SCIENCESCOPE

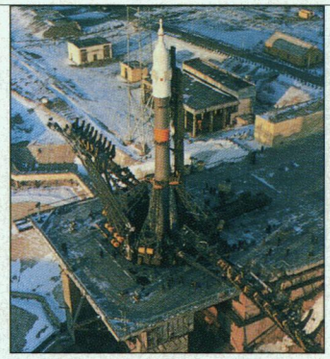
edited by JOCELYN KAISER

Space Science in Political Limelight

Space science will get some high-level attention next week, when two dozen eminent researchers gather in Washington, D.C., at the request of the White House to assess what new goals they should set for their field. Presidential science adviser Jack Gibbons has called for the unprecedented gathering, to be held 28 to 30 October at the National Academy of Sciences, to consider a revamped direction in light of recent Hubble Space Telescope discoveries and possible evidence of ancient life on Mars.

Gibbons told NASA Administrator Dan Goldin in a recent letter that he wants the group to focus on four topics: large-scale structure and evolution of the universe, exploration of the solar system, the search for planets beyond this solar system, and the possible existence of life elsewhere. But to the consternation of some, that charter leaves out life and microgravity sciences and Earth observation.

The panel's findings will be used to set an agenda for a White House symposium in early December led by Vice President Al Gore on the future of space science. After that, plans call for President Clinton to host a space summit later in the month attended by senior lawmakers.



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Grounded. Scarcity of Russian rockets is holding up Bion mission.

Launcher Shortage Delays Bion Project

The controversial U.S.–Russian space biology project known as Bion dodged heavy fire from U.S. animal-rights activists and Congress this year, but now faces a new question: Can it survive Russian budgetary troubles? The mission was slated to send two monkeys into orbit for experiments in September, but it's now on hold because of problems with booking a Soyuz launch vehicle. "The fate of Bion is hanging in midair," says one Russian company official.

Launchers are a precious commodity in this cash-strapped country that, because of its reliance on space-based telecommunications, needs to keep placing satellites in orbit. It also needs rockets to keep the Mir space station supplied. But various agencies are competing for a limited pool. The Russian military recently made a bid for a Soyuz to carry Bion, but then withdrew the request, say NASA and Russian sources. Part of the delay apparently is that Russian Space Agency chief Yuri Koptev has been hospitalized, says Joseph Bielitzky, NASA's chief veterinarian. The official launch date remains 30 October, but mid-November now seems more likely, Bielitzky adds.

NASA had said it would oppose a launch after September because the cold weather on the Kazakhstan steppes—where the capsule with the monkeys is to land—could hurt the animals. But Bielitzky says the Russians have now convinced the United States that frozen ground might aid recovery of the capsule, minimizing the risks to its cargo. Critics at People for the Ethical Treatment of Animals, however, which calls the project cruel and unnecessary (*Science*, 12 July, p. 175), say NASA's acceptance of the schedule change shows contempt for the monkeys' welfare.

Cold weather isn't the only problem. After December, the growing monkeys may become too heavy for the capsule. That would mean Bion's managers will have to train a new pair of animals and do required surgery before the flight could be rescheduled.

Max Planck to Shutter Institutes?

The prestigious Max Planck Society may close four of its research institutes in western Germany under a cost-cutting plan announced earlier this week by the society's president, Hubert Markl. The closure plan, which must still be approved by Max Planck's governing board, comes in response to the government's demand that the society reduce its personnel costs in western Germany by 11% over the next 4 years. That would require eliminating about 740 positions.

Under Markl's proposal, Max Planck eventually would close at least four research centers: the Institute for Biology in Tübingen; the Institute for Aeronomy in Lindau; the Institute for Behavioral Physiology in Seewiesen near Munich; and the Institute for History in Göttingen. Max Planck officials said those institutes were singled out because their directors were nearing retirement, not because of any problem with their scientific performance.

The society is trimming costs in the west so it can open more research centers in eastern Germany, now home to 15 of Max Planck's 70 institutes. Even so, the proposal to close four institutes surprised some German scientists who had expected across-the-board personnel cuts. Originally, Max Planck had planned such an approach to meet staff cuts required by the federal government, which provides about half of the society's budget. But Max Planck was forced to consider closing institutes after the government decreed this month that the society should shave an additional 5% of its staff costs, or 740 jobs instead of 420. Closing the four institutes would achieve half these cuts.

The institutes will have a chance to present their cases to Max Planck officials before next month, when Markl will give his budget plan to Max Planck's governing board. A final vote on the closures is expected in the spring.

Patent Office Puts a Lid on Gene Claims

Biotech firms—hugely successful in their hunt for new genes and gene fragments—have flooded the U.S. Patent and Trademark Office with so many claims on DNA sequences that PTO managers have become desperate for help. In hearings last April, PTO officials called for suggestions (*Science*, 3 May, p. 643). And now they've come up with a quick fix, but one that's not likely to thrill the companies. Why? Because the solution—capping the number of sequences per application—will force companies to seek patents only on their best data or else pay millions of dollars in extra application fees.

As *Science* went to press, the PTO was preparing to announce that commissioner Bruce Lehman has signed a notice limiting the number of sequences that may be put into a single patent application to just 10. That's a huge reduction compared to claims now made by sequencing outfits like Human Genome Sciences (HGS) of Rockville, Maryland. In the past, says an HGS official, the company has packed as many as 2000 to 10,000 sequences into a single application—at around $750 per filing. The new PTO ruling, signed on 17 October, means that a company such as HGS with 120,000 sequences pending review can now expect to spend millions of dollars just on filing fees to cover all of its data.

According to a spokesperson, the PTO's current backlog of 500,000 sequences represents over 200 person-years of unfinished work. If companies choose not to be more selective about claims, the new policy will allow the PTO to increase its income from fees and, presumably, use the money to hire more staff. The decision to either pay extra fees or file fewer claims now rests with the companies.