

be closely coordinated with research in computer sciences at MCC. That center was begun four years ago to head off Japan's vaunted Fifth Generation project by devising innovative computer concepts and advanced software.

To get a running start, SEMATECH will be given some of today's most advanced integrated circuits by IBM

and AT&T, which both design and produce chips for their own use. Under an agreement announced on 26 January IBM will provide the design and manufacturing specifications for its 4-megabit dynamic random-access memory chip and AT&T will contribute the technology for its 64-kilobit static RAM device.

—IRWIN GOODWIN

WASHINGTON INS & OUTS DOE'S SNOW GOES TO CHICAGO; MARQUET AND KERBER LEAVE DOD

On 22 January, **Joel A. Snow**, director of science and technology affairs at the Department of Energy's Office of Energy Research for the past ten years, became associate vice president for research at the University of Chicago. The vice president for research at Chicago is Walter Massey. Among its many functions, the research office oversees management of Argonne National Laboratory.

In fact, Snow has spent 20 years in Washington science programs and, as such, has been involved in some of the capital's most contentious research issues in that period. In government circles he is known as an informed, urbane and often acerbic commentator on policy matters.

Snow got a PhD in physics in 1967 at Washington University in St. Louis, in its halcyon days, when Edward U. Condon, George Pake and Arthur Holly Compton were there. In 1968, after a postdoctoral year at the University of Illinois, he joined the National Science Foundation, where he helped develop Research Applied to National Needs, a program that owed its origin to a widely held assumption in the late 1960s that government-funded research could help solve many of society's problems. RANN was mired in controversy from the start. Its birth certificate was issued by Congress in P. L. 90-407 in 1968 and its wet nurse was the White House Office of Management and Budget. But Congress and OMB had not sought prior approval for their actions from the National Science Board, which oversees NSF policies.

The upshot was that the Science Board, irked at being ignored, decided it needed to approve all RANN proposals, because P. L. 90-407 required NSF to support the program not only at universities but at other government agencies and nonprofit organizations. From fiscal 1971, when RANN began obligating money, until

NSF killed it in 1978, a total of \$484 million was spent on the program—notably for R&D on alternative supplies of energy after the Arab oil embargo forced Americans to stand in gas lines. Not surprisingly, the death knell for RANN came from academics who argued that it was a dangerous new direction for NSF, one veering away from the agency's original purpose of supporting university grants and fellowships in basic research.

Before RANN's demise, Snow joined the White House Office of Science and Technology Policy, where he helped guide the creation of the DOE Office of Energy Research in 1977. He remembers the stormy meeting in the Roosevelt Room of the White House at which Wolfgang K. H. Panofsky, Frank Press and Pake confronted Energy Secretary James Schlesinger to hammer out the structure and substance of a DOE basic-sciences program. Less than a year later Snow joined DOE, where one of his main jobs has been to manage the Energy Research Advisory Board and to administer the selection of winners of the annual Fermi and Lawrence Prizes. He also assisted Alvin W. Trivelpiece, who was his boss at DOE's Office of Energy Research, in developing a strategy for selling the giant \$5.3 billion Superconducting Super Collider to the Reagan Administration and Congress. "Joel is extremely effective behind the scenes," says Trivelpiece, now executive officer of the American Association for the Advancement of Science.

One of the small band of physicists brought on board the newly launched Strategic Defense Initiative Organization in 1984, **Louis C. Marquet** jumped ship on 4 January to sign on as vice president for research at Atlantic Aerospace Electronic Corp in Greenbelt, Maryland. He had been

one of three deputies to the program's director, Lieutenant General James Abrahamson. Before coming to "Star Wars," Marquet was at DARPA, where he managed directed-energy projects. He headed all research and technology in the SDI operation. To his credit, as SDIO's liaison with the American Physical Society panel that issued its examination of directed-energy weapons last April, Marquet told news reporters the report ought to receive a final grade of A, in disagreement with some of his Pentagon colleagues who had fought its release.

Marquet earned a PhD from the University of California at Berkeley in 1964 and taught physics at the University of Arizona before going to MIT's Lincoln Laboratories, where he became associate head of the optics division. In 1983 he went to DARPA. In leaving SDI for Atlantic Aerospace, Marquet rejoins his old boss, former DARPA chief Robert Cooper.

While Abrahamson seeks a successor for Marquet, he has appointed Air Force Colonel **Garry A. Schnelzer** the acting deputy for research and technology. Schnelzer, who holds an MS degree from the Air Force Institute program at the University of Hawaii, worked as a research physicist on inertial guidance systems at the Air Force Cambridge Laboratories in Massachusetts and as a program manager for space-based radar and antisatellite weapons at the Air Force Space Division in Los Angeles. Since 1985 he has been director of the sensors office in SDIO.

Ronald L. Kerber resigned as deputy secretary of Defense for research and engineering on 5 February to become vice president for aerospace advanced systems and technology at McDonnell Douglas in St. Louis. Before coming to the Pentagon in 1985, Kerber had been associate dean for graduate studies and research and director of the division of engineering research at Michigan State University.

He received his MS and PhD in engineering science from Caltech in 1966 and 1970, respectively. Kerber joined the MSU faculty in 1969, and left in 1971 to spend a year at the Aerospace Corp, where he worked on chemical lasers. Upon returning to MSU he conducted research in a wide range of fields, including laser physics, plasma chemistry, fluid dynamics, energy conversion and materials science. During 1983-84 Kerber served as program manager in DARPA's materials science division, specializing in laser hardening and electromagnetic processing.

—IRWIN GOODWIN ■