

tions on that topic; and a study on "The Soviet strategy of terror" was issued the day after Secretary of State Alexander Haig announced that international terrorism would be a top priority of the State Department.

The Heritage people never send out a press release that is not accompanied by



Edwin J. Faelner, Jr.

Constance Holden

the publication to which it refers; every new report is delivered by hand to every member of Congress as well as key aides and government officials. Money is no problem: in addition to corporate and foundation support, Heritage has received 120,000 individual contributions over the past 18 months.

Science policy is one of the few areas to which the foundation has not accorded much attention. It is not particularly interested in the nature of the President's science advisory apparatus. Recommendations so far are in accord with the conservative line: most applied research should be left to the private sector; regulatory and fiscal roadblocks to research investments should be lifted; and government should reduce participation in areas that promise no immediate benefits, such as space, astronomy, and high energy physics. In line with faith in the power of economic incentives, the foundation recommends establishment of a new federal prize for private innovators. Says Faelner, "we would defend scientists making decisions instead of them being made by bureaucrats or the courts." Any more specific than that he is not prepared to get. He says, "broadly speaking, as believers in the growing economic pie, we are supportive of advances in science and technology. . . the best way government can serve science is by restoring a healthy economy."

—CONSTANCE HOLDEN

"Flash" Near South Africa, Again

The press has recently given attention to a report of a second mysterious "flash" over the ocean near South Africa, detected 15 December by a U.S. surveillance satellite. The sighting has been described as a sequel to the flash spotted near South Africa on 22 September 1979.

Many intelligence analysts thought the 1979 event might have been produced by a small, surreptitious atom bomb test. After a year-long review of the physical data collected that night, an independent panel of scientists brought together by the Carter White House concluded that there was no evidence that a blast had occurred. However, the scientists never came up with a persuasive explanation of what had happened (*Science*, 1 August 1980). They guessed that a meteoroid might have reflected sunlight into the satellite's "eye."

Some of those who were skeptical of this theory thought the Carter Administration was trying to paper over an unpleasant fact: that a nuclear test could be concealed and that a test ban treaty would be unenforceable. The skeptics appear ready to cite the second event as conclusive evidence that someone is testing nuclear weapons in secret and getting away with it. As one agitated Washington newspaper columnist put it, "President Reagan is confronted with one of the gravest, most perplexing mysteries of the nuclear age. . . Is the nuclear club expanding another notch, or has a card carrying member taken advantage of the remote waters where the South Atlantic joins the Indian Ocean to test weapons without the risk that the world will ever discover who he is?"

Although the report from 15 December remains somewhat puzzling, government officials and scientists who have studied it say that in one respect it is not mysterious at all. The intelligence agencies agreed this time that it was not an atomic blast. In the earlier case, the federal technicians were divided because the satellite's record looked like the unique signal given off by an atom bomb explosion. In this case there is no difference of opinion in the technical community.

The 15 December event was in fact a heat signal picked up by an infrared monitor designed to spot missile launches. Because nuclear blasts do not give off a unique infrared signal, there is no way for the people who interpret the satellite's messages to judge whether the machine spotted a natural or man-made event. However, nuclear blasts do produce a unique visible light signal, not thought to have any counterpart in nature (except for meteoroids reflecting sunlight). The technicians are confident that the 15 December event could not have been caused by a bomb because an optical sensor—just like the one that picked up the earlier South African flash, and much more sensitive than the infrared sensor—was watching the same area of the globe that night. It saw no flash. According to one highly placed government official, the most likely explanation is that the satellite picked up solar infrared radiation being reflected off the condensation trail of a meteor. The intelligence agencies have combed through the geophysical and other information collected last December and found nothing to suggest that a blast occurred.

One intriguing aspect of this and the previous sighting is that they have given rise to the expression of diverse varieties of international paranoia. Although there is insufficient evidence to prove that any bomb actually went off, authoritative articles have already named villains. The candidates include South Africa, Israel, the Soviet Union, Pakistan, and France.

—ELIOT MARSHALL

Texas Court Rules That Hughes Left No Will

The Howard Hughes Medical Institute has lost an attempt in Texas to take control of the estate of the late Howard R. Hughes, Jr., an empire valued at more than \$2 billion. A victory for the Institute would have immediately made it one of the world's largest private organizations devoted to the support of biomedical research (*Science*, 20 February). On 27 February, a judge in Houston ruled that the Institute could not attempt to probate a so-called lost will. Last year, similar rulings were handed down in Nevada

courts. Though the Institute still might enter into minor court actions in California and Delaware over control of the estate, attorneys who have followed the case believe that the Texas ruling effectively ends the Institute's chances of winning the empire.

