

It does not appear that CAST had its genesis as a result of the pesticide industry inviting its formation to represent the industry viewpoint, as has been commonly supposed, even though they have given aid to CAST in important ways. CAST seems to have originated out of a concern in the American Society of Agronomy as to whether agronomic and agricultural sciences could be properly represented (since they were a distinct minority) by the only societal configurations available to present scientific judgments.

Witt, himself rather even-handed in his judgments, makes clear that he would have little objection to CAST if it were sailing under different colors. "If CAST were to identify itself as an advocacy group—advocating the presentation of the positive side of agricultural science, there would be no quarrel with them. That is a worthy and noble enterprise. The issue of ESA affiliation could then be examined in terms of the question of whether a scientific society would tend to diminish its (or its members) objectivity by joining an advocacy group. But since CAST lays claim to being totally objective, the issue of advocacy must be closely examined for it is a subtle issue with fine differences of degree."

The ESA board has moved cautiously on the CAST issue, making no recommendations to the ESA membership on whether to approve or reject the link. Sources familiar with board attitudes say that two issues have caused reservations on the part of board members—heavy financing of CAST by the pesticide industry and departures from conventional academic procedures in preparation of reports.

Of CAST's current budget of \$146,000, more than two-thirds comes from industry. Its officials say there was no alternative to industry support and that it takes considerable pains to insulate policy-making and report-writing activities from industry influence.

As for CAST's procedures in preparing reports, task force members are suggested by the CAST governing board, which is made up almost entirely of society representatives. A key role in the organization of CAST task forces and in the preparation of reports is played by CAST's executive vice-president, Charles A. Black, a member of the agronomy department at Ames, who still teaches but has given up most other duties for the CAST post.

In response to a question about the accusation that CAST task forces are "stacked," Black points to the process for selecting task force members.

Chairmen for CAST task forces are normally picked on the basis of recommendations by the board of directors, who also nominate scientists from the so-

CIA Research: Duckett Out, Dirks In

Carl Duckett, deputy director for science and technology of the Central Intelligence Agency (CIA), was replaced on 30 May because of poor health and what an agency spokesman describes as routine turnover among high officials following the appointment of a new director. However, there are indications that George Bush, who became director of CIA in January, was unhappy with the fact that Duckett had made a statement, to a CIA seminar, regarding Israel's possession of "10 to 20 nuclear weapons ready and available for use" which was subsequently leaked to the press.

The statement about Israel has never been publicly denied by agency officials. Discovering whether Israel possesses nuclear weapons has been a publicly stated goal of the U.S. reconnaissance effort for some time.

Duckett declined to discuss his situation except to confirm that he is on sick leave from the agency.

The new deputy director for science and technology—the highest ranking science job in the intelligence community—is Leslie C. Dirks, a 15-year veteran of the CIA's science and technology branch. CIA spokesman Dennis Berend declined to state Dirks' specialty or educational background, except to say that he is, "of course, well qualified for the job." Berend said that CIA policy is not to discuss personnel changes except for the director and the deputy director, the only two officials who are presidential appointees.

On 11 March, the CIA sponsored an evening seminar which included cocktails, buffet, and a question and answer period attended by some 150 members of the American Institute of Aeronautics and Astronautics (AIAA). The ground rules for the session have since been disputed. AIAA invitations said it would be "unclassified," but AIAA executive secretary James Harford said, "We were told not to repeat what was said, or which agency officials were present."

There was great surprise, then, when the *Washington Post* immediately reported that at the briefing, "senior officials" of CIA estimated that Israel has "10 to 20 nuclear weapons ready and available for use." The story was written by journalist Arthur Kranish, who attended as a member of AIAA.

The controversy over the remark caused Bush "great anguish" and "embarrassment" according to one official. Senator Frank Church (D-Idaho), who was investigating the CIA, hauled Bush before the committee for questioning about it, and later called the remark "the biggest goof in the history of leaks that I have ever seen." The *B'nai B'rith Messenger* quoted Israel's prime minister Yitzhak Rabin as commenting, "Israel is not a nuclear power." No one, however, seems to have issued a flat denial.

The source of the leak has never been named. However, two AIAA members who were present told *Science* that Duckett not only chaired the session but made the remark. None of the other agency officials on the podium commented on it. "They all just sat there looking blank," said one witness.

Several of Duckett's acquaintances insist that the remark is not the reason he left his job and that his ill health is the cause. Citing a heart condition, one says, "He has been on the verge of having to retire for some time." Another acquaintance says "Ninety-nine percent of this story is his health." Asked whether Duckett had in fact been sick recently, CIA spokesman Berend declined to discuss the health of any CIA employee.

Duckett directed the science branch during some of its more ambitious undertakings, such as Project Jennifer, the attempt to raise a sunken Soviet submarine in 17,000 feet of water in the mid-Pacific using Howard Hughes' ocean mining project as a cover. Intelligence officials say that Project Jennifer was as much Duckett's idea as anyone's.

The science branch was also responsible for designing the newest reconnaissance satellites and the heightened emphasis on gathering economic intelligence since the 1973 Arab oil embargo. A congressional staffer, otherwise critical of CIA, reflected a widely held view of Duckett's abilities: "He was very gifted in pulling people together in teams to work on difficult technological problems. He had a genius for that." His talents were more remarkable, say admirers, because he had never obtained a college degree.

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