manufacturers in Germany, Britain and the United States, thus bringing into its fold important research laboratories, the patents to PAL and NTSC television technologies, and of course large manufacturing facilities.

Thomson Consumer Electronics is a wholly owned subsidiary of the French state and appears to have the full confidence of the current French regime. Admittedly, the government's support cannot be taken entirely for granted. In February a unit of the French Foreign Ministry produced a memorandum questioning the wisdom of the government's commitment to Europe's MAC television system at a time when fully digital systems are being discussed in the US. The memo provoked an indignant response from Thomson's corporate leadership. The company questioned whether an all-digital standard could be met by the end of the 1990s and suggested that the case for an all-digital system depends on the special requirements for terrestrial broadcasting set for the US by the FCC. "I had no idea that there were qualified electronics engineers at the Foreign Ministry," a spokesman for Thomson commented acidly.

US and Soviet markets

Together, Thomson and Philips account for about one-third of television manufacturing in the United States, and as members of one of the three consortia competing in the FCC trials, they seem well placed to make big inroads into North America's HDTV market. In addition to that, even though the MAC systems developed for Europe require 12-MHz channels and therefore are not compatible with the 6-MHz simulcast system favored by the FCC, they may turn out to be more readily adaptable to emerging FCC standards than currently expected. NHK is developing variants of MUSE, which normally requires a 9-MHz channel, to compete in the FCC trials, and if MUSE can be adapted, it is not obvious why the same would not be true for the MAC family.

Even if MUSE and MAC cannot be successfully tailored to the standards selected by the FCC, the possibility remains that programs from either system could be transmitted by satellite into the head-end of private cable systems or telephone systems—if the "Baby Bells" are permitted to enter the television business, as is widely expected—for further transmission to homes. No obvious technical barriers stand in the way of direct satellite transmission of MAC and MUSE in the United States. And statements made in recent months by FCC Chairman Alfred Sikes suggest that his dreams are troubled by the specter of direct satellite transmission.

The USSR uses the SECAM color television system, and so free convertibility between Soviet and European television already is an accomplished fact. Two years ago, when Mikhail Gorbachev paid a visit to Bonn (the first state visit by a Soviet leader to the Federal Republic of Germany), the notion was hatched at a high level in the German government of making an HDTV news film of his visit. According to Bosch's Dieter Pohl, the coordinator of Germany's work in EUREKA-95, the idea was presented to the HDTV directorate and quickly won approval. The result was the first live HDTV news film ever made, Pohl says.

Obviously the officials planning Europe's future television system have been casting a sharp eye on the potential Soviet market as well as the US market.

Setbacks and uncertainties

Effectiveness in global politics, as Henry Kissinger has been fond of saying, often is a function of the ability to "create facts." The direct participation of the French state in the European HDTV program helps give that program the capability to pursue a long-term strategy and to engender *faits accomplis* that everybody else in the world then has to adjust to. Yet the EUREKA-95 program has not been immune to glitches and disappointments.

The first high-power satellites designed to carry D2–MAC transmissions (enhanced television, not true HDTV) all suffered technical failures. As a result, there seems now to be some uncertainty as to whether HDTV customers will be able to receive programs using 40-cm dishes as originally intended, or whether they will have to purchase 60-cm dishes instead. The whole strategy of requiring customers to buy dishes is fraught with risk. Will customers be willing to invest in new receivers and dishes in order to receive D2–MAC and HD–MAC transmissions, considering that those transmissions will not be backward compatible with receivers based on PAL and SECAM?

In Britain, whose engineers played an important role in the development of the MAC transmission system (along with Philips, which developed an important algorithm), hopes for the EUREKA-95 system have been set back by Rupert Murdoch's stubborn insistence on continued use of PAL in his Sky Television network, despite a directive by the European Community requiring satellite broadcasters to switch over to D2–MAC. British Satellite Broadcasting remained committed to MAC, but late last year it was taken over by Murdoch.

Japan's MUSE system has the advantage of being directly backed by the national broadcaster, NHK, but in Japan too, it will be the customer in the end who decides whether to invest in a dish, a receiver and converters.

—WILLIAM SWEET

SCHMID SUCCEEDS STRASBERG AS ASA's EXECUTIVE OFFICER

Charles E. Schmid, an acoustical engineer with over 25 years' experience in the general area of underwater acoustics, has succeeded Murray Strasberg as administrative chief of the Acoustical Society of America. Schmid recently took office as executive director, a newly created position that ASA's executive council authorized with a change in the society's bylaws in November 1990.

Schmid earned his BS at Cornell University (1963), his MS at the University of Connecticut (1968) and his PhD at the University of Washington (1977), all in electrical engineering. He worked for General Dynamics/Electric Boat in Groton, Connecticut, from 1966 to 1968 and for Honeywell Marine Systems in Seattle and Poulsbo, Washington, from 1966 to 1990. He was ASA's Congressional Science and Engineering Fellow in 1985–86.

