To Catch a Spy

The FBI's tactics in arresting an East German physicist at a meeting of the American Vacuum Society have raised some ire

Alfred Zehe, an East German physicist, was arrested at the annual meeting of the American Vacuum Society on 3 November and charged with espionage. The arrest in Boston was the culmination of a 2-year operation by the Federal Bureau of Investigation (FBI) during which Zehe was implicated in attempts to obtain classified information from a civilian employee of the Navy. Although the FBI has stated in an affidavit that Zehe spent very little time at the meeting before he was arrested, the episode has prompted concern that the Reagan Administration will use the event to justify further restrictions on open scientific meetings attended by foreigners.

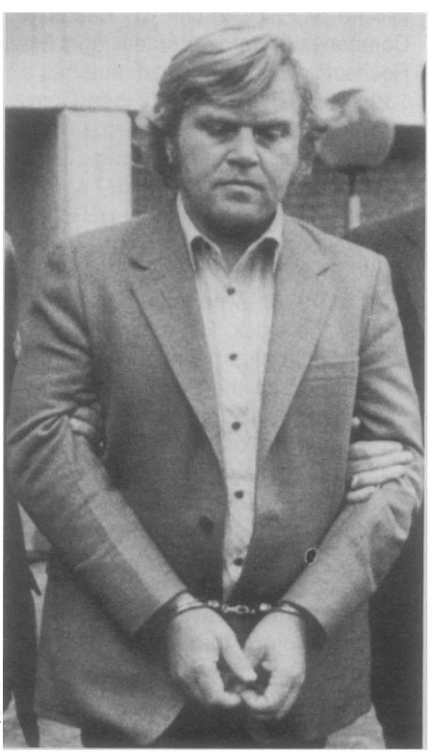
Officials of the vacuum society are angry at the way the FBI involved the society in the surveillance and arrest of Zehe. FBI agents requested complimentary badges made out to false names and rather conspicuously patrolled the meeting. Some officials of the society even believe their telephones were tapped. After the arrest, the FBI demanded, under threat of a subpoena, a list of those attending the meeting.

All of this has brought the society a good deal of publicity, which has in some cases left the erroneous impression that Zehe may have been gathering secrets at the meeting. This is particularly unwelcome because it is not the first time that the society has been at the center of controversy surrounding the transfer of technology to the Soviet bloc. Three years ago, the Carter Administration, in the wake of the Soviet invasion of Afghanistan, refused to allow Soviet scientists to attend a vacuum society meeting on bubble memory devices, a move that kicked off the recent spate of restrictions on open conferences at which unclassified but potentially sensitive information is presented.

The investigation and arrest of Zehe otherwise appears to have been a classic counterespionage operation. According to an affidavit filed in federal court in Boston on 4 November, the operation began with a meeting at the East German embassy in Washington, D.C., between a civilian employee at the Naval Electronic Systems Engineering Command in Charleston, South Carolina, and Dieter Walsch, an embassy official described in the affidavit as "an officer of the GDR Ministry of State Security, East Germany's intelligence gathering organization." Unknown to the East Germans, the Naval employee was cooperating fully with the FBI and the Naval Investigative Service (NIS).

According to the affidavit, Walsch subsequently paid the Naval employee—referred to in the document as the "confidential source"—a total of $3500 for two sets of classified documents that were delivered to the embassy in February and April 1982. The documents had been supplied by the FBI and the NIS. The confidential source was then instructed to make further deliveries to the East German Embassy in Mexico City. It was there that he first met Zehe.

In a statement issued after Zehe's arrest, the FBI described him as an exchange scholar at the University of Puebla, in Puebla, Mexico. His permanent address is given in the court papers as Dresden, East Germany. Zehe was introduced to the confidential source as a "scientific-technical expert" who would evaluate the classified documents. During six meetings in Mexico and one in East Berlin, Zehe handed over a total of $17,300 for various documents and provided the confidential source with a camera to film additional material, the affidavit alleges.



Wide World

Alfred Zehe

There is concern that his attendance at the meeting could lead to more restrictions on open scientific conferences.

Then, on 19 October, the FBI learned that Zehe was scheduled to attend the vacuum society meeting in Boston in the first week of November. This was apparently not his first visit to the United States. An FBI press release describes him as a frequent visitor. FBI agents had Zehe under constant surveillance from the time he landed in Boston on 1 November until his arrest 2 days later. The affidavit states that he "traveled extensively in the Boston area," but "only briefly attended the functions or meetings of the American Vacuum Society."

According to John Arthur, a physicist at Oregon State University who is the current president of the American Vacuum Society, a man appeared at the society's New York office about a week before the meeting, identified himself as an FBI agent, and requested complimentary badges to permit six agents to attend the meeting under false names. He apparently said "we hope to catch a spy." The arrangements were made without notifying Arthur or other members of the executive committee.

