

trial must be compared to the cost of medical care rather than to the cost of doing other kinds of research. Each day a patient spends in a coronary care unit, he says, costs about \$1000. And there

are about 1 million heart attacks each year in the United States. Many of these heart attack victims die before they ever reach the hospital, but Chalmers points out that those who die represent a

significant economic loss to the country.

Critics of the prevention trials contend that the trials would undoubtedly be worthwhile if they indeed showed that particular preventive measures were use-

Briefing

UFO's Just Will Not Go Away

Federal science officials are now being visited by what many of them regard as a nightmare—an upwelling public interest in Unidentified Flying Objects (UFO's) and requests that the government “do” something about the possibility that they exist. One course of action now being considered is another scientific review similar to the report completed in 1969 for the Air Force by a panel led by the late Edward U. Condon.

The issue arose in July, when the mounting number of inquiries began coming into the White House about UFO's. The White House press office asked Presidential Science Adviser Frank Press whether he could do something about answering this mail. Press's investigation of the matter showed that inquiries from UFO buffs get quite a run around: the White House answers one way, the other federal agencies have their own stock answers, and the Air Force, which has chief responsibility for the issue, says something else. So Press wrote the Administrator of the National Aeronautics and Space Administration (NASA) asking if that agency would take the lead in answering incoming mail.

It was Press's by-the-by paragraph that kicked off the fuss, when he suggested that it might be time for another study of the issue. He even suggested that a new study panel include well-known scientists such as astronomer Carl Sagan of Cornell, who is something of a media star, but is said not to believe Earth has been visited by UFO's.

It should be no surprise to anyone familiar with science-government matters that NASA officials are not relishing the thought of launching such an inquiry and have sidestepped the request by assigning an official to the job of looking at the need for a study. NASA seems to fear that the reopening of the question of the genuineness of visitors from outer space will legitimize a subject most establishment scientists consider phony and a waste of time.

What makes NASA's damned-if-they-

do and damned-if-they-don't dilemma interesting, and even important, is that there is indeed a resurgence of public feeling about UFO's, perhaps due to the hit movie *Star Wars*. According to its promoters, *Star Wars* has sold more than 400 million tickets (a fact all the more significant because there are only 200 million people in the entire United States). A new film, *Close Encounters of the Third Kind*, has just been released, about a Citizen Joe whose belief in extra-terrestrial visitors is eventually proved right—despite NASA, the Air Force, and everyone else. It is likely to also be a box office hit. Surely it will increase the White House UFO mail.

Indeed, there may be evidence that President Carter once was, or now may be, among the 54 percent of the American public that a recent Gallup Poll found believes in UFO's. While Governor of Georgia, Carter filed a report that he had seen a UFO while standing with a group of men at 7:15 p.m. on an October evening outside the Leary, Georgia, Lions Club. The Naval Academy graduate—apparently not aware that the object was probably the planet Venus—described it as being as big as the moon. He wrote “it came close, moved away—came close then moved away . . . then disappeared.”

Moreover, during his presidential campaign, Carter is said to have promised he would release all government information concerning UFO's—a promise which UFO buffs have not let him forget, because of their fervent belief that for many years the government has been covering up its encounters of the third kind.

Truth is as strange as fiction. The Air Force, officials say, indeed classifies some results of its inquiries made after UFO “sightings”—many of which are made near military bases, and by men trained to observe the skies, and a few of which are investigated by Air Force men going up in planes. Press's office says that these facts, together with the conflicting responses the government hands out to UFO buffs who write in, keep alive this belief in a cover-up. Policies like these, officials say, need review and perhaps changing.

In the present climate, then (and who knows when *Close Encounters* will be shown to the First Family), it may become more difficult to avoid another UFO study. Further, it can be argued that scientists in government incur some obligation to respond to the concerns of the public, which, after all, is paying them. On the other hand, it seems clear that federal science officials hope that if push ever comes to shove on the issue of reopening the government's UFO book, the push does not come from them.

SIPI Sells (Out?) Environment Magazine

Environment magazine, which broke the first stories on mercury pollution, polychlorinated biphenyls (PCB's), and the hazard of steam explosions in nuclear reactors, will close down in its present form at the end of December—a victim of the problems small-circulation journals have in finding a suitable, profitable niche.

The Scientists' Institute for Public Information (SIPI), which owns and publishes *Environment*, has agreed to sell it for \$20,000 to Heldref Publications, a Washington firm that publishes technical journals such as the *Journal of Environmental Health* and *Current*. SIPI will aid Heldref in soliciting outside manuscripts; but there will be no more staff-written articles, which tended to be the news-making ones.

The decision to cut the SIPI-*Environment* umbilical cord has exposed some of the strains within SIPI, an old, New York-based organization that recently has been growing and expanding into new projects such as sponsoring seminars on energy or genetic engineering for members of Congress in Washington (*Science*, 9 April 1976, p. 122). The sale has sparked a number of resignations, on the editorial board and board of directors, by those who say that *Environment*, which is published in St. Louis, Missouri, is more important to SIPI than SIPI's current leaders think.

