

Briefings

edited by JOSEPH PALCA

Scientists Plan China Boycott

As President Bush gave China back its "most-favored-nation" trading status last week, a group of prominent scientists made it clear they would not resume normal relations for reasons of principle. Led by former Soviet dissident Yuri Orlov, more than 200 scientists from the United States, Europe, and Japan signed a petition stating that they would boycott meetings held in China and they urged others to do the same. "We cannot remain silent when our colleagues in the People's Republic of China are held captive," the petition reads.

They also called upon the Chinese government to provide information on Chinese scientists and students who have been imprisoned since last summer's democratic uprising. The petition seeks amnesty for political prisoners and safe passage out of China for Fang Lizhi, China's prominent astrophysicist and human rights activist who has taken refuge in the U.S. Embassy in Beijing for the past year.

For those who must go to China, Orlov urged them to try the same tactics tested in the 1970s in the Soviet Union: Namely, to read the names of Chinese scientists who are political prisoners at the start of their talks, and to write letters addressed to them in prison. "It was a long, long process, but the Soviet experience shows that it is not a hopeless task to change their minds," says Orlov, now a professor of physics at Cornell University.

Orlov vows to keep the pressure on as long as it is needed. He has sent the petition to the Chinese Academy of Scientists and to U.S. Secretary of State James Baker, asking them to lobby Chinese leaders. Next, he plans to travel to the Soviet Union and to Scandinavia

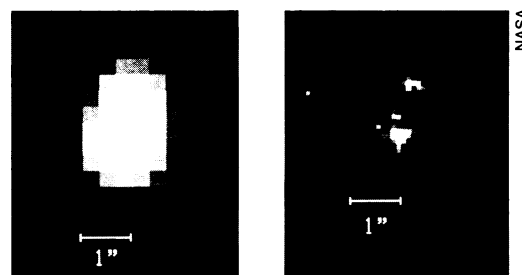
Hubble's First Light

Project scientists were pretty pleased with the first images from the Hubble Space Telescope, but it took a few days to realize just how good they really were.

The first light images were taken about 11:30 a.m. EDT on 20 May as part of an engineering test on the telescope. Included were a 1-second exposure and a 30-second exposure of an open star cluster known as NGC 3532, which is in the southern constellation of Carina, the Ship's Keel. The photograph released to the public that afternoon showed a portion of the 30-second exposure that looked somewhat better than a ground-based image of the same region—but not much.

Once the scientists had had a chance to study the images more carefully, however, they realized that the 30-second exposure was smeared by a slight drift in the telescope's pointing—something that is not unexpected at this stage of checkout. Moreover, they realized that much of the apparent fuzziness of the stars was due to the severe contrast enhancement they had used in their preliminary processing of the images. In fact, most of the photons from each star were going into a central "core" image only about 0.15 arc second across—very close to the telescope's ultimate goal of 0.1 arc second.

The left-hand image presented here shows a ground-based view of the double star in the original, widely publicized first-light photograph. The right-hand image shows the same double star as seen by Space Telescope during its 1-second exposure. Telescope engineers now estimate that the internal adjustments required to clean up the residual fuzziness could be completed in about a month, quite a bit faster than expected.



NGC 3532 viewed from the ground (left) and space.

where he will collect even more signatures.

The American Association for the Advancement of Science is also trying to get China to mend its ways. A letter from AAAS President Richard C. Atkinson to Premier Li Peng urges safe passage for Fang Lizhi and more respect for human rights.

Mammoth Glasnost

A Soviet scientist arrived at the Smithsonian Institution last week, bearing gifts the likes of which have never been seen before in the United States: the freeze-dried intestines of a woolly mammoth that drowned in Siberia 30,000 years ago and a lock of blonde hair from a woolly rhinoceros that lived 14,000 years ago.

A crowd of archeologists gathered round as the gift-bearer, renowned biologist Nikolai Vereschagin, pulled the specimens out of a cardboard box. "I know of no woolly rhinoceros specimen brought to North



Pleistocene tresses. Soviet scientist Nikolai Vereschagin pulls the hair from a woolly mammoth.

America before," declared Dennis Stanford, the curator of North American archeology at the National Museum of Natural History. The mammoth intestines also are unusual in that they contain digested grass and other material from the creature's last meal.

Vereschagin, who is the Soviet Union's leading expert on mammoths, says he would have donated the specimens earlier but it took him 16 years to win permission to visit the United States—which finally came through thanks to glasnost.

The Smithsonian scientists, for their part, are eager to get to work on the new specimens. "We want to see if we can do DNA analysis, and I imagine we'll analyze the material from the intestines to see what these beasts were eating," says Bruce D. Smith, head of archeology at the Natural History Museum.

Blue Genes for Red Roses?

