

What about permanent human colonies in space? "I haven't gotten it clear yet what are the key things that would require continuous occupancy," Frosch said, referring to the idea of manned space stations. He believes that as experience is gained with the Space Shuttle, some experiments and possibilities for applications will be found that will drive NASA in the direction of ever longer missions. In his opinion, therefore, the colonization of space will take place "as a more or less evolutionary process, rather than a sudden jump where we put, say, 50 people at L5 or whatever." Frosch dismisses for the present the suggestion of Gerard K. O'Neill (see *PHYSICS TODAY*, September 1974, page 32) and others that giant human colonies be placed in orbit at the Earth-Moon Lagrangian-point neighborhoods (such as L5). "We'll probably go on thinking about it," he told us, "but I'm inclined to put that aside until there's a driving reason for doing it."

Benefits from space activities. Those who question the overall usefulness of NASA's efforts, though, have "short memories," according to Frosch. He listed satellite

communications, improved meteorological predictions and Earth-resource sensing as but a few of the developments that prove NASA is something more than "a kind of public-works program for scientists." Another, often overlooked spin-off from the space program, he said, is the capability to manage very large, complicated technical systems. "Whether that means that the people who manage operations like the Viking mission could or should manage things like BART [San Francisco's Bay Area Rapid Transit system] or the Washington Metro," Frosch told us, "I don't know. Some of the skills would be applicable, but if you do that with a group of people then you're not really maintaining their expertise—you're employing them to become something else altogether." He noted that if the Jupiter Orbiter-Probe had not been voted start-up money for 1978, the scientists and engineers on NASA's planetary-exploration teams—especially at the Jet Propulsion Laboratory—would have been left with no means to stay usefully occupied. "I've asked people to look further at what's needed to maintain that capability

through such a period, what rate of activity is necessary to keep such a team alive," Frosch said. He sees such maintenance as the preservation of a national capability. —FCB

in brief

Nominations are now open for the fourth Marconi International Fellowship, which is a \$25 000 grant for "creative work in science, technology and humanism." Information regarding the Fellowship may be obtained from the Aspen Institute for Humanistic Studies, 1919 14th Street, Boulder, Colo. 80302, and nominations are due no later than 15 October.

Solid-State Physics in the People's Republic of China, a trip report of the American Solid-State Physics Delegation, is available from the Printing and Publishing Office of the National Academy of Sciences, 2101 Constitution Avenue NW, Washington, D.C. 20418 at a cost of \$10.25 per copy.

the physics community

AAPM elects Bjarngard, acts to change bylaws

The American Association of Physicists in Medicine has chosen Bengt E. Bjarngard as its president-elect for 1978. Bjarngard is an associate professor in the Harvard Medical School department of radiation therapy.

The AAPM is in the process of chang-

ing its bylaws and rules to allow its officers to serve terms that coincide with the calendar year; therefore, this year's president, William R. Hendee (University of Colorado) will be serving an extra half-year in office. In January 1978, Peter Wootton (University of Washington) will succeed to the office of president and Bjarngard will assume his post as president-elect.

Bjarngard was educated in his native Sweden where he received his PhD in radiation physics in 1962 from the University of Lund. He then worked for four years as a research physicist at the Atomic Energy Co before moving to the US to become director of radiation physics at Controls for Radiation Inc. He joined the faculty of Harvard Medical School in 1968 and was named to his current position in 1974. Bjarngard's research interests include dosimetry and medical radiological physics.

Leshowitz is first ASA Congressional Fellow

Barry H. Leshowitz, associate professor of psychology at Arizona State University, has been named the first Acoustical Society of America Congressional Science and Engineering Fellow. The fellowship, which is co-sponsored by the American Association for the Advancement of Science, will be given to Leshowitz for the academic year 1977-78.

Leshowitz studied as an undergraduate

at Brooklyn College and earned his PhD from the City University of New York in 1968. From 1968 to 1970 he was a National Institutes of Health postdoctoral fellow at the University of California, San Diego, and then he joined the faculty of the Arizona State University. Leshowitz spent one year, 1976-77, as a research fellow at the Institute for Perception Research, Eindhoven, The Netherlands.



BJARNGARD



LESHOWITZ