-style dinner at the Field House Restaurant, just up the hallway in the RA Centre; members and guests were chatting during the meal on a range of subjects. Those arriving around 7.30 pm, just for the presentation, also had a chance to look at the hardware. Just before the 8pm presentation, a brief mention was made of the Executive’s plans to highlight a recent article in an IET publication, with a short AV summary, given before the main evening presentation. Bhagvat Joshi had an interesting 10-minute show prepared, but he was called out-of-town at the last minute. However, the range of IET printed publications

was described; a few of our guests were very interested in some of the review articles during a discussion after the presentation. It is hoped to have a greater range of past IET publication copies available on a display table at future meetings; and we hope to have some membership forms, too. We have to get the word out, to non-members, about what the IET does to serve its members, in addition to the local technical presentations.

Our next meetings? I am pleased that, despite a heavy schedule, Frank Johnson has found the time to schedule a 22nd February site visit to his hi-tech assembly plant in the Glebe. Then, on 15th March, Alan James, seconded to DND from the RAF will give an evening presentation at the RA Centre. He is an excellent speaker and, in his engineering project experience, he has a range of tales to tell. In addition, some mid-week field trips are in the planning stages. Information appears on our web page as soon as details are firmed up. - <http://www.iee-ottawa.org/>.

- - - Hugh Reekie Chair

YOUR EMAIL ADDRESS

For some time we have been sending notices to members by Email. This is to save the cost of paper and postage, but also provide updates and reminders that you would not receive in time from Canada Post. We send at least one paper mailing to all Ottawa Branch members each year.

You are receiving this paper copy of the newsletter because we do not have your Email address or the address that we do have does not work. If you wish to receive notices and newsletters by Email, please send your Email address to jvines@iee.org and the address will be placed on the list. Thanks

Note: If you change your home address, telephone number or Email address, please inform the IET in London. The change may be made by letter or sending an Email to membership@theiet.org, or by entering the change directly via the IET WEB page. Notification to jvines@iee.org will also help locally.

The 2006/2007 Ottawa Branch Committee consists of:

NAME	ROLE	TEL NO(H)	TEL NO.(W)	EMAIL
Allen Baldwin		613 224 7805		a.baldwin@iee.org
Colin Billowes	Overseas 35+ plus representative	613 592 9026		billowes@magma.ca
.... (winter)		239 432 0117		
David Boteler		613 824 6474	613 837 2035	boteler@iee.org
Martyn Delbridge	Secretary	613 599 4297	613 596 7724	martyn.delbridge@gdcanada.com
Eric Dodman		613 820 8894		ericandsylvia@sympatico.ca
Hudson Egbert		613 270 0978		egbert@nortelnetworks.com
Ernest Fanthome		613 828 2003		eofanthome@sympatico.ca
David Farmer		613 832 2611		dfarmer@cyberus.ca
Nicholas Homan		613 692 9309		thenics@cyberus.ca
Frank Johnson	Treasurer	613 563 8159	613 233 1621	fjohnson@iee.org
Bhagvat Joshi		613 599 8134	613 482 1546	bjoshi@iee.org
Edwin Morton	Past Chair	613 837 3597	819 776 2425 x 520	emorton@iee.org
D Hugh Reekie	Chair	613 728 5343		max-com@allstream.net
John Rivenell		613 843 0058	613 225 4404	jr@sage.ca
Robert Tolley		613 542 9626		rtolley@iee.org
John Vines	International Membership Advisor	613 729 5458		jvines@iee.org