

In Memoriam

G. Franklin Montgomery, an electronics scientist and consulting technical editor of this *Journal*, died of pancreatic cancer on July 16 at a hospice near his home in Washington, D.C. He was 74 years old.

Montgomery was born in Pennsylvania and grew up in Washington. He graduated from Purdue University with a degree in electrical engineering. During World War II he worked for the Naval Research Lab and served with the Army Signal Corps in the Pacific. In 1946 he joined the National Bureau of Standards, which later became NIST. He worked in radio propagation research and directed three divisions over the years. In 1951 with bureau colleague Peter G. Sulzer and Irvin H. Gerks from Collins Radio Co., he conducted experiments in which a continuous-wave radio signal was successfully relayed from Cedar Rapids, Iowa, to Sterling, Virginia, using the moon as a reflector. It is believed to



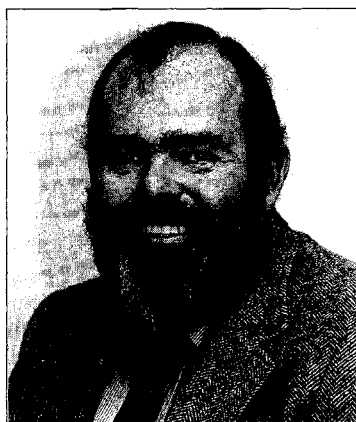
G. Franklin Montgomery

be the first successful moon-relay transmission at ultrahigh frequency and the first complete message to be received by moon reflection. He was head of the instrumentation and the measurement engineering divisions before retiring in 1976 as chief of the product engineering division.

Montgomery joined the *Journal's* editorial staff in 1981. As consulting technical editor, he assisted the editors with his valuable insights into debatable technical issues that arose from time to time. He reorganized the AES publications indexing procedure to be applicable to emerging technologies. He was not only logical but wise. With a wry sense of humor, he performed as a consummate editor and elegant writer who took concision to its *n*th degree in his contents-page descriptions of *Journal* papers.

The author of 40 technical works, Montgomery held seven U.S. patents. He had also done volunteer work with the Washington chapter of the Recording for the Blind. A fellow of the Institute of Electrical and Electronics Engineers, he had also been a government consultant on energy-related inventions.

Survivors include his wife, Joan Hartman Montgomery, and a son, Christopher, of Washington, DC.



William David Harrison

William David Harrison, audio pioneer and AES fellow, died August 17 at Arlington Memorial Hospital in Arlington, Texas, after a stroke following surgery for colon cancer. He was 53 years old.

David was a musician who became a recording engineer, audio console

designer, business executive, computer programmer, missionary and good friend.

His most notable accomplishment was his concept of the modern recording console in 1970. At that time most consoles were custom affairs, and almost totally hand wired. Each studio got only what it felt was most important in a console because consoles were expensive. Stock consoles were almost unheard of. Monitor and output sections were always separate from the input section. Dave had the idea of building a console with a whole new approach. It would be a stock console equipped with every possible feature a studio was likely to desire. Because of the construction technique, it would be more reliable than a hand wired console, yet so much cheaper to build that even the smallest studio could afford it.

A number of revolutionary ideas

made this possible. The first was putting the monitor and output sections in line with the input section. This allowed the second advance, which was to put all the components for one input/output channel on a single printed circuit board. The I/O circuit boards plugged into another circuit board which bussed the signals together, but had no active components. The use of these circuit boards, which were much larger than those in any other console, allowed the almost total elimination of hand wiring. Taken together these advances produced the most cost effective console of its era.

In July of 1971 Dave licensed his design to MCI, which sold it as the MCI 400 series console, the first of a whole new generation of console designs to come. He founded Studio Supply Company and Harrison Systems, both of Nashville, Tennessee, and in October 1975 introduced ➤

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the first console to bear the Harrison name, the 3232. He stayed active in console design work through the digital era, contributing programming to some of today's digitally controlled analog consoles.

In recent years Dave's strong commitment as a Christian led him

into missionary work. He had been writing programs to assist in development of written languages and Bible translation for Wycliffe Bible Translators. Once a written language is developed, which can take as much as 15 years, and the people taught to read, the Bible is then

translated into the language.

I have had the good fortune to get to know Dave and his wife, Sheila, these past few years. He became a good friend and mentor and will be sorely missed.

Ray A. Rayburn
Arlington, Texas

It is with sadness that I report the death of **Michael Gayford**, AES member, on April 22. A long-standing member of the British Section and a respected electroacoustician, Michael was born in the middle of World War I. He inherited the scholarly outlook of his parents and became fascinated with early radio technology. His family related the story of how, in the 1920's, Michael immediately dismantled an expensive radio set that he had persuaded his parents to buy, whereupon he proceeded to improve upon its design. This early interest in audio engineering developed as he built a radio and electrical workshop in an old stable, where he was able to construct cabinets for his equipment.

Having switched from classics to science at school, Michael's progress

quickly became unstoppable. He went on to earn a BSc in electrical engineering at London University, followed by postgraduate studies at Imperial College, researching microphone and loudspeaker design.

During World War II Michael was involved in secret research work alongside the teams that developed radar, working on projects related to magnetic mines and submarine communications. In the early 50s he took up a post at STC (Standard Telephone and Cables) designing microphones. He was a leading figure in the development of STC's ribbon microphones, which included the production design of the world renowned STC 4038 and the 4104 noise-cancelling lip ribbon microphone. He continued to remain involved with these microphones when they were

taken over by Coles in 1978. In addition to his microphone design work, Michael travelled widely in Europe and lectured in America, as well as acting as consultant in acoustics for the UK's Royal Festival Hall, and on reinforcement systems for St. Paul's and Guildford Cathedrals.

Michael Gayford was UK representative on the IEC committee for microphone standards and authored a number of books on electronics and electroacoustics. His most recent work was the editing of the authoritative *Microphone Engineering Handbook* for Focal Press published in 1994. Not only is his death a great loss to the industry that meant so much to him, but he will also be missed greatly by his family and friends.

Francis Rumsey
Guildford, UK