Briefings

edited by DAVID P. HAMILTON

Out of China. . .and Now Back In

Fourteen months after pulling its academic exchange office out of Beijing, the National Academy of Sciences is ready to return. Heading that office as of 1 October will be John Olsen, an archaeologist from the University of Arizona.

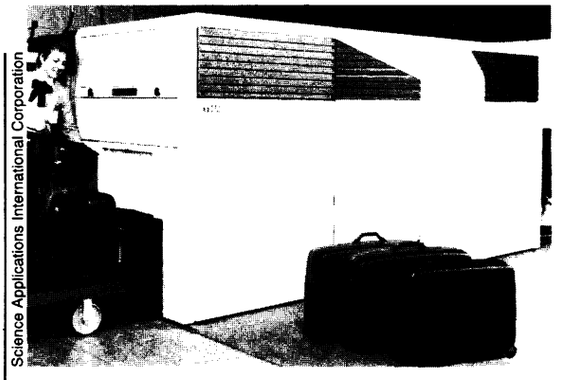
News reports from China continue to feature stories of intimidated academics and official restrictions on freedom of expression, but NAS president Frank Press says that Chinese physical scientists, toward whom the NAS exchange is oriented, are largely insulated from such pressures. "Chinese scientists will be free to work and communicate in scientific matters," he says. "Among the social sciences, the case may be closer to what [news reports] describe." Two co-sponsors of the Chinese exchange have been sending social scientists to China on a "case-by-case basis" over the last 14 months, according to an NAS spokesperson.

Press adds that the move to reopen the Beijing office was approved by the Academy's human rights committee.

According to Olsen, some Chinese academics are in fact reluctant to pursue contacts with foreign scientists. This attitude is "not so significant that it will have a damaging effect on our long-term work in China," he says. His major goal over the next year is to resurrect several programs in agriculture and ecology that were interrupted following the Tiananman Square massacre in July 1989.

Feds Hush Up a Bum Bomb Detector

The Federal Aviation Administration (FAA) has decided to classify all details about a controversial bomb detector that it may ask airlines to install at major airports. The machine, called a thermal neutron activation or TNA device, is designed to spot plastic explosives and was rushed into production under federal orders after the bombing of PanAm flight 103 over Lockerbie, Scotland. But TNA detectors have been criticized by technical experts because the false alarm rate when searching for small quantities of explosive is high—5%, according to some official studies, and much higher, according to others (*Science*, 1 September 1989, p. 926).



Science Applications International Corporation

Bad vibes. *The TNA bomb detector.*

The FAA has been reluctant to discuss TNA's flaws in the past, although the airlines and a presidential commission have argued that the technology is currently too expensive, bulky, and inefficient to be practical. They have called for an independent technical review. New legislation pending in the House and Senate would also require the FAA to delay installation of the machines until it has created a scientific advisory board capable of making an independent judgment about the technology.

Meanwhile, FAA administrator James Busey shows every sign of wishing the issue would just go away. Busey told the *New York Times* in September: "How we are changing the methodology of the system, how we are changing its detection capability. . .how we are dealing with its known false-alarm capability—those are the kinds of things I don't want to talk about anymore."

Chronic Leaks Plague Shuttle Science

The smallest molecule in the universe continues to create big problems for NASA's space shuttle program—and two important space science missions waiting for launch.

The latest act in this seemingly interminable drama came on 17 September, when, just days after fixing a leaky seal in *Columbia*'s 17-inch fuel line, engineers discovered yet another hydrogen leak in the shuttle's aft compartment. This new leak exceeded NASA's recently relaxed leakage allowance by a factor of 4, leaving managers with no choice but to scrub the launch for the fourth time. This means that the Astro-1 astronomical mission that is supposed to be lofted by *Columbia* will now sit on the ground at least until late November.

In a separate development, NASA now says that a freon coolant leak on the shuttle *Discovery*, which is slated to launch the Ulysses solar probe next month, has slowed to a rate of 0.5% a day—small enough that engineers believe simply topping off the freon tank before launch will leave ample margin for the 4-day mission. *Discovery* hasn't exhibited any hydrogen leaks of its own yet, and NASA officials insist there's no reason it should.

Retraining the Cranes

Who would put a brown sack over his head, attach a crane beak to his hand, and march around a swamp in Michigan's Upper Peninsula? Zoologist Richard Urbanek, for one. He's part of a team headed by Ohio State zoologist Theodore Bookhout that hopes to show how sandhill cranes born in captivity can be encouraged to join a migratory flock of cranes that regularly stop at Seney National Wildlife Refuge in Michigan.

The intended beneficiary of this scheme is actually the endangered whooping crane, not the sandhill crane. But because there are only about 224 whooping cranes left in existence—160 in the wild and 64 in captivity—an international committee decided that Bookhout's team should first test techniques for getting the birds used to life in the wild on the more common sandhill cranes.

These birds evidently don't demand high fidelity from parental stand-ins. Urbanek's crane costume has so far been enough to get captive cranes adjusted to other cranes and willing to take off with the migratory flock when it departs for th winter. Bookhout says that if his team can sustain their success, they think they'll have a good argument for trying the technique with the rare whooping cranes.

Until then, the only preservation project for whooping cranes is in Kessimmee Prairie in central Florida, where biologists are introducing captive-born cranes into a nonmigratory flock.