showed interest in the possibility that ISTP could provide the Star Wars program with data on the solar wind's effect on Earth's magnetosphere, which in turn could affect conditions that SDI spacecraft might encounter. ISTP's polar probes also might produce data on space plasma and auroral phenomena in polar regions, where conditions for missiles and directed-energy weapons are much different from those in equatorial regions.

The Research Council report, it should be noted, was not concerned with Star Wars matters.

—Irwin Goodwin

Academies will build western outpost

What Rockefeller and Carnegie did for education, science and medicine earlier in this century, Arnold O. Beckman, founder and chairman of a California company that makes precision instruments, is apparently trying to do right now. Since the early 1960s, when he donated the 1200-seat main auditorium at Caltech, where he earned a PhD in photochemistry in 1928 and served on the chemistry faculty until 1940, Beckman has emerged as possibly the nation's biggest private benefactor of scientific research. His gifts, made through the Arnold and Mabel Beckman Foundation, totaled $75 million in 1985 alone.

His latest donation of $20 million is for a West Coast study center for the National Academy of Sciences and National Academy of Engineering. The gift was characterized as "the largest single contribution ever received by the academies." The center will be built on a 7-acre site valued at $6 million, to be given by the Irvine Co, which is planning and developing an entire city around the Irvine campus of the University of California and near the John Wayne Airport. A letter from President Reagan, distributed at a press conference held simultaneously in Irvine and Washington, D.C., on 4 November, extolled Beckman for a "distinguished career and this generous act," which "combine to make you a sterling example of two essential American qualities: the entrepreneurial spirit and the public spirit."

The construction of the center will begin in spring and it will open for business a year later. It will be used as a West Coast facility for studies and symposia conducted by the academies and the National Research Council, similar to the way the Soviet Academy operates its far-eastern branch in Vladivostok. Both academies, along with the Institute of Medicine and the Research Council, now share buildings in Washington, D. C., and in Woods Hole, Massachusetts. Together, they ran some 70 meetings at universities, hotels and motels west of Denver last year, involving about 2500 scientists, engineers and other specialists. All told, one-third of the members of both academies live in western states, with more members in California, it so happens, than in any other state in the nation.

NAS President Frank Press said West Coast members wanted to participate in more projects but had been put off by the distance to Washington and Woods Hole. What's more, Beckman observed in answer to a question, a West Coast facility would provide a truly national outreach for the academies and heighten interest in the rapid growth of science and technology in the Pacific Basin.

Studies of ethical issues. Beckman, an NAE member since 1967, explained that the center would be used mainly for broad studies of ethical questions in science and technology. Such issues dominate genetic engineering, for instance, and some defense R&D, such as the Strategic Defense Initiative. "I have long been concerned with the haphazard manner in which we handle many ethical issues related to science, technology and society," said Beckman. "Currently, these matters are aired in the media largely by activists who see only a narrow aspect of a problem. Through simplistic sloganeering and mass demonstrations, they seek to establish policies that should be established only after thorough and thoughtful study by competent leaders in whatever professions may be involved, including social sciences, economics, religion and politics, as well as medical and physical sciences and engineering."

ARNOLD AND MABEL BECKMAN

Beckman's gift came one month after the University of Illinois announced it would receive $40 million from the Beckman Foundation to establish a research institute with two centers—one dealing with materials and computing sciences, the other with biology, behavior and artificial intelligence. University administrators call it the largest gift ever by an individual to a public university. Construction of the institute is likely to start next year with funds from a $10-million grant by the state of Illinois. The state also has guaranteed $2 million per year to operate the institute, and additional financial support is expected from private sources. The grant for the institute was Beckman's second to his alma mater, where he received graduate degrees in physical chemistry before attending Caltech. In 1979 he gave $5 million as an endowment to support young scientific and medical researchers at Illinois.

Besides the gifts to the academies and the University of Illinois this year, Beckman has given $12 million to Stanford University to help build a $50-million center for molecular and genetic medicine and a $1.5-million endowment for a research professorship at Rockefeller University. In the late 1970s, Caltech received $6 million for the Mabel and Arnold Beckman Laboratories of Behavioral Biology, and last year he gave $2.5 million for the Beckman Laser Institute at the University of California at Irvine and another $6.5 million to Caltech for the Arnold and Mabel Beckman Laboratory of Chemical Synthesis.

At the news conference in Irvine, Beckman refused to answer questions about future philanthropic plans, saying such questions were "not relevant to this meeting" and that his foundation "does not seek publicity." But in academic circles there is intense interest in courting Beckman, who founded Beckman Instruments Inc while he was teaching at Caltech. He merged it into Smith-Kline Corp in 1982 to form SmithKline Beckman, of which he is a major stockholder. Beckman's rise began in 1935, when he started his company on his first product—a pH meter to measure the acidity of lemon juice in a Southern California citrus-processing plant. In 1940 he introduced two new products—the quartz photoelectric spectrophotometer for automated chemical analysis and the helical potentiometer, a variable-resistance device for the pH meter that turned out to be important in radar during World War II and later in computers, control systems and various electronic products.

–Irwin Goodwin □