
No Consensus Yet on a Space Station

With the time drawing near for a decision on the National Aeronautics and Space Administration's (NASA's) proposed space station, a number of key groups have begun to weigh in with opinions on the matter. As yet, however, those opinions hardly add up to a consensus.

On 9 September, for example, the National Academy of Sciences's Space Science Board sent a carefully worded and rather ambiguous "No, thanks" to NASA administrator James M. Beggs. "If there *were* a space station, we wouldn't have any problem using the thing," explains board chairman Thomas M. Donahue of the University of Michigan. He concedes that in some ways the space station would be good for space science: NASA plans to do 30 or 40 space science missions on the station by the turn of the century, a considerable boost from current rates and certainly more than any other single activity. In addition, some of the missions might well benefit from the regular maintenance and repair available from space station crew members. "But every one of those missions has already been designed to be launched on the space shuttle," says Donahue. "So we don't *need* a space station to do them."

However, the scientists told Beggs that if NASA wanted to contemplate a more ambitious space station for the post-2000 era—say an orbital construction shack for the assembly of large antennas and optical arrays, or the assembly and launch of complex interplanetary spacecraft—they would be happy to cooperate.

By all reports, the scientists' reticence stems from their desire to avoid a repeat of their experience during the development of the space shuttle, when years of delays and cost overruns played havoc with their own programs. Something of the sort also seems to be behind the Pentagon's resistance to the space station. In the White House's Senior Interagency Group on Space, Defense Department representatives have shifted from neutrality on the subject—they claim there is no military use for a space station—to outright hostility.

Cynics wonder if the Pentagon simply does not want to help pay for it.

Within the White House proper the Office of Management and Budget is dead set against the station, which is no surprise considering that the program will cost roughly a billion dollars per year. But science adviser George A. Keyworth has shifted from neutrality to cautious support, citing the space station as a first step toward an ambitious program of manned flights to the planets (*Science*, 8 July, p. 132).

Of course, the opinion that matters most is that of Ronald Reagan, who is said to be supportive of the space station. He responded enthusiastically on 3 August, when he heard a delegation of corporate managers extol the space station as a factory site for potential zero-gravity materials-processing industries (*Science*, 30 September, p. 1353). And on 19 September, the *Washington Post* reported that the President's political advisers are urging him to announce the space station with great fanfare this fall so as to steal the thunder of Senator John Glenn, his potential Democratic opponent in next year's elections. The betting is that if Reagan does endorse the station, he will do so at the NASA 25th anniversary celebration on 23 October. —**M. MITCHELL WALDROP**

Organs for Sale

The increasing need for human organs has led to a flurry of activity in the federal government and in the private sector in an attempt to deal with the problem. But the proposed approaches are widely different.

Increased attention to the issue has followed recent reports that at least two companies are planning to act as broker for potential donors who would be recruited to sell their organs for profit. There is currently no law that prohibits such business. Reports that many organs from American donors are going to foreign patients who pay U.S. hospitals for the full cost of the transplant have also stirred concern.

Legislators in the House and Senate are now trying to set up a national clearinghouse to coordinate the donation—not the sale—of organs. At the same time, the Administration is hoping that the private sector will set up a clearinghouse on its own. Last week

Surgeon General Everett Koop met with a new committee that is charged with forming a private foundation for this purpose.

On Capitol Hill, at least two legislators are planning to introduce legislation concerning organ donation and transplantation. Representative Albert Gore (D-Tenn.) is to introduce a bill that will do three things: (i) establish a national clearinghouse to coordinate regional organizations funded by federal grants; (ii) limit transplants to hospitals that meet federal criteria; and (iii) resurrect the National Center for Health Care Technology. According to an aide, Gore is also considering a provision that would ban the sale of organs but, as yet, has not made a firm decision. Hearings on the sale of organs are scheduled for the last week in October. Senator Paul E. Tsongas (D-Mass.) also plans to introduce a bill soon that would ban the sale of organs. —**MARJORIE SUN**

New Bioethics Panel Under Consideration

The defunct presidential bioethics commission may be reincarnated in the form of a panel either within the Office of Technology Assessment (OTA) or the Institute of Medicine, according to senate sources. Senator Jeremiah Denton (R-Ala.) is suggesting that OTA may be the best organization to study bioethical issues for Congress, while Senator Edward Kennedy (D-Mass.) is proposing that the institute take on the task.

Last December, the bioethics commission was phased out when Congress declined to reauthorize it. Kennedy then introduced a bill to recreate the commission but again encountered tough opposition by other members of the Senate Labor and Human Resources Committee, including Denton and committee chairman Orrin Hatch (R-Utah). Kennedy is now suggesting that the institute may provide a satisfactory home for a bioethics panel and committee members are currently engaged in working out a solution. Institute president Frederick C. Robbins has reportedly given the idea a tentative OK.

