

What is the problem in trimming a little money from a program? It just means the program won't reach fruition quite as fast, right? Not always. The trouble is, timing can be critical on some projects. There may be no better example of an arena in which a relatively small delay can have a huge impact than planetary exploration.

The U.S. House of Representatives would inflict grievous damage with its proposed cut of \$55 million from the Bush administration's Fiscal 2004 spending plan for NASA's New Frontiers program. Nearly all of the \$140 million the administration is seeking this year would go to a single flight project—the New Horizons mission to Pluto and the Kuiper Belt.

The value of the project is not in doubt. As a mission to the only planet never to have been visited by a spacecraft, New Horizons was determined in the National Research Council's once-a-decade survey of planetary scientists to be their No. 1 priority. The project was approved in 2001, and \$140 million has been spent so far. The Senate has voted for full funding in the fiscal year that began Oct. 1.

The House proposal would mean NASA would have to give up on launching in 2006 and aim for a 2007 opportu-


nity, and even that would be tight. Even if the 2007 opportunity is achievable, the effect would be draconian. To start with, a less-efficient development plan would increase the cost of that phase of the project by \$76 million.

Flying to the outer planets is like playing pinball in the Solar System, so with the planets in different positions in 2007 the flight plan would be entirely different. It would take three years longer to reach Pluto, significantly in-

creasing the risk of a failure en route and increasing operations costs by \$41 million. There would be no fly-by of Jupiter, a nice science add-on.

As Pluto is getting farther from the Sun, reaching Pluto so much later would mean the planet's atmosphere might have collapsed into surface ice. If so, one of the mission's three main objectives at

Pluto would be unachievable. Finally, because of the additional fuel that would be needed in the 2007 trajectory, it is likely that any exploration of the Kuiper Belt of comets and planetesimals would have to be forgone.

If ever there were an example of being penny-wise and pound-foolish, it is this House proposal. House and Senate conferees should spike this idea for saving \$55 million, get savings elsewhere in NASA's \$15-billion budget and go ahead with the full funding for New Horizons in 2004. 

Planets Don't Wait For Budget Catch-Ups