expendable launch vehicle industry. "We want to force the competition to bid honestly," explains Issac Gillam, associate administrator for NASA's new commercialization office.

Nothing about the pricing plan is official, of course, until the President says yes. So far there has been no word from the White House. But a decision is expected sometime before the President's fiscal year 1986 budget proposal is submitted in February.

It may not be smooth sailing. For one thing, the proposed new price only covers *operating* costs, and makes no attempt to recover sunk costs for such things as launch facilities. NASA gave up on recovering sunk costs in its last price revision in 1982 (*Science*, 2 July 1982, p. 35). But the expendable-launch people may still object.

More important, however, is that NASA's proposed price assumes 24 shuttle launches per year. Given the record of delays and scrubbed launches in 1984, that seems a bit optimistic. On the other hand, Gillam points out that shuttle launches are scheduled at the rate of one per month for the next 11 months; if the agency can pull that off, the 24-per-year figure will look a lot more credible

Gillam also points out that the Pentagon has requested 13 shuttle flights in 1989, the first year of the new pricing schedule. Assuming that they hold to that number, he says—a big If at the moment, since the Air Force seems to want to move some of its satellites onto expendable launchers (*Science*, 29 June, p. 1407)—then there should be no problem with filling up the bay on the other 11 flights. "We might not be able to keep up with the demand," he says.

-M. MITCHELL WALDROP

## Coalition Recognizes Ten Friends of Science

The National Coalition for Science and Technology has announced its second batch of "Friends of Science" awards. Reversing the formula of dubious achievement awards used in the past by environmentalists in naming a congressional "Dirty Dozen," the coalition cited ten senators and repre-

sentatives "who have been of particular help to the science and technology community." Factors such as legislative leadership, action in committee, and public advocacy are taken into account in making the awards.

The recipients this year are senators Pete V. Domenici (R–N.M.), Daniel K. Inouye (D–Hawaii), and Sam Nunn (D–Ga.), and representatives Joseph D. Early (D–Mass.), Bill Frenzel (R–Minn.), Albert Gore, Jr. (D–Tenn.), Judd Gregg (R–N.H.), Stan Lundine (D–N.Y.), Henry A. Waxman (D–Calif.), and Ed Zschau (R–Calif.)

The coalition made its first Friends of Science awards in 1982, the year it was founded. No repeat awards were made because the coalition decided to spread its plaudits around. A nonpartisan, nonprofit organization of scientists, engineers, educators, and business people, the coalition operates as advocacy group supporting education, training, and research in science, technology and engineering. This year's awards are to be presented by local NCST members to the winners back in their districts, where most of them are currently campaigning for reelection.—JOHN WALSH

## Landsat Stalled Again

The White House Office of Management and Budget (OMB) has once again blocked funding for the transfer of the Landsat system to a private operator, and has once again left the program in limbo.

The irony is that after nearly a decade of arguments and study groups and study groups and study groups and study groups and arguments, a compromise on Landsat commercialization has finally been reached. A private operator—EOSAT, a partnership of RCA and Hughes—stands ready to take over (*Science*, 21 September, p. 1373), and the long-sought goal of a commercial remote sensing industry seems within grasp.

The OMB, however, has balked at the cost of getting that industry started. The multitudinous studies of Landsat have been virtually unanimous that EOSAT or any other private operator will require some \$500 million in subsidies while it develops the market. In fact, President Reagan himself has endorsed the idea.

In July, however, OMB succeeded

in getting a cap of \$250 million on the subsidies. Then in September, when EOSAT and the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) finished their negotiations on the contract and the agency asked OMB to forward a request to Congress for the first installment of the subsidy, OMB refused (*Science*, 12 October, p. 152).

Most recently, in mid-October, Commerce Secretary Malcolm Baldrige sent a letter to the chairmen of the House and Senate appropriations committees asking for permission to get the transfer started with money reprogrammed from elsewhere in NOAA; he would come back next year for a supplemental appropriation when Congress was back in session.

But the letters had to go through OMB, and once again OMB refused to forward them.

OMB officials have consistently refused to talk to the press about Landsat, so it is hard to be certain of their rationale. However, as one Commerce insider noted, Occam's razor suggests that they are deliberately trying to kill the program for budgetary reasons.

Be that as it may, Baldrige is currently trying to strike a deal with OMB director David Stockman. Failing that, Baldrige could try to go over Stockman's head to the President's inner circle, although it will be hard to get their attention in the midst of Reagan's reelection campaign.

And if nothing works, of course, EOSAT may very well decide to with-draw—leaving Landsat caught in an entertaining Catch-22.

The Land Remote Sensing Commercialization Act, passed just last spring, says that Commerce would then have to put the system out for bid again. But even assuming that anyone would want to bother, the delay would mean conceding the commercial remote sensing market to SPOT, the highly subsidized French satellite scheduled for launch in 1985. So the new Landsat operator would not only have to build a market, it would have to recapture the market-which means building something better than SPOT, which means lots of high-technology research and development, which means raising the OMB subsidy cap. Which the Reagan OMB will almost certainly not allow.

Stay tuned.—M. MITCHELL WALDROP