ect in the Pacific Ocean, conducted under a cover of bird-banding study." A few minutes later, after two brief preliminary interviews, Pettit supported this charge by introducing Robert Standen, the Los Angeles teacher who had once worked for the Smithsonian project. Standen described a typical day's work, and then Pettit dropped his bombshell. He revealed that "Standen later took part in an ultra-secret military CBW project in the Pacific."

In a rather confusing question-and-answer sequence, Standen said that he had never told the Smithsonian about the military test, and that the test involved a "biological carrier." He refused to say where the test had taken place.

Reporter Pettit then filled in the blanks by announcing that NBC had learned from other sources that the 6-week test was conducted in the spring of 1965 on Baker Island, a 1-square-mile U.S. possession some 1700 miles southwest of Honolulu. Pettit said Army, Navy, and Air Force personnel were "testing animal vectors, or carriers, to see how they would behave in a tropical climate. No germs were involved. In effect it was a checkout of an animal delivery system for CBW."

What was the Smithsonian's involvement in this military test? "The Smithsonian never knew what it was about," Standen told *Science*. Standen said the Army asked the Smithsonian project to send an observer along so that, if the test caused biological changes on the island, the Smithsonian scientists would understand what had happened. As it turns out, Standen said, there were no changes, so Standen left the island after 12 days, well before the end of the test.

Standen said the Army refused to tell one of the Smithsonian project's ranking scientists what the test was about. He also said that he himself was barred from a meeting aboard ship at which the objectives of the test were apparently discussed, and that he was instructed not to tell his Smithsonian colleagues about anything he had seen.

Shortly after the NBC program, the Defense Department acknowledged that "some years ago" it had conducted "classified biological warfare-related testing for purely defensive requirements at Baker Island and other Pacific islands." The Defense Department said "These tests involved no Smithsonian Institution personnel and no actual BW agents were ever used."

Thus the Smithsonian's only involvement with this test seems to be that the bird project allowed one of its field men to accompany the military team, almost as an "outcast." NBC's use of the word "cover" to describe this situation seems highly misleading. As far as Standen, NBC's star witness, is concerned, the Smithsonian bird project "is not a cover for anything."

After finishing with Standen, re-

Science Adviser DuBridge Makes His Press Debut,

President Nixon is making unusual efforts to ingratiate himself with the scientific and academic communities. Earlier this month he restored $10 million in funds for the National Science Foundation. On 13 February the President spent an hour and 15 minutes discussing problems of research and the universities with 25 members of the National Science Board.

Few Presidents would make a meeting with the National Science Board a priority item for their first month in office. Basically, the Board, whose members are chosen from universities and industries, is the inconspicuous policy-making body for the National Science Foundation (NSF), which itself controls only a portion of Federal research spending.

At least part of the President's solicitude for the scientific community must be credited to the uncommon respect and access he seems to accord his science adviser, former Caltech president Lee A. DuBridge. (DuBridge held his first press conference as science adviser on 13 February after meeting with Nixon and the National Science Board, then left immediately afterward for yet another appointment with President Nixon.)

DuBridge described the "friendly" meeting with Nixon, the Board, and Vice President Agnew, as a "round-table discussion" on the problems of science, the universities, and graduate education. DuBridge said that Nixon expressed "his very deep interest in the progress of science in our universities especially" and believes that it is important for basic science to have stable and dependable research support. Nixon believes that the National Science Foundation should play "an ever increasing part in the support of academic science."

DuBridge's 13 February press conference was his first major appearance in Washington since becoming science adviser. Reporters packed the Treaty Room in the Executive Office Building (where President Eisenhower held his press conferences). DuBridge handled the press conference with authority. Although he dodged some questions, especially on weapons systems, he did convey a lot of information and ideas during the session. In response to reporters' questions he made these points:

► DuBridge said that his office, NASA, the Department of Defense, and the National Space Council were charting "new directions, new goals, and new programs for the entire United States space program" for the post-Apollo decade. Recommendations will be delivered to the President by 1 September. DuBridge said that a "balanced" space program with several goals is more appropriate than a program with a single goal, that "the Apollo program will certainly go on," and that "the Apollo Missions Program is still under study."

► He reported that the President had asked his office to give an opinion on "the value and budgetary justification" of the 200-Gev accelerator at Weston, Illinois. He said he was "enthusiastic" about the accelerator and hoped that Congress would approve this year's $100-million budget request for the beginning stages.

► DuBridge revealed that a panel of the President's Science Advisory Committee headed by Princeton University physicist Marvin L. Goldberger would submit a "highly secret report" on ABM within a few days. The study, DuBridge said, represented "3 or 4 years of work" by the Goldberger panel and examined the pros and cons of various technical alternatives. The report will be sent to the Defense Department, he said, before being given to the President. (The study will be received in an atmosphere

porter Pettit then moved in with his clinching evidence. He revealed that former Senator Joseph S. Clark (D–Pa.), "when he was in the U.S. Senate, learned of a direct connection between the Pacific bird project and CBW testing." Clark then stated: "Well, as I understand it, under the screen of the Smithsonian Institute in a bird-banding project, they were looking for a relatively safe place to conduct chemical and biological warfare testings. This resulted in their picking one of the islands in the Hawaiian Chain, probably a pretty small one. It is my understanding that they are now on their way to do some testing there."

