IEEE - Canada (Region-7)

An Overview

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IEEE-AESS Board of Governors Meeting
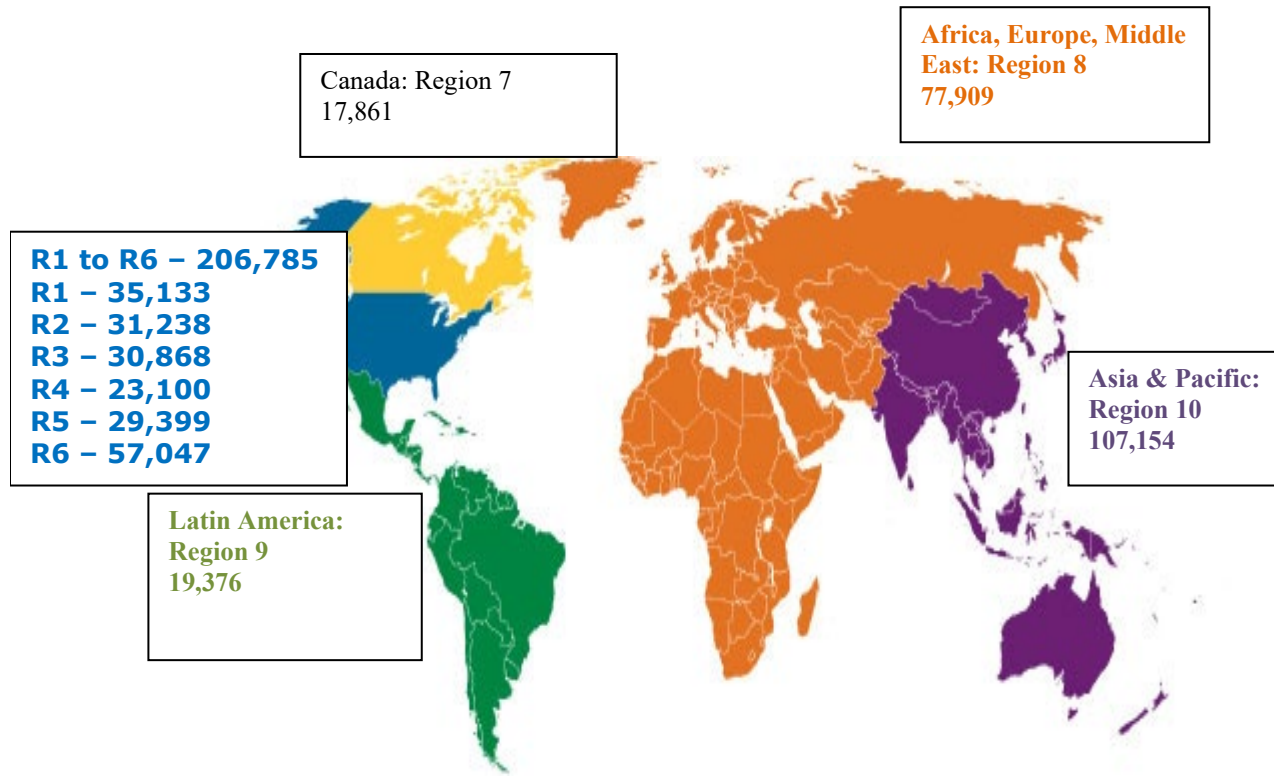
Ottawa, Ont., May 3-4, 2013

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IEEE Total membership by Region 31 December 2012

Canada: Region 7
17,861

Africa, Europe, Middle East: Region 8
77,909

R1 to R6 – 206,785
R1 – 35,133
R2 – 31,238
R3 – 30,868
R4 – 23,100
R5 – 29,399
R6 – 57,047

Asia & Pacific: Region 10
107,154

Latin America: Region 9
19,376

Membership data as of Year End December 2012

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IEEE Canada (Region 7) - www.ieee.ca

Technical Society Chapters

Aerospace and Electronic Systems Society (AESS)

