firmed reports that since May the birds that were candidates for release had been fed directly by humans, rather than through blinds using condor puppets. As a result they became tame, and biologists determined that deprogramming was essential before releases could occur.

Even if this effort succeeds, the capturing of the six wild adult condors, elevated lead levels in the blood of one bird, and the need for birds to reach age six or seven to reproduce, makes the near-term release of young condors doubtful. Without the presence of adult condors in the wild to guide young birds to historical nesting and feeding sites, the chances of their survival are reduced. "The intention is still to put [birds] in the wild," says Interior's Smith, "But there are major blocks to doing that." Indeed, department and Audubon scientists concede that releases may not occur before 1990.

Absent condors in the wild, sustaining research to understand the species' high-mortality rate could prove difficult in the future. Similarly, it will be harder to protect roosting, nesting, and foraging areas within the condor's 50,000-square-mile range. To accomplish all of this a unified effort is needed, but working relationships among federal and state agencies, the scientific community and the zoos have been strained by years of infighting over whether to capture the wild flock and over program direction. Disgruntled by Interior's failure to consult with members of the recovery team prior to deciding to capture the birds and to defer acquisition of Hudson Ranch, Audubon may pull its professional staff from the recovery effort. Audubon has played a central role in the condor program for years and has persuaded Congress to augment Interior's $800,000-annual condor budget by $300,000.

"There has to be a fundamental change in how the program is run," says Enos, who complains that decisions should be made by field biologists, rather than bureaucrats in Washington. Interior's Smith hopes to patch up frayed relations with participants in the condor's recovery, but he wants Interior and the State of California to call the shots. Audubon, the zoos and other participants would serve in an advisory capacity. Just how this power struggle will sort out is uncertain, but "there has to be a more clearly defined sequence of authority," says Lloyd Kiff, director of the Western Foundation for Vertebrate Zoology. "The one thing we always ask is: 'Who is running the condor program?' " The House Appropriations and Merchant Marines and Fisheries Committees are likely to ask the same questions when they probe the condor program in coming hearings. ■ MARK CRAWFORD

Briefing:

Appeals Court Backs Gould's Laser Claim

Inventor Gordon Gould won a victory and the Patent and Trademark Office (PTO) suffered a sharp rebuke in a case involving lasers decided in the U.S. Court of Appeals on 19 December.

In the decision, Judge Thomas Flannery wrote that he was "thoroughly convinced that the PTO made several material errors" in denying Gould a patent on the gas-discharge laser. Flannery brushed aside at least 20 times the "erroneous," "mistaken," "irrelevant," and "incorrect" views of the Patent Office and sided with Gould, saying Gould had a fair claim that should be recognized. The Patent Office is normally assumed to be correct, as the court said, unless its "findings are demonstrably inaccurate to a material degree." The judge relied heavily on the testimony of Gould's chief witness, Peter Franken of the University of Arizona at Tucson, in rejecting the government's argument.

Gordon Gould

First applied for patent in 1959.

In his final judgment, Flannery ordered the government to stop delaying and issue a patent "forthwith." If Gould does win a patent and enforces it, he may collect royalties on the helium-neon laser and the CO_2 laser, a market said to be worth several hundred million dollars. Automated supermarket checkout counters, for example, use helium-neon lasers.

Gould sold shares of his laser claim to other investors, including his lawyers, to finance his marathon quarrel with the PTO. A majority interest now belongs to the Patlex Corporation of Westfield, New Jersey, whose stock leaped up when the decision was announced. Gould himself calls the ruling a "vindication" and an "exposure of the bureaucratic incompetence" of the PTO. However, Gould warns that the PTO may appeal the decision or insist on a reexamination of the patent. A spokesman for the PTO said no decision has been made as yet.

One remarkable aspect of the case is its longevity, for it reaches back 26 years to the time when Gould first applied for a patent in April 1959. His ideas were incorporated in a military research program for several years after that, in an unsuccessful attempt to produce laser weapons. During this time, Gould's patent application was classified. Later, he began to press for patents that would entitle him to royalties on commercial lasers. His original filing was split into many pieces, the gas-discharge part being one of three major cases still active. The other two deal with optically pumped lasers and industrial applications. Both have been in and out of the courts for years.

Despite Gould's legal success, many other inventors disparage his claims. William Bennett of Yale, coinventor in 1960 of the first working gas-discharge laser (a helium-neon device), says it is "ridiculous" that Gould should be recognized as the inventor of the helium-neon laser. "We saw nothing of Gould's work until much later," says Bennett, "and it contained no useful information whatever." Bennett describes Gould as a "clever guy" who pursued his legal claims assiduously. ■ ELIOT MARSHALL

CIA Funding Dispute Claims Victim at Harvard

Since the early 1970's, when the Central Intelligence Agency (CIA) was first implicated in a series of unethical activities and hidden political manipulations, the acceptance of its money by academic researchers has frequently created turmoil on university campuses. Recently, the taint of a CIA connection claimed a new victim, Professor Nadav Safran, a highly regarded scholar and director of the Center for Middle Eastern Studies at Harvard University.

Last August, Safran negotiated a $45,700 contract with the CIA to organize a small conference on "Islam and Politics in the Contemporary Muslim World." The conference, which attracted such well-known experts as Michael Cook of the University of

London, Hermann Eilts of Boston University, and Emmanuel Sivan of Hebrew University, took place on 15–16 October and was considered by Safran to be a success. But he did not disclose the CIA's involvement, either to the participants or to officials at Harvard, until the news media got wind of it the previous week. Once the connection was made public, it immediately embroiled both the center and Safran in controversy, and led to a public request for Safran's resignation by half of the center's executive committee.