When Arthur learned at the beginning of the meeting what had happened, he said he was "really appalled that we were being used in this fashion." He called the FBI and said it was an open meeting which anybody, including FBI agents, could attend if they paid the registration fee. He says he was subsequently aproached by a man who presented FBI credentials, pulled out a sheaf of $100 bills and paid $780 to register himself and his five colleagues. According to Arthur and others who attended the meeting, the agents were conspicuous because they all wore bulky, old-fashioned earphones. Zehe was arrested at the conference hotel in the afternoon of 3 November.

Officials from the society were particularly concerned that their hotel telephones may have been tapped. The concern stems primarily from a curious incident in which the local arrangements officer's wife made a call on the room telephone and heard played back a recording of a conversation her husband had had 2 days previously. Arthur says he was subsequently advised by the ho-

tel management not to make confidential calls on his room phone. He took his telephone apart, but found nothing. A spokeswoman for the Boston Sheraton told *Science* that the hotel had no evidence that telephones were tapped. The FBI has declined to comment while the case against Zehe is pending before the court.

The society heard from the FBI again on 9 November, when the FBI requested a list of the 2600 attendees at the meeting and threatened to subpoena the list if it was not supplied. According to Edward Sickafus, the society's president-elect, the list will not be turned over voluntarily, but society officials have told the FBI that they would comply with a subpoena. Sickafus says the society could be on shaky legal ground in supplying a list of attendees without their authorization.

As it happens, Zehe was arrested on the very day that a congressional subcommittee was holding hearings on scientific communication and national security, at which several witnesses voiced fears that attempts to restrict the dissemination of scientific information through meetings and publications could be highly detrimental to U.S. science. The arrest also came at a critical juncture in the Reagan Administration's deliberations on how to restrict unclassified, but potentially sensitive, information. A Defense Department task force is now putting the final touches to regulations, and an interagency committee chaired by the National Security Council hopes to formulate draft government-wide regulations by the end of the year.

One fear is that the Administration will use the Zehe incident to bolster its arguments for tighter restrictions. The Administration has long argued that Soviet bloc spies comb through U.S. scientific conferences and publications, and now it has arrested an alleged spy at a scientific meeting. The symbolic impact of that event may be difficult to offset with the argument that the meeting contained no classified information, that it was open to everybody, and that Zehe in fact spent very little time at the sessions.

—COLIN NORMAN

NAE Seeks a Share of the Limelight

The Engineering Academy, with a renewed focus on technology and society, wants a more prominent role in the policy arena

In 1984, the National Academy of Engineering (NAE) will be 20 years old. It has 1200 members who, says NAE president Robert M. White, represent the engineering crème de la crème from industry, academia, government, and nonprofit organizations. Like the National Academy of Sciences (NAS), its parent, the NAE advises the federal government on a range of technical issues and, in the future will strive mightily to become more involved in major policy debates where issues of technology and society are joined.

White, a graduate of Harvard and MIT whose research has focused on the atmospheric sciences, sees several areas where the NAE could make its mark. Among them he cites the impact of technology on employment, the role of technology in foreign relations, health care technology, industrial productivity and competitiveness, and new approaches to engineering education.

The trouble with the NAE, as its president and many members see it, is that most people don't know what the NAE is. White, who became president last July, is direct in talking about the engineers' lack of visibility. In his first letter to the membership he had this to say:

> The National Academy of Engineering is not as well known in this country as one might expect or wish. I was somewhat surprised recently on a visit to the Hill to engage a key staffer on the House Science and Technology Committee, who was not familiar with the NAE, what it did and how it related to the National Academy of Sciences. I was equally nonplused at a recent meeting with senior executives of a major U.S. corporation to find that knowledge of the NAE was almost nonexistent.

White, a member of NAE but not NAS, is determined to take the NAE from relative obscurity to high visibility and national prominence. In an interview with *Science*, he called the fight for identity a matter of "substance not just style," which will be important in terms of the NAE's ability to play an influential role in national policy debates and to raise nongovernment funds to give it a stronger base from which to initiate programs of its own. Visibility and some financial independence will also enhance the NAE's likelihood of moving out of the shadow of the National Academy of Sciences. Reflecting his own views and those of many NAE members, White says, "We need to move out on our own where this is appropriate and not always be in lock step with the NAS."

Robert M. White

"We need to move out on our own . . . and not always be in lock step with the NAS."

Indeed, during the past couple of years, the NAE has won power within the NAS structure as, for instance, it gained nearly half of the seats on the governing board of the National Research Council (NRC)—the Academy's operating arm through which the NAS and NAE carry out studies. (The Institute of Medicine also shares in the governance of the NRC but conducts studies on its own.)

It seems obvious to aficionados of Academy politics that White intends to capitalize on strides made by his predecessor, Courtland D. Perkins, and carry them far more than one step further despite the internal friction this may cause for a while. White speaks warmly of his relationship with NAS president Frank Press who, he says, has been very supportive of the NAE's efforts.

But observers say it is clear that White will not play a deferential second to Press, and the fact that the NAE has a president as aggressive as White changes