1. Microwaves/Antennas/Propagation Society (AP/MTT)
2. Joint Chapter of Computational Intelligence and Systems, Man and Cybernetics Societies (CI/SMC)
3. Computer Society (CompSoc)
4. Joint Chapter of Communications Society, Broadcast Technology Society and Consumer Electronics Society (ComSoc/BTS/CES)
5. Components, Packaging and Manufacturing Technology Society (CPMT)
6. Joint Ottawa-Montreal Chapter of Dielectrics and Electrical Insulation Society (DEIS)
7. Joint Chapter of Electron Devices Society, Circuits and Systems Society, and Solid-State Circuits Society (EDS/CAS/SSCS)
8. Electromagnetic Compatibility Society (EMC)
9. Engineering in Medicine and Biology Society (EMBS)
10. Instrumentation and Measurement Society (IMS)
11. Photonics Society (LEOS)
12. Power and Energy Society (PES)
13. Joint Chapter of Robotics & Automation, and Control Systems Societies (RAS/CSS)
14. Reliability Society & Power Electronics Society Joint Ottawa Chapter (R-PEL)
15. Joint Chapter of Signal Processing, Oceanic Engineering, and Geoscience and Remote Sensing (SP/OE/GRS)
16. Joint Chapter of the Technical Management Council, Professional Communications Society, and Society on Social Implications of Technology (TM/PCS/SSIT)
17. Vehicular Technology Society (VTS)

AESS Ottawa Chapter Details

- AESS Ottawa Chapter Chair: Hugh Reekie

- AESS Ottawa Chapter Vice-Chair: Tony Ponsford (who is also a recently named AESS Distinguished Lecturer)

- AESS Ottawa Chapter Website
  - http://www3.bell.net/max-com/ottawa.AESS.html
  - Latest event: May 7, 2013 talk on "Aircraft Avionics Equipage for FAA Next-Gen Flight Control System" by Ron Ogan, SMIEEE & Member of the AESS Board of Governors

Section AGs and SBs

- **Affinity Groups (AGs)**
  1. *Alliance of IEEE Consultant Network (AICN)*
  2. *Graduates of the Last Decade (GOLD)*
  3. *Life Member (LM)*
  4. *Women in Engineering (WIE)*

- **Student Branches (SBs)**
  1. *Algonquin College*
  2. *Carleton University*
  3. *University of Ottawa*

R7's Canadian context (*Humanitarian*)

- **Canada is recognized internationally as a humanitarian nation:**
  - Disaster Relief (Canada's rapid-response team)
  - Peace Keeping, Humanitarian Intervention
  - International Development (CIDA)

- **Canada is a world leader in the technological areas of the selected challenges in the HTC:**
  - Communications
  - Health
  - Energy

- **Many of IEEE Canada members are already actively involved/leading humanitarian efforts, including the HTC, but due to the geographical barriers and scarcity of resources/scale there has not been a concerted purposive effort to support such individuals.**

IEEE-Canada HIC's Structure

- *2009 – first IEEE Humanitarian <u>Standing</u> Committee:*

HIC Chair: Alfredo Herrera	Eastern Area representative: Gerard Dunphy
HIC vice-chair: Dr. Pedro Sanchez	Centra Area representative: Dr. Alex Bot
Past-Chair of HIC: (vacant)	Western Area representative: Mooney Sherman
Past-President of IEEE Canada: Dr. Ferial El-Hawary	
IEEE Canada President (ex-officio): Dr. Malik Om	Humanitarian advisor: Joan Kerr
HTC Reliable Electricity liaison: Glenn McKnight	volunteer: Raed Abdullah
HTC Data Connectivity liaison: Martin Murillo	volunteer: Dr. Sri Krishnan

- *2010 – IEEE-Canada bylaws:*

  - http://www.ieee.ca/administration/bylaws_e.pdf
  - 6.4 Purpose: The Humanitarian Initiatives Committee (HIC) shall be responsible for promoting IEEE core value of service to humanity; raising awareness of how IEEE Canada can best use its strengths and relevant technologies to address societal problems; providing leadership, encouragement, and support to Sections and Chapters interested in humanitarian initiatives; identifying humanitarian activities across Canada; coordinating activities with IEEE worldwide humanitarian committees and initiatives.