By selling *Environment* outright, SIPI

ful and if people then employed those measures. But a trial such as the LRC trial, they say, can have a marginal effect at best in preventing heart disease. After years of public education campaigns by

the American Heart Association and others, many people in the United States are already convinced that cholesterol-lowering diets will prevent heart disease. Those who are still skeptical of the diet

heart disease hypothesis may be unlikely to change their minds on the basis of the LRC study. Thus even a positive result from the LRC trial could be a mere whistling in the wind.

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eliminated the magazine's \$20,000 debt and the specter of having to raise from private sources the estimated \$40,000 deficit the magazine would run next year. The magazine was founded in the late 1950's as an information sheet. In the 1960's it was called *Scientist and Citizen*. In 1969 it acquired its current name and a large Mellon Foundation grant to boost circulation, which eventually peaked at 25,000. Lately, the Mellon money has run out, operating costs have risen, and the magazine's circulation has declined to some 18,000.

The chairman of the magazine's editorial board, Donald Dahlsten, of the University of California at Berkeley, resigned from the board after the sale was agreed upon. Dahlsten charges that SIPI's leading light, Barry Commoner of Washington University in St. Louis, and the SIPI people in New York deliberately let the magazine go because it was not reflecting enough of their current thinking. Also David W. Swetland and Daniel H. Kohl have resigned as members of the editorial board and from SIPI's board of directors. "I think we should have done everything possible to keep the magazine alive," Dahlsten says.

Queried by *Science*, Commoner vigorously denied the charge. "I have as strong a sentimental tie to the magazine as anyone," he replied. "I mimeographed the first issue back in 1958." As for his view of the magazine's direction, he said, "There was a time when the magazine encompassed most of what SIPI was doing" in environmental pollution and related issues, he said. "SIPI's activities have naturally gotten broader, while the magazine continued to represent—very well—that segment that SIPI did some time before."

Environment's ten-member staff, in St. Louis, are unhappy, obviously, and are rumored to be even bitter about the decision, since they will lose their jobs and none has settled on other employment. Publisher Julian McCaull sounded resigned. "I guess it was unavoidable," he said.

Among the small magazine's achievements have been the PCB and mercury stories, both of which were published in 1969, and a 1976 story by co-editor Ke-

vin Shea about the possibility of major explosions in nuclear reactors, based on a report leaked from Sandia Laboratories. In recent years also, *Environment* has been a sort of "roots" for modern technology and its problems, delving back into the origins of medical practice, urban industrialization, and the electric power industry, to name a few.

Role of Science in China's Development

While inquiries into the achievements of Chinese science have tended to the arcane, the Congressional Research Service (CRS) has just published a study of China's central accomplishment, her apparent ability to control population growth and keep her 850 million people adequately fed.

The Role of Science and Technology in China's Population/Food Balance, by China expert Leo Orleans, delves into such Oriental mysteries as whatever happened to the famous "Eat tadpoles" method of contraception which the Chinese once advocated in international forums; how China developed an oral contraceptive when no papers on the subject appear in her technical literature; and whether she will be able to feed her people in the future. On the last point, the study is optimistic, and concludes that the rest of the developing world can learn from China's methods.

Traditional Chinese medicine has opposed abortion and other drastic population control measures, and instead has harkened to ancient potions, such as "the paper on which silkworm eggs have been hatched" or "fried oil and quicksilver," or "Shui yin" which contains poison. Political leaders advocated even less efficacious methods in the 1950's, when Western bourgeois medicine was in particular disrepute, such as acupuncture or swallowing 14 live tadpoles on the third day after menstruation.

But in other, more candid times, the Chinese scientific establishment has disputed these methods and admitted their inefficacy. Since the 1960's, the Chinese

government has encouraged its technical community to develop a variety of approaches to contraception, including even making abortion easily available to women who already have some children, and other methods. Even the "barefoot doctors" who serve in the countryside have been trained in a simple sterilization procedure using acupuncture as an anesthetic. The CRS report notes that one paramedic thereby becomes "a family doctor, an anesthesiologist, a surgeon and a sex therapist." But, it adds, "it seems to work."

The Chinese conducted major research into developing oral contraceptives during the 1960's, the report says, despite some earlier reports that it did not have a pill. The work was done at just a few institutions, the report says, which explains why there was no need to communicate widely about it through established scientific journals. Field testing may have been done on women in other countries, possibly Malaya. The Chinese have developed the world's first low-dose oral contraceptive, as well as "paper formulations" that, like a sheet of stamps, can be torn off at the perforations, one at a time, and eaten.

The report attributes China's increased agricultural productivity again to its diversity of approaches: good pest control, extensive use of unskilled manual labor to literally build new fields in difficult areas, importation of chemical fertilizer, and for the future, the 13 new fertilizer plants it ordered from abroad in 1972. China's diversified national diet also helps. While most Western experts measure a nation's agricultural productivity and self-sufficiency in terms of grain, the Chinese rely on a large share of vegetables and other things in their diet—roots, grasses, berries, seaweed, sea urchins, snails, snakes, insects, birds' nests, and even camels' humps!

A major ingredient in China's success has been her stress on national "self reliance" in bringing population and food production into balance, according to the study. And while China apparently does little preaching to developing countries on what policies they should follow, the study seems to say that self reliance is the key lesson she has to teach.

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