

NEWSWATCH

FROM

SPACE

What if the media got their own photography satellites?

By JONATHAN EBERHART

The members of the Fourth Estate have their sources, ranging from press releases to confidential contacts, and on several occasions of late the list has included photos taken by cameras aboard earth-orbiting satellites. Some have been released by the Defense Department, but others, including pictures of the accident at the Soviet Chernobyl nuclear plant, were the commercially marketed products of the French SPOT and U.S. Landsat satellites.

Even with such imagery available on the open market, however, the possibility that the press might someday seek to operate an earth-watching satellite of its own, or even just to make increasing use of satellite photos from other available sources, has raised issues from national security and foreign policy to First Amendment rights.

An illustration of one form such concerns can take is mentioned in a study of the subject recently completed by the Congressional Office of Technology Assessment (OTA), for the House Committee on Science, Space and Technology. In 1962, noted one of the OTA panel's analysts, "President Kennedy had six days to formulate a response to the discovery that Soviet missile sites were being built in Cuba." Photographic evidence and Kennedy's stern demand led to the missiles being removed, but "how," asked the analyst, "might the President have handled this crisis had he been forced by media disclosures to respond to Congress, the press and the American people within the first few hours?"

This has not been the only time, of course, that such "evidence" has been deliberately publicized by an administration in support of particular ends. The OTA report cites one photo,

taken from an aircraft, showing Soviet planes on an airfield at Vietnam's Cam Ranh Bay. The picture, according to the report, was released on Feb. 9 of this year by the Defense Department "to refute Soviet and Vietnamese denials of the existence of Soviet forward-deployment bases in Vietnam." Subjects of satellite photos used in recent news coverage (though not all have been from military satellites) have included Chernobyl, the Iran/Iraq war and the reported Soviet space-shuttle site at Tyuratam.

In the course of preparing the report, OTA held a workshop last December, attended by representatives of the media, the commercial satellite-photo marketing firms and other organizations such as the American Civil Liberties Union and the International Institute of Space Law. The workshop participants identified five areas of possible national-security or foreign-policy concern:

- that rapid media dissemination of information about U.S. military operations could deprive U.S. troops of the element of surprise. One network representative noted that last year his network's correspondent was flying in a chartered airplane when he saw the U.S. fleet turn southward toward Libya hours before the U.S. retaliatory bombing. The information was radioed to the network affiliate in Rome and from there to the United States, but it was not put on the air because of concern for human lives. Another panelist, however, commented that "I assume you don't have fancy cryptographic communication equipment; therefore, you gave Libya the message when you radioed it from the airplane to the ground station."

- that media disclosures about activi-

ties of other countries might provoke retaliation against U.S. interests or personnel. As for whether such reports might be made subject to U.S. government constraints, one workshop member said, "When the Soviets or other countries call and say, 'Why aren't you stopping that story on the evening news?,' you say, 'We can't, and that's the difference between our country and yours.'"

- that rapid media awareness of breaking events could reduce to zero the "grace period" that has usually been available to officials who must make critical decisions and formulate responses. (The 1962 incident of Soviet missile sites in Cuba was cited in that regard.)

- that media coverage of U.S. or Soviet activities could provide valuable intelligence to third parties who do not at present have access to it. This question, according to the OTA report, "seems to turn on the judgment that: 1) there exists a sizable set of issues about which the United States and the Soviet Union would have a common interest in withholding or controlling the flow of information, and 2) the fact that Soviet reconnaissance systems could detect something does not necessarily mean that they *have* detected it." The workshop members reached no consensus on these points, with some participants noting that the possibility of commercial newsgathering satellites revealing things the Soviets did not already know was "conceivable but extremely unlikely."

- that problems could result from media misinterpretation of satellite photos, primarily due to competitive pressure to

be first with breaking news. According to a 1986 newspaper article cited in the report, several television networks showed SPOT satellite photographs of the Soviet nuclear proving grounds at Semipalatinsk "and claimed that the Soviets were preparing to resume nuclear testing. They showed photos of what was described as a 'drill site.' Looking at the photo, any competent imagery analyst would have pointed out that the arrangement and the cable scars terminating at the site would have proved that it was not a drill site but rather an instrumentation site, common to all nuclear proving grounds." The report notes, however, that the media may become better interpreters of satellite photos as use of such pictures becomes more common. It also cites one panelist's view that "it is part of the process of free speech to permit and encourage diverse interpretation," and that "attempts to limit interpretation will have a direct impact on the American people's ability to get information and make their own judgments."

