

ment experience to head the new office. Arnauld Nicogossian, the longtime head of the life and microgravity office, was to remain head until his replacement was named, but in mid-July he was relieved of that duty. (Nicogossian is now the chief health and safety officer for NASA.) NASA Chief Scientist Kathie Olsen, a biologist who was instrumental in the reorganization, has been named acting chief while a search is begun for a permanent boss. But sources say she will not apply for the job. Swain, trained as a physician, is said to be a candidate.

As for what kind of research will be done once the station is complete, Swain says that "we're not even sure what questions we will be answering in terrestrial laboratories. But I think we're going to have a dynamite research program to help find some fundamental answers."

—ANDREW LAWLER

X-RAY ASTRONOMY

Solar Storm Knocks Out Japanese Satellite

TOKYO—Japan's x-ray astronomy program was dealt a new blow last month when a solar geomagnetic storm left an orbiting x-ray telescope spinning out of control. Scientists are dubious about their chances of saving the 7-year-old Advanced Satellite for Cosmology and Astrophysics (ASCA), whose replacement—the ASTRO-E x-ray satellite—was lost shortly after launch in February. "We haven't given up," says Hajime Inoue, head of space astrophysics research at Japan's Institute of Space and Astronautical Science (ISAS) in Sagami-hara, outside Tokyo. "But we don't have a great amount of hope."

ISAS scientists believe a solar storm on 14 July expanded Earth's atmosphere to the point that it increased atmospheric drag on the satellite, which was orbiting at an altitude of about 440 kilometers. The drag disturbed the angular momentum of the satellite, which

sent it spinning out of control. The next day it went into a safe mode, spinning in such a way that its solar panels are not facing the sun. Inoue says the best chance for regaining control of the satellite will come in a month or so, when ASCA moves into a better position for generating solar power.

Developed jointly with NASA's Goddard Space Flight Center and several American and Japanese universities, ASCA had been a key component of ISAS's relatively small but carefully targeted space program. Its observations have generated more than 700 papers, Inoue notes proudly. One major finding was the detection of iron in the x-ray emissions from accretion disks, the swirls of gas and dust that orbit black holes. These iron emissions bore telltale evidence of the enormous gravitational pull of the black hole, something expected but never before observed. "ASCA had already been a very big success," Inoue says.

ASCA would have lasted only another year before falling into Earth's atmosphere. And a replacement for the lost ASTRO-E is still 4 to 5 years away. In the meantime, Japan's x-ray astronomers are trying to borrow time on other instruments. "There is a big gap in our [observational] program," Inoue says.

—DENNIS NORMILE

BIOTECHNOLOGY

USDA to Commercialize 'Terminator' Technology

For the past year, the U.S. Department of Agriculture (USDA) has been juggling a political hot potato: whether to pursue commercialization of a controversial biotech discovery that can render seeds sterile. A diverse group of opponents, including some scientific groups and companies, have disavowed this so-called "terminator" technology as an unconscionable threat to poor farmers. But last week USDA officials announced they will move ahead with the technology because of its scientific promise—albeit with conditions negotiated with its industry partner to guard against it being used in harmful ways. Antibotech activists adamantly oppose the decision, which runs counter to the intentions even of biotech giant Monsanto.

At issue is what is formally called a "technology protection system," developed by USDA and Delta & Pine Land Co. (DPL) of Scott, Mississippi, which are co-inventors on related patents. The intended application is to protect a company's investment in developing genetically engineered plants by preventing farmers from using their seeds for the next year's planting. This is done by adding three genes to a plant. If the seeds from the modified plants are treated with an antibiotic, the plants that grow from those seeds will pro-

ScienceScope

Costly Conference An animal genetics conference has sparked the costliest police action in Minnesota history. Police spent nearly \$1 million providing security for the recent International Society for Animal Genetics conference in Minneapolis, state officials said last week.

Animal-rights protesters had threatened to shut down the 5-day meeting of 650 scientists, which ended 26 July. But disruptions proved minimal as riot-ready police generally outnumbered protesters, who mustered just 100 people for their biggest march against

biotechnology and animal experimentation. Still, "the experience was tense," said one attending scientist.

Some local politicians aren't sure the money was well spent. "The fact that [police spent \$770,000] to control a couple of hundred protesters seems crazy to me," city councilman Jim Niland told the Minneapolis *Star-Tribune*. Officials plan to finish a protest post-mortem this fall.



Switchback AIDS researchers in Italy are celebrating a government decision to rescind a 36% cut in extramural funding for HIV research. The change of heart leaves intact last year's grants budget of about \$10 million, which mostly comes from the Istituto Superiore di Sanità (ISS) in Rome.

Last week's reversal came less than a month after *Science* reported—on the eve of the international AIDS meeting in Durban, South Africa—that authorities planned to gut the program (*Science*, 7 July, p. 28). "No sooner was the ink dry on the pages of *Science*," commented the Italian weekly magazine *L'Espresso* in its 3 August issue, than "as if by magic [health] minister Umberto Veronesi put everything back in place."

But Stefano Vella, director of the ISS's clinical research program and president of the International AIDS Society—which organized the Durban meeting—laments that the restored funds will come from within the agency's own budget rather than from additional government spending. "This is not a permanent solution, because it causes continuous conflict within the institute" between AIDS researchers and other scientists, Vella says. "It is a war among the poor for research money."



Premature ending. Solar storm increased atmospheric drag on ASCA, sending the spacecraft spinning out of control.

CREDITS: (LEFT TO RIGHT) ISAS AND NASA-GODDARD; A. KING/AP