man of Steinway & Sons, on August 29 in Plymouth, Massachusetts. He died of heart failure after a brief illness. A memorial service is planned on October 18 at the All Souls Unitarian Church in New York City. The family has requested that instead of flowers, memorial contributions be sent to Bard College in New York, which was John's alma mater, or to the Pilgrim Society of Plymouth.

- William Shockley, controversial inventor of the transistor, died of cancer at the age of 79. He was one of three researchers from Bell Laboratories who developed the solid state transistor in 1947, but the invention remained unused. Shockley bought the patent from Bell for $23,000. The founder of Shockley Semiconductors, Schockley was considered an important inventor who made an enormous contribution to the field of engineering.

- Harold Joseph Leak, audio pioneer, died at his home August 27, 1989, in Jersey, U.K., at the age of 82. For three decades after World War II, Leak's name dominated the U.K. high-fidelity market. In 1945 his company launched the Point One amplifier, which as its name implied, had a harmonic distortion level below 0.1%. This product set new standards, not only in its technical performance, but also in the elegance of its construction for a commercial amplifier in series production. The amplifier was widely distributed throughout the world. In fact, Leak was one of the first manufacturers to achieve success in export markets, particularly in the U.S.

The Point One was purchased for use by the BBC and other prestigious institutions, thus endorsing its credibility. Regrettably, the same standards were not achieved in a series of matching preamplifiers and radio tuners. Indeed, even later power amplifiers (both of the valved and transistorized variety) failed to reach standards of construction and performance achieved by the original Point One design.

Leak was nevertheless lucky in his choice of collaborators for other ancillary equipment. Two mono pick-ups designed by George Wise achieved considerable success as did the trough-line FM tuner designed by Amos and Johnson.

Throughout the history of his firm, H.J. Leak & Co. Limited, founded in 1934, took an interest in loudspeaker development. Early models using paper cone technology did not survive prototype stages. Later forays into electrostatics during the 50s attracted much attention. But, here again, series production was never started. Leak's ultimate success in the loudspeaker field came through the efforts of another collaborator, D.A. Barlow, who published an interesting paper in Wireless World while at the Aluminium Development Laboratories at Banbury. This article suggested benefits which might result from the use of foil-stressed diaphragms in combination with aluminium and expanded polystyrene. Leak immediately engaged Barlow to design a revolutionary loudspeaker called the Leak Sandwich. It was brought to the market in 1959 and enjoyed a considerable commercial success over many years due to the introduction of at least half a dozen new constructional features introduced by Dr. Barlow. Leak sold his company to the Rank Organization in 1969 and the brand continued in association with Wharfedale for a few years. However, eventually the name was set aside and has not been revived since.

Leak started his career in electronics, installing sound equipment in Gaumont British cinemas. He later set up on his own as a radio service man and in the 30s started manufacturing audio amplifiers as a subcontractor to larger companies. There is no doubt that the original Point One amplifier made his name and consolidated the company. Leak was also one of the first people to mass produce a transistorized amplifier for hi-fi markets. This product sold in large numbers despite poor test figures and an almost conspiratorial decision by the U.K. hi-fi press not to review it.

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