

tites in "signal identification and source locations." A large disturbance in the ionosphere sighted by astronomers at Arecibo, Puerto Rico, was set aside because too little is known about the phenomenon observed that night. It might have been caused by a tropical storm or other natural event, the panel concluded.

Having rejected all evidence save that provided by Vela, the panel then found a flaw in the Vela data. Although the signal recorded on 22 September in most ways fit the classic profile of 42 previously recorded blast signals, it contained a significant anomaly. In all previous cases, the two light registers on the satellite have recorded roughly parallel intensities in the light burst. But in this case, one of the registers deviated from the parallel. This distortion in the pattern suggested to the reviewers that the flash seen by the Vela was close by, not 60,000 miles away on the surface of the earth.

It was suggested at first that the satellite might have seen a meteoroid passing in space, but a statistical analysis showed that the likelihood of this happening was too small to be plausible—one in a billion. The present hypothesis is that the 22 September signal, like about 60 other unexplained signals, may have been triggered when a speck-sized meteoroid hit the satellite at high speed and sent particles flying at low speed in front of the sensors.

The explanation is not satisfying, but it is clearly more palatable to the Administration than leaving the mystery utterly unresolved.

Church Leaders Question Decision on New Genetics

Now that the Supreme Court has ruled it legal to patent forms of life engineered by man (*Science*, 27 June), some powerful religious institutions have said that they may seek to have the patent laws changed. General secretaries Thomas Kelly of the United States Catholic Conference, Bernard Mandelbaum of the Synagogue Council of America, and Claire Randall of the National Council of Churches, signed a statement recent-

ly saying they are asking the President and Congress to look into the dangers that may arise from the Court's ruling.

"New chemicals that ultimately prove to be lethal may be tightly controlled or banned," their statement said, "but we may not be able to 'recall' a new life form. For unlike DDT and DES, both of which were in wide use before their tragic side effects were discovered, life forms reproduce and grow on their own, and therefore would be infinitely harder to contain." They charged that the government is not providing adequate oversight or control of genetic engineering projects, "nor is anyone addressing the fundamental issues" which have to do with "the dignity and worth of the human being."

The signers have already written the congressional judiciary committees asking for hearings to review the patent laws. They have asked President Carter to "provide a way for representatives of a broad spectrum of our society to consider these matters and advise the government on its necessary role." Randall said they may try to take their concern before the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research.

The chairman of the commission, Morris Abram, sent his own message to the President on 17 July. The churches' criticism came up during a meeting on 12 July, Abram wrote, and the commission decided to "survey the field" to find out whether genetic engineering should be made the subject of an ethics review. Abram indicated that the commission would not touch on biohazards—a technical problem falling within the purview of a special advisory committee at the National Institutes of Health.

The ethics commission, according to its executive director, will try to decide on 15 September whether it will jump into the debate. "We obviously have a full agenda," he said, "and we don't want to reach out and take on a new issue unless it seems necessary." The church groups also seem content to press their concern in a deliberate way. None has budgeted funds to do additional research on the issue. And Kelly said that the Catholic Conference has dropped the two staffers who were working on it.

Nuclear Industry versus Amory Lovins

The nuclear industry's quick-response public relations team was galvanized into action in July by an adverse article appearing in the summer issue of the quarterly *Foreign Affairs*. As soon as the quarterly hit the streets, the industry's Committee for Energy Awareness (CEA) began to stir, asking friends and allies to read the article and fire off a personal critique to the editor.

The target: an essay entitled "Nuclear Bombs and Nuclear Energy," written by British environmentalist Amory Lovins; his wife, L. Hunter Lovins; and former California utility commissioner, Leonard Ross. In it, Lovins and company argue that the commercial development of nuclear power should be halted because (i) it unavoidably helps spread abroad the technology of nuclear weapons, (ii) the industry is moribund in any case, and (iii) nuclear electricity cannot be used in the short term to reduce our dependence on oil by more than a fraction.

The CEA was founded in 1979 shortly after the accident at Three Mile Island as part of the industry's new effort to combat bad publicity. Housed under the Edison Electric Institute—an association of investor-owned utilities—the CEA was originally planned as a temporary project; but, like so many emergency institutions in the nation's capital, it has become a permanent fixture. It has helped place industry technicians on television and radio talk shows, conducted an expanded pronuclear advertising campaign, and sent an "energy truth squad" to follow and correct Jane Fonda and Tom Hayden on their nationwide antinuclear campaign last year.

CEA official Theora "Bunny" Webb said that "all we are trying to do is to communicate an alternative response" when articles like the Lovins piece turn up. The CEA has contacted a handful of potential letter writers, and the Atomic Industrial Forum, according to Webb, has alerted its members to the article and is preparing a lengthy technical rebuttal for distribution later. "You will be hearing more about it," she said. No doubt we will.

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