

For several months afterward, we saved our feces and urine to have them monitored for radioactivity. We had absorbed a year's maximum allowance of radiation in 1 minute and 29 seconds. There were no apparent after-effects from this exposure—just a lot of doubtful jokes among ourselves about death versus sterility.

Nuclear matters aside, Carter's naval career seems to have called for a certain degree of technical competence. On his first ship after graduating from Annapolis, a test vessel for electronics and gunnery, he was electronics and photography officer. The rest of his naval career was spent on submarines. One of these, the *USS K-1*, conducted experiments on undersea sound transmission and tested new techniques for locating ships by sonar. Carter's command thesis (he became qualified to command a ship but was not senior enough to do so) described "a new technique for determining the distance to a target ship, using information derived from the passive listening equipment only," he says in his autobiography.

Bessel from Fourier

People in the scientific and technical community are already reacting with enthusiasm to the possibility of having one of their own kind in the White House. "It would be unusual to see a president who knows a Bessel function from a Fourier series," says Snow. Others believe that Carter's technical expertise will be of help in making decisions on energy policy. Carter would certainly make a more scientifically literate Chief Executive than either the present incumbent or his predecessor, who once confided to a crowd at Hanford, Washington, that science was one of his poorest subjects and that "I got through it but I had to work too hard." A scientist-engineer in the White House is perhaps the modern age's nearest equivalent to Plato's ideal of the philosopher-king. Carter would doubtless play the former part less disastrously than Hiero, the tyrant of Syracuse upon whom Plato set his hopes, performed the latter.

Carter's descriptions of himself as a nuclear physicist and nuclear engineer may not coincide exactly with what most people would take to be the natural meanings of the terms, but then nor are they barefaced examples of the type of statement that Jimmy has vowed never to make. The point is that he acquired a broad technical competence in the course of his naval career, for which as a shorthand description in a stump speech the term "nuclear engineer" could be regarded as generally apt enough.

—NICHOLAS WADE

New CIA—Research, Anyone?

Mathematica Inc., one of the nation's best known private think tanks, has become a guinea pig for attempts by the Central Intelligence Agency (CIA) to conduct "open" research and resuscitate its languishing relations with the American academic community. Normally, CIA's outside research contracts have been kept secret.

For 2 years, Mathtech, a subsidiary of the corporation, has operated a small consulting group, called the Analytic Support Center, on the outskirts of Washington for the CIA. And although those close to the work of the center are enthusiastic about its activities, perhaps the most interesting thing about the \$600,000-per-year effort is that the fact of its existence is public knowledge.

The Analytic Support Center develops methodology for problems of strategic interest; for example, it might model likely coalitions in a multiparty political system. Into such models CIA can then feed the vast amount of information it collects on such problems, in the hope of improving on its individualistic, ad hoc, methods of analyzing them. "Our job is not to conduct the analysis. It's to develop and test the methodology," says Norman Agin, Mathtech's president.

Moreover, the center is meant to be a link between intellectuals and the CIA. The center sponsors university-type seminars at CIA headquarters (which may be attractive partly because the center's private status enables it to pay three times the \$100-per-day mandatory government consulting wage). Thomas C. Schelling, professor of political economy at Harvard, who participated in one such seminar, says he finds such arrangements "all right so long as everyone who works for them knows who they're working for. The Mathematica people told me straight away that it was for CIA."

But the experiment with open research has not been totally successful. When word of the impending CIA contract reached other parts of Mathematica, its social scientists objected strongly. Mathematica Policy Research (MPR) does more than half of the corporation's \$15-million-per-year business. MPR's reputation as a social science research organization is based on its ability to get unusually high rates of response in questioning poor people such as ghetto dwellers and welfare mothers. The fear was that such people would slam the door in interviewers' faces if Mathematica had a CIA connection.

The dispute was supposedly settled when the CIA contract was let, in November 1974, by making MPR and Mathtech into separate subsidiaries with different governing boards. However, some MPR staffers are still uneasy with the arrangement, although none can cite an actual instance where a survey has actually been hurt by knowledge of Mathematica's CIA contract.

A CIA spokesman denied that the ASC contract signals a new policy of openness in obtaining outside advice. While some contracts have been unclassified, most of the agency's dealings with the academic community remain secret. The CIA has research contracts in approximately a dozen colleges and universities; in nearly all cases, only the investigator and a "senior responsible official" of the university—usually the president—know that CIA is sponsoring the research. Moreover, according to Carl Duckett, who until recently was CIA's long-term chief of research, there are some projects that university records will show the money as coming from another government agency, such as the Department of Defense or the Department of State.

Duckett says that, while CIA usually gets permission for a proposed project from a university official, in keeping with a 1967 presidential order barring covert campus research, there are exceptions. He says that, as of early this year, he knew of one university researcher, who represents "the best brainpower in the United States," who had asked CIA not to tell his superiors that the agency supported him, for fear that he would be fired. The CIA agreed. So, after 2 years of criticism and investigation, the agency now allows an occasional public glimpse of its dealings with intellectuals and scholars. But it is still a long way from opening up such dealings to the sunshine.—DEBORAH SHAPLEY