And where did Clark, the clincher in NBC's case, get his evidence? "I took that largely from NBC and from Tom Pettit," Clark told *Science*. "Pettit said there was no doubt about it. It was all documented in the NBC documentary." When pressed as to whether the NBC program really did prove that the Smithsonian had been used as a "screen," Clark acknowledged: "We could be wrong. I'm not so much concerned with whether the Smithsonian is covering up for the Army as with the fact that the Army is engaging in utmost secrecy, and the American people have no opportunity to know what is going on."

The allegations about the Smithsonian were virtually the only part of the NBC program to receive extensive coverage in the press. Unfortunately, some of the nation's leading newspapers seem to have been as casual as Senator Clark in their treatment of the charges. The New York *Times* put the weight of the prestigious Senate Foreign Relations Committee behind the allegations by asserting, in the opening paragraph of a story published on 5 February, that the committee's staff "has obtained information suggesting that the Army, under the guise of a bird study by the Smithsonian Institution, is looking for a remote Pacific site to conduct experiments in chemical-biological warfare." The *Times* said that Senator Clark, a former committee member, had based his statements to NBC on information obtained from the staff.

However, the staff does not seem to have much information. The only evidence mentioned in the *Times* was a letter from E. W. Pfeiffer, professor of zoology at the University of Montana, who wrote that he had "learned from an absolutely reliable source" that the purpose of the project was to locate a test site; plus indications that CBW officials are interested in the project. Peter B. Riddleberger, the staff's CBW specialist, told *Science* the Foreign Relations Committee has no other evidence and has not investigated the Smithsonian project. Indeed, the *Times* article acknowledged, in the last paragraph, that the Army's alleged interest in the Smithsonian project for CBW ex-

Tells about Nixon's Meeting with Scientists

of increasing scientific, congressional, public, and press criticism of quick deployment of an ABM system.)

► "The problem of finding proper personnel for scientific positions in the government has been one of my most frustrating tasks," DuBridge commented. He said "we have not yet located the right man" for either the new administrator of NASA or the Executive Secretary for the Space Council. In response to a later question, he said that acting NASA administrator Thomas O. Paine was one candidate for the NASA job. Although he did not say so specifically, DuBridge left the impression that the Nixon Administration was looking for new leadership for the NSF. The term of NSF director Leland J. Haworth, 64, expires on 30 June.

► DuBridge, at Nixon's request, has assembled a special panel on the Santa Barbara oil leakage. DuBridge said that the group would meet in Santa Barbara on 19 and 20 February to begin to determine the geological source of the leak and the biological and environmental consequences and to recommend how such damage can be avoided in the future. Petroleum geologist John C. Calhoun, vice president of Texas A & M University, will serve as chairman of the 14-member panel.

► The President has also asked DuBridge's office to help examine the Marine Sciences Commission report and the Telecommunications Taskforce report.

In his able handling of the press conference, DuBridge made only two kinds of comments which might cause him trouble in parts of the scientific community. First, DuBridge, a physicist, gave a great deal of attention to the physical sciences. He enthusiastically backed the Weston accelerator, gave short shrift to a question about what his office planned to do about molecular biology, and failed to mention chemical, biological, or medical research in specifying those areas which he hoped would have increased funding when the budget permitted. The disciplines he did single out as deserving greater funding were expensive big-science areas: high-energy physics, oceanography, astronomy, and radio astronomy.

Second, DuBridge once again made clear his desire to heal the "breaches" between the Defense Department and the universities. He said that the breaches had been exaggerated by "extremist elements" in the universities and that "many responsible scientists and engineers are collaborating effectively and earnestly and patriotically with the government in connection with its defense problems."

In discussing the 4 March research halt at M.I.T. (*Science*, 24 January), DuBridge said that the planned session had been "badly misrepresented" as a "research strike" by some people at M.I.T., including faculty members and graduate students, and had been intended by "very responsible members of the faculty" as a "day-long symposium on social problems." (Last month 182 M.I.T. graduate students and faculty members wrote DuBridge a letter of protest about his statements on wanting to heal the breach with the Defense Department. Instead, they argued, he should be trying to build closer ties between the scientific community and HEW, HUD, and Transportation).

Although DuBridge may underestimate the responsibility and seriousness of those scientists who have raised questions about the relationship of science and the military, it is clear that he is off to a fast start as science adviser, is getting his message across to President Nixon, and is being used by the President for advice on a number of issues which have great political as well as scientific significance.

—BRYCE NELSON