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IEEE Canada (R-7) Today

Member Services

- Two Annual Conferences:

    CCECE- http://ieee.ca/ccece13

    and EPEC - http://ieee.ca/epec13

- Monthly Electronic Newsletter

- IEEE Canadian Review _(3-Issues /year)_

- Canadian Journal of Electrical & Computer Eng.

    (3-Issues /year)

- **IEEE Canada Foundation (ICF):**

    Offer Students 11 Scholarships & 10 Grants Annually

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IEEE Canada (R-7) Today (*Continued)*

Member Services

- Job Site

- Awards & Recognition Program *(9 Awards/Year)*

- Students Papers Competition Workshop ..(TELUS)

- Volunteers support to Sections, Technical Society Chapters, Affinity Groups and Student Branches – bilingual web site

  http://ieee.ca

- *Eta Kappa Nu (EKN) 1st. Student Chapter outside R-6*

IEEE Canada (R-7) Today (*Continued)*

- WIE – Three Women Served as:
  Region 7 Director up to Date

- Two Regional Board Meetings / Year

  - Spring Region Board Meeting is in
    Conjunction with CCECE Conference

  - Fall Region Board Meeting

(R-7) Recognizes Volunteers

(R-7) Hosted SC`08 with the Theme:
Celebrating the Volunteers Achievements World wide

- We Reward and Recognize Volunteers and their Excellence. Best Section (Large and Small.)

- Three Areas Service Awards and a Major Service Award (The Wally Read Service Award)

Celebrated (R-7) Achievement

- In Preparation for the 125th Anniversary of IEEE, the History Committee of IEEE Canada got the Lead to Document the past 100 Years of IEEE Canada's history on the IEEE-Canada Website: http://ieee.ca

- Documented Brochure is produced to Summarize IEEE Canada's Achievements Record over the past twenty five years.

- *Milestones*
  - http://www.ieee.org/web/aboutus/history_center/milestones_intro.html

IEEE Canada, (R-7) Milestones

- **1- Landing of the Transatlantic Cable, 1866 (June 1985)**
  IEEE Newfoundland-Labrador Section
- **2- Reception of Transatlantic Radio Signal, 1901 (Oct.'1985)**
  IEEE Newfoundland-Labrador Section
- **3- First Submarine Transatlantic Telephone Cable, 1956**
  IEEE Newfoundland-Labrador Section
- **4- Alouette-ISIS Satellite Program, 1962 (May 1993)**
  IEEE Ottawa Section
- **5- Decew Falls Hydro-Electric Plant, 1898**
  IEEE Hamilton Section
- **6- Nelson River HVDC Transmission System, 1972**
  IEEE Winnipeg Section
- **7- First 735 kV AC Transmission System, 1965**
  IEEE Quebec Section
- **8- First distant speech transmission in Canada, (1876).**
  IEEE Hamilton Section
- **9- Pinawa Generating Electric Power Station, 1906**
- **IEEE Winnipeg Section**
- **10- First External Cardiac Pacemaker, "John Hobbs" 1950**
  IEEE Toronto Section

