

nological superiority. Their position is based first on the premise that our efforts may only be leading us into a "race with ourselves." "Since the Soviet Union rapidly learns of our discoveries," says the FAS report on the R&D gap, "we are protecting against being surprised by new weapons only by guaranteeing that we will be confronted by these same weapons." Second, the FAS argues that, if we were to let up somewhat, the Soviets would catch up with us, but there is no reason to assume that they would surpass us. In fact, according to FAS witnesses, a number of factors, such as the Soviets' lack of computers and the organization of their scientific establishment, make it unlikely that they could surpass us. "The Soviet system," says the FAS report, "is thought to be especially well designed for catching up, if poorly designed for getting ahead."

George W. Rathjens, a professor of political science at M.I.T. and one of the authors of the FAS report, sketched the argument still further in testimony last week before the Joint Economic Committee of Congress. According to Rathjens, who was formerly deputy director of the Defense Department's Advanced Research Projects Agency, in the area of strategic weapons it wouldn't even matter if the Soviets did surpass us. "The strategic systems serve their purpose," he said, "if there is enough likelihood that they will serve as deterrents. I do not see how a modest or even quite substantial technical advantage possessed by one side could be very useful. Certainly, evolutionary changes in technology will not upset the present, relatively stable balance. A dramatic breakthrough, for example a virtually airtight ABM system, might; but I see no such possibilities on the horizon." For tactical warfare, however, Rathjens indicated that technological advantage could be quite critical.

Just how much effect will the FAS testimony have on our efforts in military technology? With respect to our general arms posture, not much. The U.S. strategy, as stated by Foster, is "to push as aggressively as we possibly can across a broad range of research and technology, in an attempt to discover first the kinds of things that an enemy might later have in store for us." Even some of the more vocal congressional advocates of disarmament would get jittery if this country were not the first to perfect every in-

novation in the arms race. In responding to the FAS position, Foster said in a letter to Congress that it represented "a simplistic view of the arms race." "Of course," he said, "both the Soviet Union and the United States pay attention to each other's weapons systems development and deployments, but these considerations are only a portion of the fundamental motivations in the development of any one or a group of military weapons systems."

"The Soviet Union," Foster concluded, "is a proud country. . . . Soviet military and space science and technology is innovative and creative and not 'relatively backward and inefficient.'"

Yet no matter how highly he regards Soviet abilities, Foster is likely, in the wake of the FAS-generated controversy, to experience increasing difficulty in his campaign to convince Congress that the Soviets are on the verge of surpassing us. This could have many subtle, but far-reaching effects on the defense budget.

Congress is ill-equipped to challenge most of the complex items in the defense budget. Instead, it acts in response to a general feeling of what is needed and what isn't. As one congressional aide put it, "The net result of something like the threat of the technology gap is that the Congress hears cries that 'The Russians are Coming.' If somebody convinces them that the Russians aren't coming, then the prevailing attitude is that we can take a harder look at the budget."

Whatever the final effect, in dollars and cents, of their actions, the FAS is offering Congress something they have lacked for many years: expert, independent testimony on the question of how much weaponry is really enough.—ROBERT J. BAZELL

APPOINTMENTS

Thomas A. Graves, Jr., associate dean of the faculty, Graduate School of Business Administration, Harvard College, to president, College of William and Mary. . . . **Gordon B. Carson**, vice president, Ohio State University, to executive vice president, Albion College. . . . **Robert L. Gluckstern**, head, physics and astronomy department, University of Massachusetts, Amherst, named vice chancellor for academic affairs and provost. . . . **John**

E. Bardach, professor of natural resources, wildlife, and fisheries department, University of Michigan, to director, Hawaii Institute of Marine Biology, University of Hawaii. . . . **Leo Goldberg**, director, Harvard College Observatory, to observatory director, Kitt Peak National Observatory. . . . **Terence A. Rogers**, acting dean, University of Hawaii School of Medicine, appointed dean. . . . **James B. Farison**, acting dean, College of Engineering, University of Toledo, appointed dean. . . . **John G. Skalnik**, professor of electrical engineering, University of California, Santa Barbara, to dean, College of Engineering at the university. . . . **Francis N. LeBaron**, professor of biochemistry, University of New Mexico School of Medicine, named chairman, biochemistry department. . . . **Robert S. Daniels**, professor of psychiatry and social medicine, University of Chicago Pritzker School of Medicine, to director, psychiatry department, University of Cincinnati. . . . **Marvin Stein**, chairman, Mental Health Extramural Research Advisory Committee, NIMH, appointed chairman, psychiatry department, Mount Sinai School of Medicine, City University of New York. . . . **Calvin H. Plimpton**, president, Amherst College, to president, Downstate Medical Center, State University of New York, Brooklyn. . . . **John K. Major**, dean, Graduate School of Arts and Sciences, University of Cincinnati, to dean, Graduate School of Arts and Science, New York University. . . . **Henry L. Price**, professor of anesthesiology, University of Pennsylvania Medical School, named chairman, anesthesiology department, Hahnemann Medical College and Hospital of Philadelphia. . . . **Charles B. Beck**, professor of botany, University of Michigan, to chairman, botany department at the university. . . . **William L. Thomas**, professor of geography, California State College, Hayward, named chairman, geography department at the college. . . . **Julius B. Richmond**, professor of child psychiatry and human development, Harvard University Medical School, named head, preventive and social medicine department at the school. . . . **Antolin Raventos**, president-elect, American Radium Society, appointed chairman, radiology department, University of California School of Medicine, Davis. . . . **Ralph C. Brown**, chairman, geography department, Wisconsin State University, Superior, to chairman, geography department, University of North Dakota.