sented at this year's meeting, has a comprehensive program which includes a dedication to the cause of fusion power development and a highly disciplined attitude toward its leadership.

Both insiders and observers agree that SFTP is a product of the New Left, the generation of political activists radicalized by the civil rights movement and resistance to the Vietnam war. By common assent, the New Left was regarded essentially as a movement of intellectuals and students. In class terms it was regarded as "petit bourgeois" rather than a working class movement.

Some of the academics in SFTP see this as a serious defect in the group and in themselves and have tried to remedy it. For some, it has meant involvement in community action projects and for others, union organizing or health and safety activities among nonprofessionals in their laboratory "workplace." Despite the sense of solidarity they develop, the scientists admit that it is difficult to learn to "work collectively." Their training and the atmosphere in most laboratories militates against it, but overcoming elitism in science remains an item high on the SFTP priority list.

China holds a fascination for many SFTP members. There is a China study group, some of whom visited China and produced a generally admiring book *China: Science Walks on Two Legs*, published by Avon. SFTP members see China as a society where science is organized to serve the needs of people directly and where, at the same time, the masses are educated in the principles of science.

What price does a radical scientist pay for his political activism these days? Everyone agrees that it is easier for a faculty member with tenure and a reputation as a productive scientist to be active in left-wing politics. The scientist in industry, as one nonacademic put it, "is not like a liberal professor who can go out and say outrageous things and hang on to his job." The economic squeeze has hit industry scientists hard in the Boston area, and politically active scientists who have refused to do work connected with military contracts or who lack security clearances are particularly vulnerable.

As for academic scientists, universities are not happy when, for example, they feel that radical faculty members have become intramural labor agitators. The major factor, however, is probably peer pressure. Scientists, particularly when they are graduate students or post docs, are expected to spend full time—and that may mean 80 hours a week—on science. Time spent on political activity may well be interpreted as a sign that the individual is not serious about science. And there goes the fellowship or the chance for tenure.

A lot of scientists radicalized by the events and the atmosphere of the 1960's have simmered down politically because of careers or families or mortgages or simply because the war is over. And what about recruits to SFTP and other radical organizations from among young people now coming up through the high schools and colleges who lack experience of the political traumas of the 1960's? Most members of the SFTP who were asked the question admitted they were not sure of the answer, though several said they felt that university students now were politically more sophisticated than their predecessors and suggested that they may be more successful in changing the system from within.

SFTP has certainly not become a mass movement, but it has exceeded the half-life of many of the radical political organizations born in the 1960's and appears to have made the transition into the world of the 1970's and beyond.—JOHN WALSH

Foreign Intelligence Advisory Board: A Lesson in Citizen Oversight?

The President's Foreign Intelligence Advisory Board (PFIAB) has been emerging from its characteristic secrecy lately, in the course of recent examinations of the U.S. intelligence community. Created 20 years ago in a climate of criticism of national intelligence much like today's, the PFIAB (which has turned out to be best known for its advice on science and technology) offers one example of the strengths and limits of citizen "oversight" of intelligence.

The PFIAB's past experience is worth examining because, in his reform proposals of 17 February, President Ford drew on the PFIAB model. He proposed the creation of a new three-member Intelligence Oversight Board, made up of private citizens, with specific authority to investigate the intelligence community and report abuses. Two of the three candidates Ford has proposed for the new board have been PFIAB members.

What is the PFIAB? It is a small, blue-ribbon group of prominent citizens, military experts, and scientists created by President Eisenhower in 1956 at the time of breaking scandals about improper Central Intelligence Agency (CIA) involvement in Iran and Guatemala. Its members serve at the pleasure of the President (although successive Presidents have tended to reappoint the same people over the years*). They are private citizens who, in their daily occupations, are not primarily involved with intelligence activities. The group meets for 2 days in Washington every other month. It never publicizes its findings; members rarely talk to the press. In short, it has an apparently cherished 20-year tradition of secrecy.