The report notes, however, that it is not at all clear whether the media would in fact find it economically worthwhile to invest in a satellite or satellites of their own. At least, says the document, the costs of such a project might exceed the revenue it produces. If all four major networks used one satellite image every night, this would mean that about 1,500 images would be used annually from a "mediasat" system estimated to cost from \$215 million to \$470 million plus about \$50 million to \$75 million to operate it over a five-year period. This would come to about \$35,000 to \$73,000 per picture, which, the report states, is "an order of magnitude more than existing expenses for daily [network] news coverage."

Furthermore, noted one panelist, the money generated by pictures of the Chernobyl incident "would fit in a thin wallet. When will there be another such accident located in a place where we cannot fly in with a good hand-held camera?" One suggestion is that of a news-satellite consortium to share costs. Said the same panelist, "It could begin to form when EOSAT [the group that markets Landsat data] and SPOT get tired of throwing money at the problem, when Congress takes Gramm-Rudman-Hollings seriously, and when someone sees other countries as a set of partners eager to help share costs, and more importantly, help promote the use of [remote sensing] systems."

There are technical questions as well, including the necessary sharpness (spatial resolution) and spectral resolution of a suitable mediasat, along with the need for photographing a given spot on the earth on short notice or repeatedly over a short period of time in order to cover breaking stories. Each Landsat, for example, passes over the same portion of the earth at the equator once every 16 days,

while a system of adjustable mirrors allows SPOT's sensors to monitor a site 7 days out of 26. All of these matters, the panel concludes, are within the scope of current technology.

But the major concern about a mediasat is far more fundamental: What if the government decides to limit its use?

"Attempts by the U.S. government to restrict the media's access to satellite imagery are likely to result in First Amendment challenges to such limitations," says OTA. "The outcome of these challenges will hinge on the exact nature of the government limitations and the Supreme Court's determination of the constitutional status of newsgathering activities — as distinct from the right to publish information already obtained."

Under current international law, according to the group's report, "there seems little doubt that the U.S. government has the right, and indeed the duty, to exercise its supervision over the space ventures of its citizens." The 1984 Landsat Act requires those operating such systems — which require a federal license — to do so "in such manner as to preserve and promote the national security of the United States." This could conceivably lead to limitations on the use of a mediasat, but some attorneys have argued that the licensing provisions of the act should be declared invalid, since they lack the "narrow specificity" usually required of statutes affecting First Amendment issues.

Proposed rules for licensing private satellites were published last year by the Commerce Department, but they, too, deal more with national-security areas that could bear on such satellites' use than with specific regulations. "The clearest inference one can draw from the OTA report on commercial newsgathering from space," says Rep. Robert A. Roe (D-N.J.), chairman of the committee that requested the study, "is that we must begin immediately to address realistically the information-gathering possibilities that are looming on the horizon." Hearings are planned "to be sure that America has policies and answers readily available at the appropriate time," according to Rep. Bill Nelson (D-Fla.), chairman of the subcommittee involved; the hearings have not yet been scheduled.

"Within a decade," notes the OTA report, "many nations will have their own remote sensing systems. It is unclear whether the U.S. government could effectively limit or control media access to satellite imagery if foreign governments do not exercise similar controls." The potential scope of the issue, says project director Richard DalBello, echoing the Russian word for "openness" often mentioned these days in U.S. news coverage of Soviet events, is "glasnost-squared." □

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World Resources 1987 — The International Institute for Environment and Development and The World Resources Institute. This second volume in an annual series traces the connections among natural systems and the effects of human actions upon them. Includes updated chapters on population and health, human settlements, food and agriculture, forests and rangelands, wildlife and habitat, energy, freshwater, oceans and coasts, atmosphere and climate, and policies and institutions, with a new chapter on global systems and cycles. Highlighted in this 1987 volume is information on the spread of toxic wastes in the developed world and the steps needed to move sub-Saharan Africa toward sustainable agricultural production. Basic, 1987, 369 p., illus., \$32.95, paper, \$16.95.