Blue roses? Why not, says Calgene Pacific, the Australian affiliate of the California agricultural biotech company Calgene. With support from the Japanese food and beverage giant Suntory Ltd., Calgene Pacific will continue to develop a process to insert the "blueness" gene from petunias into the perfect red rose. According to Calgene spokesperson Stephen Benoit, cut flowers with unusual colors are a big hit in Japan, hence the interest of Suntory. Benoit says Calgene has had some initial success in inserting foreign genes into rose plants,

and hopes to use the Suntory support—\$5 million (Austrian)—to make the process more routine.

If successful, the project will open new vistas in love songs for sunburned women, for example, "Blue Roses for a Red Lady."

Psychological Warfare

The upstart American Psychological Society will hold its second annual meeting next week in Dallas, Texas, but it won't be joined by the American Psychological Association, the group it split away from 2 years ago.

APS has billed itself as an organization dedicated to the scientific side of psychology. APA has a heavy contingent of nonphysician, clinical psychologists among its 100,000 plus members. The two organizations have been trading barbs since the split occurred.

The latest flap is over booth space at each organization's annual meeting. After putting down a \$500 deposit to hold an exhibition space at APS's annual meeting, APA wrote to APS announcing its intention to pull



out and asking for its money back. The letter mentioned low attendance, high exhibit costs, and "hopelessly long exhibit hours," as the factors influencing the decision.

This stuck in APS's craw, especially as APS Executive Director Alan G. Kraut says APA refused to give exhibition space to APS at APA's annual meeting in Boston later this summer. APS declined to return



From Vagelos ...



to DiMaggio ...



... to Press

Columbia University

Dr. Press, Meet Dr. DiMaggio

What do Frank Press, P. Roy Vagelos, and Joe DiMaggio have in common? Neither Press, president of the National Academy of Sciences, nor Vagelos, chief executive officer of Merck & Co., is known for his slick fielding or 56-game hitting streak. And DiMaggio is not famous for his contributions to science. But all three have now received honorary doctorates from Columbia University—awarded at commencement exercises on 16 May. Columbia President Michael I. Sovern hailed DiMaggio as a true American legend, adding that "your loyalty and decency as a human being are qualities to be emulated by every generation."

APA's deposit.

Raymond Fowler, executive vice president of APA, says APS missed the application deadline for booth space, which is heavily oversubscribed. To let APS in, he would have to kick someone else out.

Fowler says he hopes someday the two organizations can rejoin to speak for psychology with a single voice. For the time being, however, that doesn't seem terribly likely.

A Bum Bomb Detector?

It's official now: the million-dollar Thermal Neutron Activation (TNA) device to be installed at major airports cannot catch small bombs of the size that probably brought down Pan Am flight 103 over Lockerbie, Scotland in 1987—at least not in routine operation. The Federal Aviation Administration last year told the airlines they would have to buy hundreds of these machines, even as news of technical problems came to light (*Science*, 1 September 1989, p. 926).

A report by the President's Commission on Aviation Security and Terrorism, chaired by Ann Dore McLaughlin, looked into all aspects of the Lockerbie

disaster and on 15 May published some harsh judgments, including an indictment of TNA. It faulted security forces for missing the bomb in the first place (an alert on it had gone out in advance) and criticized the FAA for being too committed to the TNA machine in its antiterrorism strategy.

During its investigation, the commission staff went to JFK Airport, where a TNA machine is now in operation, and ran an impromptu experiment using borrowed plastic explosives. The results, said the commission, were "startling": the machine failed to detect explosives of the quantity it was designed to catch in two out of ten passes, and it failed to detect a smaller, Lockerbie-like amount in seven out of eight passes. They concluded it has a 64% detection rate at best.

Hadi Bozorgmanesh, spokesman for SAIC, Inc., which manufactures the machine, responds: "The commission had no technical staff ... and those results are totally meaningless. Nobody even took any notes" during the experiment. Based on experience at JFK so far, he claims the machine has a 93% detection rate and an 8 to 9% false alarm rate.

HIV: Dangerous and Contagious?

At the request of Representative Henry A. Waxman (D-CA), the General Accounting Office has reviewed the legal basis for immigration restrictions on people testing positive for HIV virus. The GAO has concluded that despite a 1987 law adding HIV infection to the list of "dangerous and contagious" diseases, either the President or the secretary of Health and Human Services can remove it if he makes a "good faith" judgment that the designation is no longer appropriate.

Facing the threat of an international boycott, the Administration did introduce a special 10-day visa for anyone attending the Sixth International Conference on AIDS in San Francisco later this month, regardless of HIV infection status (*Science*, 20 April, p. 306). But responding to the GAO opinion, HHS declared that since Congress directed that HIV be on the list and HHS points out the Senate vote was 96 to 0, it is up to Congress to remove it. Waxman and Representative J. Roy Rowland (D-GA) have introduced legislation that would do just that.