Although talks are still preliminary, Denton's proposal may prove to be

more politically attractive than Kennedy's. Denton strongly opposed the President's Commission for the Study of Ethical Problems and Medicine and Biomedical and Behavioral Research because, in his opinion, it went beyond its mandate and developed health policy without congressional approval. According to a committee aide, OTA may be a better candidate than the institute because Congress would have closer control over the topics to be examined and over OTA's recommendations. Perhaps equally important to the proposal's passage is that Hatch and Kennedy are both members of OTA's 12-member board. The board reviews OTA's reports before they are released.

At this stage, Hatch hasn't committed himself either way, according to committee aides. Like Denton, Hatch opposes a commission that is selected by the President. He agrees that bioethical issues need public discussion, but questions whether the government should provide the forum. If the labor committee should adopt the Denton or Kennedy proposal, legislators would have to either amend the Kennedy bill, which is now ready for floor action, or offer substitute legislation. —MARJORIE SUN

Genetically Engineered Plants Get a Green Light

A proposal by the Cetus Madison Corporation to field test plants that have been genetically manipulated to resist some diseases has been given provisional approval by the National Institutes of Health's Recombinant DNA Advisory Committee (RAC). The committee recommended, at a closed meeting it held on 19 September, that the experiment should be allowed to go ahead if Cetus makes some modifications to its protocol. The recommendation has been sent to Richard Krause, the senior NIH official who must approve RAC's decision.

The committee made no recommendation, however, on another proposed field test of a genetically modified organism planned by BioTechnica International Inc. BioTechnica had applied for permission to test a genetically modified strain of *Rhizobium meliloti* that has shown an en-

hanced ability to fix nitrogen under laboratory conditions. The unmodified organism is currently used to inoculate alfalfa crops. According to David Glass, BioTechnica's director of regulatory affairs, the committee has asked for more information and he said he expects the experiment will be reconsidered at RAC's next meeting.

The two proposals have received considerable public attention in part because a coalition of environmental groups led by Jeremy Rifkin of the Foundation on Economic Trends had sought a court injunction to force RAC to open part of its discussion to the



Jeremy Rifkin

Claims RAC has conflicts of interest.

public. The same coalition has also gone to court to block a third field test, an experiment planned by Steven Lindow and his colleagues at the University of California at Berkeley, to see whether frost damage to plants could be reduced by spraying them with genetically altered bacteria (*Science*, 30 September, p. 1355).

NIH has sought to keep its deliberations on the proposals confidential because it wants to encourage industry to submit planned experiments to RAC for review, and is worried that any leak of proprietary information would prompt companies to steer clear of the review process. (Private companies are under no legal obligation to follow NIH's recombinant DNA guidelines.)

Rifkin contends that such secrecy infringes citizens' right to know what potential hazards they are being exposed to. He has now filed a freedom of information request to NIH asking for documents pertaining to the health and safety aspects of the Cetus and BioTechnica proposals, and has also called for a formal investigation of potential conflict of interest on RAC. In a letter to Krause, Rifkin points out

that several RAC members have ties to genetic engineering companies, and contends that "obviously, it is in the self-interest of each of these members to approve each other's company's requests." In fact, the biotechnology industry is so fiercely competitive that many companies would probably look askance at having their proposals reviewed by potential competitors. —COLIN NORMAN

Kerr Puts USSR Off Limits to Los Alamos Scientists

In response to the shooting down of a Korean airliner by a Soviet fighter plane, Los Alamos National Laboratory director Donald M. Kerr has banned all official travel by lab employees to the U.S.S.R. A Los Alamos spokesman says the action is believed to be without precedent.

Although Los Alamos scientists are not in the habit of shuttling back and forth between the United States and the Soviet Union, several serve on official U.S.-U.S.S.R. exchange programs. According to a statement put out by the lab, the ban will immediately affect four staff members scheduled to visit the Soviet Union for unspecified purposes. —COLIN NORMAN

VA Endorses Right to Die

The Veterans Administration has adopted a new policy which would allow terminally ill patients in its 172 hospitals to die rather than undergo life-prolonging resuscitation when vital systems fail.

The decision reverses a 1979 order which forbade doctors to issue formal "do not resuscitate"—or "no code"—orders. The new policy is based on recommendations by the President's ethics commission and brings the VA in line with the thinking of professional medical groups.

The policy states that the decision not to resuscitate must have the concurrence of the patient, the attending physicians, and either a family member or a disinterested third party. If the patient is comatose or otherwise incompetent, the decision can be made by a surrogate. —CONSTANCE HOLDEN