The Ford proposals would keep PFIAB in existence, but some of the board's critics in Congress may object to a continuation. They cite its track record over the years, which, as far as is known, has not included the uncovering of major bureaucratic abuses. To the contrary, the critics say, the board is known for its advocacy of intelligence in general, and of certain technical systems of data collection in particular. One vehement critic, Senator Mike Mansfield (D–Mont.), says that the board's value as an "impartial reviewing agency" has been so dubious that "it would be easier, cheaper, and more logical to abolish it."

Critics and proponents agree, however, that the board's chief contribution over the

**Members appointed by Eisenhower:* James R. Killian, Jr. (chairman), Gen. John E. Hull (chairman), William O. Baker, Adm. Richard L. Conolly, Gov. Colgate W. Darden, Jr., Lt. Gen. James H. Doolittle, Benjamin F. Fairless, Joseph P. Kennedy, Robert A. Lovett, Edward L. Ryerson. *Members appointed by Kennedy:* James R. Killian, Jr. (chairman), Clark Clifford (chairman), William O. Baker, Lt. Gen. James H. Doolittle, Gordon Gray, Edwin H. Land, William L. Langer, Robert D. Murphy, Frank Pace, Jr., Gen. Maxwell D. Taylor. *Members appointed by Johnson:* Clark Clifford (chairman), William O. Baker, Gordon Gray, Edwin H. Land, William L. Langer, Robert D. Murphy, Frank Pace, Jr., Adm. John H. Sides, Gen. Maxwell D. Taylor. *Members appointed by Nixon:* Gen. Maxwell D. Taylor (chairman), Adm. George W. Anderson, Jr. (chairman), William O. Baker, Leo Cherne, Gov. John B. Connally, John S. Foster, Jr., Robert W. Galvin, Gordon Gray, Edwin H. Land, Franklin B. Lincoln, Jr., Amb. Clare Booth Luce, Franklin D. Murphy, Robert D. Murphy, Frank Pace, Jr., Gov. Nelson Rockefeller, George P. Shultz, Edward Teller. *Present membership:* George W. Anderson (chairman), William O. Baker, Leo Cherne, John S. Foster, Jr., Robert W. Galvin, Gordon Gray, Edwin H. Land, Clare Booth Luce, George P. Shultz, Edward Teller.

years has been as a vehicle for a handful of scientists—namely, Edwin H. Land of Polaroid Corporation, William O. Baker of Bell Laboratories, and James R. Killian of the Massachusetts Institute of Technology—to influence technical decisions.

Land and Baker have served on the board continuously for 15 and 17 years, respectively; Killian retired from it for health reasons in 1963, having served for 6 years. Edward Teller and John S. Foster, Jr., have sat on the board since 1971 and 1973, respectively.

Land and Killian, with Baker as a consultant, served on the PFIAB's predecessor, the Technical Capabilities Panel (TCP). The TCP was set up by Eisenhower in 1954 to assess the country's vulnerability to surprise attack. But it is best remembered because the scientists, led by Land, decided that the U-2 spy plane—then an obscure design held by Lockheed Aircraft Corp.—should become the backbone of U.S. reconnaissance. Several sources say the group pushed for the most advanced design, for the most sophisticated cameras and radars, and for getting the Air Force (which was unenthusiastic about the project) to build the plane within 2 years.

When Eisenhower set up the board in 1956† Mansfield and congressional leaders were moving to establish a joint House-Senate oversight committee. Killian was made chairman of the Eisenhower board, and the board was ordered, among other things, to "conduct an objective review of the foreign intelligence activities of the government." But like the TCP, the Eisenhower board was known for its advocacy of certain technologies.

One particular problem it faced was what kind of satellite system should follow the U-2. At that time, the Air Force supported direct radio transmission of images from a satellite, through its Midas program. However, the board chose to back the CIA's view that better photographic resolution and greater coverage were possible if, instead, film were dropped from the satellite and recovered by airplane.

The latter plan proved the better one. Within months of the shooting down of Francis Gary Powers' U-2 plane in May 1960, the first aerial recovery of a capsule dropped from a Discoverer satellite took place. Yet, even today, the problems associated with transmission of high-resolution images from space have not been fully resolved.

