**Region 1 History Report**

There are many activities in process:

**UPCOMING DEDICATION**

1. Under the auspicious of the Providence Section, there will be an IEEE Milestone dedication at the French Cable Museum in Orleans MA on September 6, 2018. The telegraph cable, known as *Le Direct,* connected France with the United States, coming ashore in Orleans. Operational from 1898 to 1959, except during WWII, it is 3174 miles long. The museum contains much of the original equipment and is well worth a visit. Of personal interest, my uncle worked for the cable for many years. FMI regarding the milestone ceremony: <http://www.frenchcablestationmuseum.org/milestone.htm.>.

**APPROVED AND DEDICATIONS BEING PLANNED**

1. Under the auspicious of the Boston Section a dedication is being planned for the milestone of the Harvard Mark 1 Computer. The Mark I computer, conceived by Dr. Howard Aiken, was a general-purpose electro-mechanical computer that could execute long computations automatically. Built by International Business Machines Corporation in New York, it is considered to be the first large-scale electro-mechanical computer. It used mechanical punch-card tabulating equipment.

# Under the auspicious of the Long Island Section a dedication is being planned for the milestone of the First Magnetic Resonance Image (MRI). Researchers at Stony Brook University produced the first two-dimensional image using nuclear magnetic resonance in 1973.The proton distribution of a test tube of water was distinctly encoded using magnetic field gradients. This achievement was a major advance for MRI and paved the way for its worldwide usage as a noninvasive method to examine body tissue.

### APPROVED BY ADVOCATES & AWAITING FINALIZED CITATIONS APPROVAL FROM PROPOSERS

1. Under the auspicious of the New Jersey Coast Section a proposal is awaiting finalized citations approval for a milestone for the Detection of Radar Signals Reflected From the Moon. On January 10, 1946 a group of civilian and military personnel at Fort Monmouth did so using a specially modified SCR-270/1 radar. The achievement marked the beginning of radar astronomy and the space age.

# Under the auspicious of the Providence Section a proposal is awaiting finalized citations approval for a milestone for the Chirp Sonar Subbottom Profiler. Chirp sonar was the first quantitative subbottom profiler to generate wide dynamic range and artifact-free seismograms in real time. Key features included a computer-generated FM signal, directional arrays with low sidelobe levels and a towed vehicle designed to scatter bottom multiples. The chirp sonar provided unprecedented high resolution images of the subbottom seafloor for quantitative analysis.

**PROPOSALS IN PREPARATION/SUBMITTED**

1. Under the auspicious of the Connecticut Section a proposal is being prepared for a milestone to the late Walter Cady, Professor of Physics at Wesleyan University from 1902 to 1951. In 1921, he designed the first circuit to control frequencies based on a quartz crystal resonator. Cady’s research was fundamental to the development of ultrasonics, sonar, quartz time standards, radar, and myriads of other areas.
2. Under the auspicious of the Connecticut Section a proposal is being prepared for a milestone for the creation of BASIC. Professors John G. Kemeny and Thomas E. Kurtz at Dartmouth College designed and implemented the BASIC programming language between 1963 and 1964. Its simplicity enabled users in fields other than science and mathematics to harness the power of computation – an early instance of accessible computing.
3. Under the auspicious of the Providence Section, a proposal is being prepared for a milestone for Alvin, the first submersible vehicle and related technology for ocean exploration and later vehicles developed by the Woods Hole Oceanic Institution. Expeditions using these were highly successful and opened the door to new frontiers in ocean sciences and engineering.
4. Under the auspicious of the Power Electronics Society in the Rochester Section, a proposal for the Silicon Controlled Rectifier (SCR)/Thyristor has been submitted for review. The SCR, introduced in 1957 by GE, replaced gas-filled tubes (thyratrons) used previously were difficult to operate and notoriously unreliable.

**POTENTIAL MILESTONES BEING INVESTIGATED**

1. The Maine Section is investigating RCA’s Belfast Maine receiving station to be an IEEE Milestone. The station used an early Beverage Wave Antenna. On March 14, 1925 the station received dance music broadcast by station 2LO at the Savoy Hotel in London. It then retransmitted the broadcast to WJC New York and WRC in Washington DC for listeners there. This was the first live transoceanic radio broadcast. Harold Beverage, the late inventor of the Beverage Wave Antenna received the [IRE Morris N. Liebmann Memorial Prize](https://en.wikipedia.org/wiki/IEEE_Morris_N._Liebmann_Memorial_Award" \o "),  [AIEE Lamme Medal](https://en.wikipedia.org/wiki/AIEE_Lamme_Medal" \o "), and the [IRE Medal of Honor](https://en.wikipedia.org/wiki/IRE_Medal_of_Honor" \o ").

Do you know a project you think is worthy of being an IEEE Milestone? If so, please let me know: ron@ronaldobrownconsulting.com. I created an easy to use check list to initially evaluate your idea.

Finally, my thanks to Gil Cooke, outgoing History Chair, for generously sharing his wisdom about the job with me.

Ron Brown

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