After a thorough investigation, A. Michael Spence, the dean of Harvard's arts and sciences, announced on 30 December that Safran would indeed resign as the center's director. Safran's motivation, according to Spence, is "to see the Center recover its momentum as a scholarly enterprise and . . . to avoid unnecessary and prolonged controversy that would interfere with his own teaching and research and that of others." But in a report, Spence said that CIA sponsorship clearly should have been disclosed at the outset and that "the University owes an apology to the participants, to scholars in the field, and to the academic community at large." Under accepted academic standards, not to mention Harvard's own rules, he added, disclosure "is essential for the protection of scholars who place their trust in us."

No fault was found in Safran's earlier acceptance of a $107,430 CIA contract to write a book-length manuscript on Saudi Arabian politics. Two provisions in the contract were judged to be in violation of Harvard's guidelines for institutional contracts, but Safran was considered blameless because he had furnished a copy of the contract to university officials and received no reply. One of the provisions reserved the CIA's right of prepublication review and approval, and the other demanded that CIA sponsorship be concealed from the public. No mention of the CIA was made by Harvard University Press when it published the manuscript last year as *Saudi Arabia: The Quest for Security*.

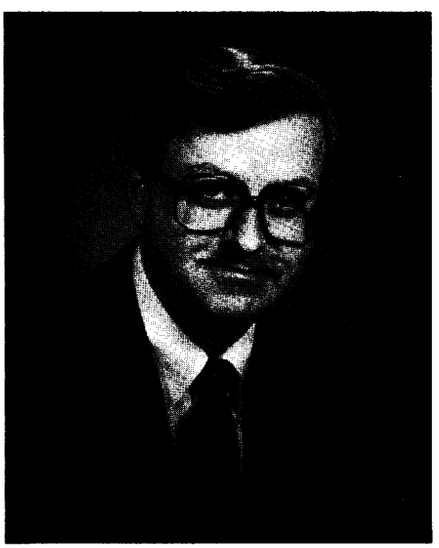
CIA spokeswoman Kathy Pherson says that such requirements are routine at the agency, although she could not explain why they were imposed in a circumstance in which none of the resources were classified or provided by the CIA. Safran, who will remain a professor at Harvard, says he accepted the requirements because they seemed benign, and that in any event, the agency applied no pressure to alter the book's conclusions. (It has received favorable reviews.)

Spence said that the requirements conflicted with a long-standing rule that research be unfettered by institutional censorship and that economic support be plainly stated. An exception is made for so-called "individual" contracts, in which the involvement of the university is minimal, and Safran says he thought both contracts fit into this category. But Spence says the distinction is not clear-cut and that a faculty committee will examine whether CIA funding of center activities is appropriate under any circumstances in light of "the special features of the region." ■ **R. JEFFREY SMITH**

McTague Named Acting Science Adviser

John P. McTague has been appointed acting director of the Office of Science and Technology Policy (OSTP), following the departure of George A. Keyworth II on 31 December. McTague, a physical chemist who was previously at Brookhaven National Laboratory, has been Keyworth's deputy for the past 2 years.

His appointment ends speculation that Erich Bloch would be given the job, at least on a temporary basis, in addition to his post as director of the National Science Foundation. Such an arrangement was recommended by Keyworth and many considered it a foregone conclusion. But according to one source it was "never seriously considered" by top White House officials.



John McTague

Has been deputy adviser for past 2 years.

The White House is still looking for a permanent replacement for Keyworth, who is heading his own consulting firm. ■ **COLIN NORMAN**

OTA Optimistic About Scientific Work Force

As the post–baby boom generation moves into the 18- to 24-year-old age group, col lege enrollments will drop by 12 to 16 percent by 1995. But, says the Office of Technology Assessment (OTA) "it is entirely possible that the supply of people trained in science and engineering will not decline at all."

In an analysis ordered up by the House Task Force on Science Policy, *Demographic Trends and the Scientific and Engineering Work Force*, the OTA finds no cause for alarm in the coming contraction of the work force. It says "career choices and market forces have a greater impact on the supply of scientists and engineers than do demographic trends." The data show that "there appears to be no direct relationship between the number of Ph.D.'s in science and engineering and the size of the graduate school age population." Thus, "a slight increase in the rate of selection of scientific and engineering careers . . . could more than compensate for the decline" in enrollments.

The 145-page "technical memorandum" goes on to emphasize, however, that the composition of the entering work force is changing—27 percent of college students will be minority members by 1998—and that it is especially important now to encourage minorities and women to study science.

Blacks, Hispanics, and American Indians go to college at half the rate of whites, and those who select quantitative fields (engineering, mathematics, and computer sciences) do so at 1/2 to 3/4 the white rate. Social class and parents' educational levels are among the most powerful deterrents to progress for minorities, says the report. Although blacks and Hispanics in science and engineering earn lower salaries than do whites, "analysts consulted by the OTA did not report strong evidence" that discrimination by employers was a significant problem.

The situation is somewhat different for women: "gender-stereotyped career expectations and differential treatment of women scientists in the work force are the two major factors discouraging women from entering science and engineering." Women are still not particularly keen on engineering, for example, and enrollments have leveled off after the surge of recent years. This does not seem to be a result of a conditioned aversion to quantification, however, since women have obtained over 40 percent of bachelor's degrees in mathematics since 1974.

Although women have a 50 percent higher attrition rate than men, the report says men are more likely than women of comparable experience to be promoted and hired