It was under President Kennedy, in the aftermath of the Bay of Pigs invasion fiasco, that the PFIAB came closest to playing the watchdog role which has always been implied in its mandates. Kennedy claimed he had been badly misinformed prior to the invasion attempt. He was convinced that the intelligence community needed to be thoroughly overhauled. Clark Clifford, whom Kennedy appointed to the board, recalls that PFIAB then enjoyed considerable power because the President backed it. "He let the [intelligence] community know that if they didn't cooperate they were definitely in peril."

According to official records, between May and November of 1961 the PFIAB met 25 times. This was more often than it had convened during its previous 5 years of existence. Clifford estimates that of the 180 recommendations it made to Kennedy, some 170 were adopted. Among the recommendations were proposals to establish the science and technology directorate in the CIA and to consolidate some military intelligence activities in the Defense Intelligence Agency.

Under both Johnson and Nixon the board seems to have gone into a decline, although the lack of available information on its technical achievements may simply be due to the tighter security surrounding the more recent history of intelligence gathering. However, Clifford, who was chairman under Johnson, makes no bones about the fact that there was a definite decline in presidential interest in the board. And a congressional staffer ventured that "if you had asked him, President Johnson probably couldn't have named who was on the board."

Nixon is said to have met more frequently with PFIAB, but it is unclear whether, as a result, the board had more influence. Several people on the board or close to it during that period say it had no knowledge of covert operations—either of the domestic spying revealed in 1974 or of the CIA's involvement in Watergate. According to some accounts, the board helped persuade Nixon to approve the *Glomar Explorer* caper—CIA's daring, but only partly successful, attempt to use an alleged ocean mining barge to raise a sunken Soviet submarine.

President Nixon clearly viewed the prestige of appointment to the board as a way to reward political friends. He appointed a number of such friends—who had no particular background in intelligence—to it: John Connally, Clare Booth Luce, George P. Shultz, and economist and sculptor Leo Cherne.

This history, although sketchy, does not bear out the notion that PFIAB has been a zealous overseer of the more sordid activities of the intelligence community. Some who are familiar with it, such as Clifford, argue that it is inherently unable to be much of a watchdog. Since it is part of the executive, yet meant to police the executive, it will always resemble the hound in the Sherlock Holmes story who failed to bark during the robbery because he was friendly with the thief.

Others, such as Baker, argue that the board's job never was meant to be general oversight of the bureaucracy. It was to pass on the quality of intelligence itself. "Judging the quality of intelligence is almost wholly separable from judging the bureaucracy that produces it," he says.

But CIA critics Victor Marchetti and John D. Marks, in their book *The CIA and the Cult of Intelligence* (Knopf, New York, 1964; pages 334–335), argue that even in this more limited, technical advisory role the PFIAB has done the intelligence community a disservice.

> The PFIAB had tended to operate with the assumption that all information is "knowable" and that the intelligence community's problems would be solved if only more data were collected by more advanced systems. This emphasis on quantity over quality has served to accentuate the management problems that plague American intelligence and, in recent years at least, has often been counterproductive.

The PFIAB's lack of success as a stern overseer of the intelligence community could have been due to the fact that it lacked specific powers of enforcement. President Ford has proposed that the new Intelligence Oversight Board have such powers. But it may turn out after all, that part-time citizens' committees are, by definition, not quite up to the massive task of intelligence oversight.

—DEBORAH SHAPLEY

† It was then called the President's Board of Consultants on Foreign Intelligence Activities. The name was changed to its present form in 1961.

RECENT DEATHS

Ray T. Dufford, 84; professor emeritus of physics, University of Evansville; 1 November.

John R. Dunning, 67; former dean, School of Engineering and Applied Science, Columbia University; 25 August.

Hamden L. Fornker, Sr., 78; former professor of education, Teachers College, Columbia University; 25 November.

Samuel S. Kistler, 75; former dean of engineering, University of Utah; 13 November.

Chester R. Longwell, 88; professor emeritus of geology, Yale University; 15 December.

Charles H. Newton, 45; professor of sociology, Memphis State University; 12 November.

Robert D. Patton, 74; professor emeritus of economics, Ohio State University; 13 November.