Thank You

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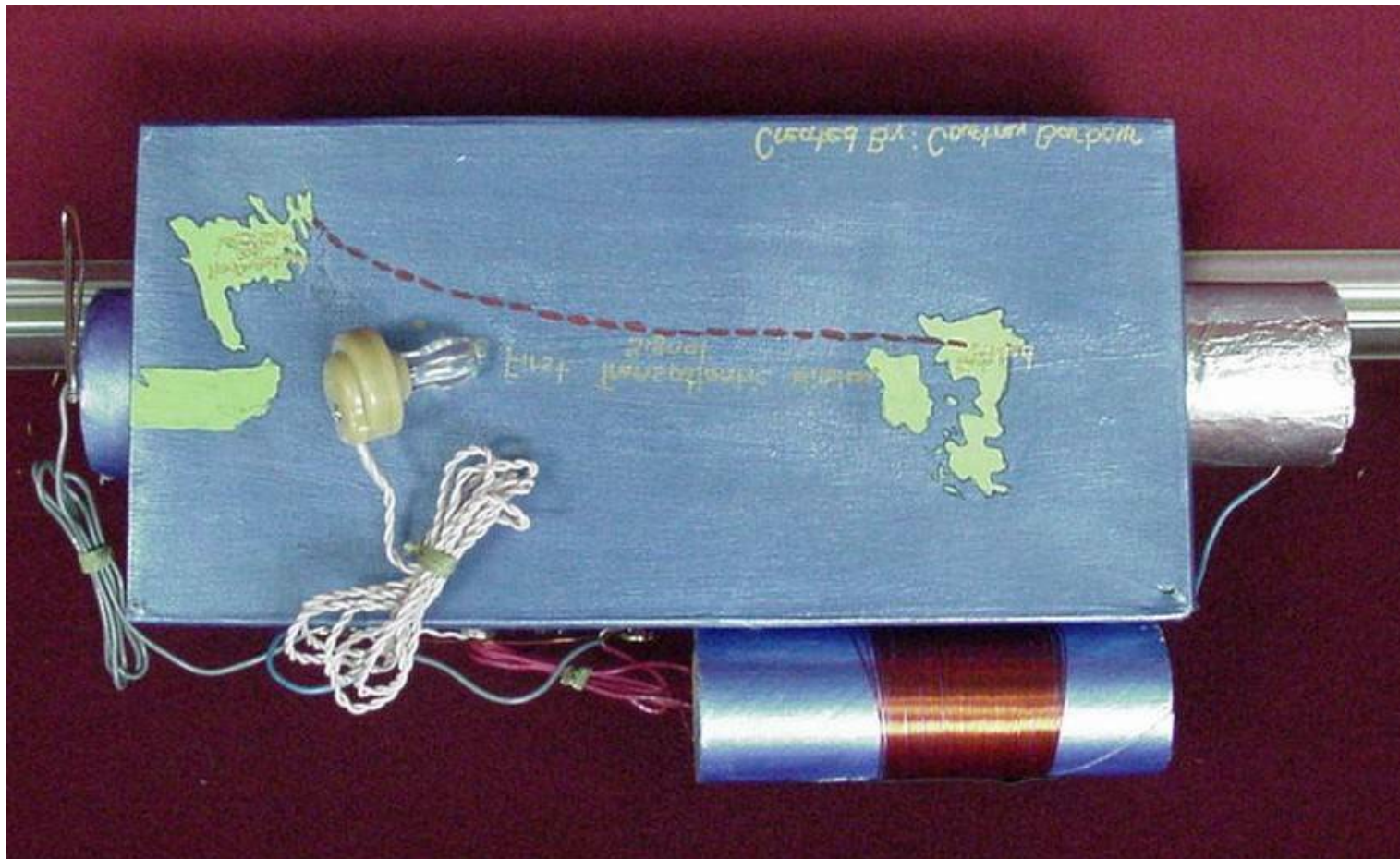Advancing Technology
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Milestone TAT1 (1866)

" Milestone Ceremony, NFDL"

First Distant Speech Transmission in Canada (1876) Pioneer (Alexander Graham Bell) " Milestone Ceremony, Paris, Ont. "

First Transatlantic Wireless (1901) Pioneer (Marconi)

First Transatlantic Wireless (1901) Pioneer (Marconi) Cont.

Pinawa Generating Station (1906)
" Milestone Ceremony, Winnipeg, Man. "

Steele
WINNIPEG

NO. 16- over Flow Dam looking up stream.

Pinawa Generating Station (1906) "1907 Crew"