Tracing the Roots of IEEE-USA: From a Small Beginning to a Big Outcome

(Highlighting The Role of the IEEE Washington Section and its AESS Chapter)

By Saj Durrani

It was recently announced that James Howard had been voted in as 2011 President-Elect of the IEEE-USA, and that he “was the sixth person from the ranks of the AESS Society” to hold this position. This triggered some memories of 1971, when the AESS Chapter in Washington, DC, embarked on a small project to get the IEEE involved in professional activities – a process which ultimately led to the formation of the IEEE-USA in 1998.

As of 2014, the IEEE-USA is a major unit of the IEEE, with a President, five Vice Presidents, 27 Committees, a large staff, and many accomplishments to its credit. It is like a large tree today, but it was just a small bush in 1975, a sapling in 1973, and merely a seed in 1971. An article by John Meredith and Pender McCarter and the Web site of the IEEE-USA provide many details of its history; a synopsis of its growth over the years is given below.

The Apollo Program was a great source of pride for the US when it successfully placed a man on the moon in 1969. However, its completion also resulted in layoffs of thousands of engineers and other technical professionals who had been working on it.
The AESS Chapter of the Washington Section was concerned by this, and thought that the IEEE should do something to mitigate the problem. The Section appointed a Committee to study the issues and come up with recommendations.

The Committee initiated what it called the Professional Activities Pilot Experiment (PAPE), with about 15 members who met on a monthly basis during 1971-72. (Some details about the members are given at the end.) After a year of study and discussion of several alternatives, the PAPE developed two recommendations: first, that the IEEE should get actively involved in safeguarding the professional interests of its members; and second, it should persuade the government to phase out major aerospace projects gradually or start other projects to take their place, in order to avoid large scale lay-offs.

The Washington Section supported these recommendations, but the IEEE Board felt that undertaking professional activities would violate its constitution. As reported in the *Spectrum*, in their view the “purposes” of the IEEE, as stated in the constitution, omitted any reference to non-technical topics, and therefore required that “IEEE should limit to a substantial degree its activities outside the technical sphere.” In response to this, some members proposed an amendment to the constitution, which would make “professional” interests of the members as the primary purpose of the IEEE, and “scientific and technical” interests as the secondary purpose. This amendment was defeated, because members felt that it had the wrong priorities.

However, several Directors, and in particular Dr. James Mulligan - the IEEE President in 1971 - agreed with the basic idea that professional interests should be a part of the Institute’s purposes. Thus, a new amendment was proposed by the Board, which kept scientific and technical interests as the first purpose, and added professional interests as the second purpose. This amendment passed by an overwhelming 86.6% vote in 1972, and resulted in the formation of US Activities Committee (USAC) in 1973.

To make a long story short, PAPE led to the formation of USAC, which was elevated to the status of US Activities Board (USAB) in 1975, and ultimately to IEEE-USA in 1998. USAB supported the effort to establish the Office of Science and Technology Policy (OSTP) in the office of the US President and provided testimony to the National Platform Committees of both political parties during 1976. Some IEEE Presidents and other leaders who played a role in these activities include Jim Mulligan, John Guerrera, Leo Young, Merrill Buckley, Bruno Weinschel, Dick Gowen, and Eric Herz. And starting with a small project 39 years ago, the AESS continues to provide leaders for professional activities from its ranks – including five Presidents of IEEE-USA: Paul Kostek, Russ Lefevre, Jim Leonard, Evelyn Hirt, and Jim Howard.

The Lesson Learned: Size does not matter; even a small first step can lead to a big outcome!
References


Donald Fink: Blueprint for Change; Spectrum, June 1972, pp 38-43.


Background

Sajjad (Saj) Durrani, the author of the original version of the article, used to work in Comsat Labs in the early 1970s and was named the Committee’s Chair.

Dick Backe of Unisys Corporation was its Vice Chair; he participated in many discussions at IEEE Headquarters during 1972-73, which led to the formation of USAC. Most of the Committee members worked in industry, but some were with government agencies.

Dr. Rudy Stampfl (who became President of AESS later on) and Dr. Ed Wolff (who was a VP –Technical Activities at one time) held senior management positions at NASA’s Goddard Space Flight Center, and actively participated in the Committee’s work.

Dr. George Abraham, Past Section Chair and future Director of Region 2, also supported the Committee’s recommendations.