An expert on underwater acoustics and signal processing, Schmid has done research and design work involving submarine sonars and train-

Charles E. Schmid

ers. He also is interested in musical acoustics. His PhD dissertation dealt with pattern recognition of sounds from musical instruments.

Schmid also has been active as a leader in environmental and community affairs on Bainbridge Island, Washington, where he and his family live.

At its meeting last November in San Diego, ASA presented its Distinguished Service Citation to Strasberg for his four decades of service to the society, especially for his years as secretary. A physicist who earned his bachelor's degree at the City College of New York and his master's and doctoral degrees at Catholic University, Strasberg became secretary of ASA in 1987, succeeding Betty Goodfriend. He spent most of his career at the David Taylor Naval Ship Research and Development Center in Bethesda, Maryland, and he became a senior research scientist at David Taylor in 1972. He also served as a scientific adviser to the London branch of the Office of Naval Research and was a Fulbright lecturer at the Technical University of Denmark.

Strasberg's main research interests have been hydrodynamic noise, cavitation and cavitation noise, structural vibrations and acoustic instrumentation. He is a former associate editor of the *Journal of the Acoustical Society of America* and a past president of ASA.

ALLEY IS ELECTED AAPT VICE PRESIDENT FOR 1991

The new vice president of the American Association of Physics Teachers is Reuben E. Alley, a professor of electrical engineering at the US Naval Academy at Annapolis. Alley, who took office at the AAPT meeting in San Antonio in January, succeeds James H. Stith of the US Military Academy at West Point, who is now president-elect. AAPT's president is Thomas D. Rossing of Northern Illinois University.

Alley earned a BA from the University of Richmond in 1938 and a PhD in electrical engineering from Princeton University in 1949. He has worked at a number of universities and industrial labs, including the University of Richmond (1948–51, 1953–55), Washington and Lee University (1955–57), Bell Telephone Laboratories (1951–53, 1957–59), Texas Instruments (1959–60), Vassar College (1960–62) and the University of South Carolina (1962–65). He has been at the Naval

Reuben E. Alley

Academy since 1965.

Alley has done research on magnetic materials, nuclear radiation effects, and electrical analog networks for solving nonlinear differential equations.

John L. Hubisz Jr, a physics teacher at the College of the Mainland in Texas City, Texas, has been elected to a three-year term as a member of the AAPT executive board. Kenneth S. Ozawa, a professor of physics at California Polytechnic State University, has been reelected to a two-year term as secretary.

SPS ESTABLISHES NEW SCHOLARSHIP, MAKES WHITE AWARDS

The American Institute of Physics and the Society of Physics Students have established a new scholarship for physics majors in honor of Herbert Levy, a German immigrant whose own promising career in physics was cut short after he was debilitated by mustard gas during World War I.

Funds for the $1000 annual award will come from a bequest from Levy's widow, Margaret Levy, a piano teacher who lived in Syracuse, New York, until her death in May 1990. As stated in Mrs Levy's will, the money is "to be used for a worthy, needy physics student, to be chosen by the [AIP] board of trustees or other governing body." The executive committee of the Society of Physics Students will administer the prize.

The first Herbert Levy Memorial Endowment Fund scholarship will be awarded in 1992.

In other news from SPS, six schools have been selected to receive this year's Marsh W. White Awards, which are given to SPS chapters to support projects that promote interest in physics among students and the general public. The award is named for a professor emeritus of physics at Pennsylvania State University who was executive secretary of Sigma Pi Sigma, the physics honor society, from 1930 to 1967 and its president from 1967 to 1970.

The 1991 White Awards will go to the SPS chapters at Jacksonville University (Jacksonville, Florida); Louisiana Tech University (Ruston); Loyola College (Baltimore, Maryland); Southwestern Oklahoma State University (Weatherford); the University of Wisconsin, Platteville; Jackson State University (Jackson, Mississippi). Morningside College (Sioux City, Iowa) received an honorable mention.

IN BRIEF

Rensselaer Polytechnic Institute and the National Science Teachers Association have formed the Russian American University Consortium, which will arrange exchanges between US and Soviet colleges and universities. US experts will go to the USSR to teach subjects such as business, computer science and technology management, and Soviet experts will come to the US to teach advanced mathematics, theoretical physics and geoscience. The chair of the association's board is Roland W. Schmitt, president of Rensselaer.

Darlene A. Carlin, the director of journal publishing for the American Institute of Physics, has been named an AIP officer. The other officers are the chair and the secretary of the Governing Board and the institute's executive director, treasurer and director of physics programs. As an officer, Carlin will serve on the AIP management committee.

Alexander J. Glass, acting associate director for magnetic fusion energy at Lawrence Livermore Laboratory, has been named head of the team that will coordinate plans for US participation in the proposed International Thermonuclear Experimental Reactor project. ITER is a collaboration of the US, the European Community, the USSR and Japan, and it involves construction of a tokamak capable of sustaining fusion reactions. Conceptual design work for ITER was completed in December, and negotiations toward launching a six-year engineering design phase for the project began in February.

CERN's council voted unanimously in December to admit Poland as the organization's 16th member state. ■