—WILLIAM J. BROAD

Reagan Ends Mandatory Conservation

Among the regulations that the new President attacked in his first month in office were those designed to push Americans into conserving energy through controls on building temperatures and home appliances. By executive order, Ronald Reagan lifted the "emergency" temperature controls on public buildings that Jimmy Carter had just imposed for a second 9-month term in January. Building managers who wish to save energy will no longer be able to say that they are keeping offices cool (65 degrees) in winter and warm (78 degrees) in summer because the law demands it.

While conservationists seem disappointed, they are by no means ready to fight to keep the controls. For example, a spokesman for the Environmental Policy Center said that the mandatory temperature settings stirred up a lot of ill will toward conservation programs, a penalty not matched by a significant gain in energy savings.

Far more distressing, says energy analyst Eric Hirst of the Oak Ridge Laboratory, is the new Administration's decision to withdraw federal standards that were to have been imposed this year on home appliances. Reagan's Department of Energy (DOE) has said only that it wishes to "reevaluate" the regulations which would have required manufacturers of refrigerators, ovens, air conditioners, and furnaces to build in a minimum level of efficiency. Most observers assume that this is the first step toward killing the entire project. Conservationists are planning to defend it.

Hirst says that the DOE "did a pretty good job of making these standards cost-effective." He fears that it will take manufacturers much longer to improve the efficiency of appliances without the spur of minimum federal

standards. And he points out that hesitation will have long-term consequences. An inefficient refrigerator purchased today will probably waste energy for 20 years. Hirst warns that unless the home appliance industry finds a way to push itself toward building in greater efficiency, 10 years from now it may find itself in the same fix the U.S. auto industry is in at the moment. There are signs, he thinks, that foreign appliance and furnace manufacturers may try to invade the American market with better products. If customers begin to demand high efficiency, Hirst asks, will the American companies be ready to supply it?—ELIOT MARSHALL

Teletext War Comes into Focus

French, British, and Canadian entrepreneurs are locked in an increasingly heated battle to penetrate the still-untapped U.S. market for teletext systems, which allow television viewers to summon up "pages" of textual information on a TV screen (*Science*, 7 November). One reason for the increased pace of the competition is that consumers, beset by soaring gasoline prices and rampant inflation, are more often staying home for entertainment. Sales of color television sets are currently at an all-time high.

Canadian promoters have captured the attention of Time Inc., which this year will begin testing a satellite-based teletext service. The 24-hour-a-day system will utilize a teletext format known as Telidon, developed by the Canadian Communications Department. Time says it will initially test the system on cable TV channels owned by American Television and Communications Corp., its cable subsidiary. Teletext systems were first developed in England for use with regular TV stations, the teletext "pages" being encoded into the so-called vertical blanking interval between the transmitted pictures and retrievable when the viewer pressed a hand-held selector. About 100 pages of information were available. Since a vastly increased number of channels can be transmitted by a satellite-cable distribution system, however, Time has decided to devote whole channels to

its teletext service. The result of this decision is that about 2000 pages of news, weather, stock market reports, airline and train schedules, sports scores, and shopping guides will be available to subscribers of the Time service.

British promoters announced on 19 February the launching of a joint venture in the United States to market its teletext systems, which have been operating in England for 7 years. The venture is sponsored by British Telecom (the telecommunications arm of the British Post Office) and Logica Ltd. (a British computer firm). The pair plan to aggressively market their teletext systems, a distinct change of strategy. British engineers freely demonstrated the technology around the world in the late 1970's and thus touched off the current spate of rival systems. The British are only now starting to capitalize on the booming world market. "Because our systems are operational," says Dill Faulkes, president of Logica, "we have a substantial advantage over our international competitors, whose systems are still primarily experimental." The British system was recently adopted by Austrian television, which already is sending signals to some 15,000 receivers equipped with teletext decoders. A U.S. manufacturer, moreover, has just announced the production of a teletext decoder based on British know-how. Zenith, which shares with Radio Corporation of America the top spot in U.S. color TV sales, is now manufacturing a teletext decoder it calls Virtex.

French promoters are continuing their alliance with the CBS television network, which recently launched a test of the French Antiope system over the CBS-owned and operated station in Los Angeles, KNXT. By this fall, CBS hopes to have 100 receivers with experimental decoders placed in special test locations around Los Angeles.

CBS is continuing to press its request that the Federal Communications Commission (FCC) set the Antiope specifications as the U.S. standard for all teletext transmissions. Though there has been no official ruling, the FCC has apparently made a de facto decision to let market forces determine which teletext system will reign in the U.S. marketplace.

—WILLIAM J. BROAD