

gious hereafter, in the other, a political utopia). Members are eager to subsume their identities to the cause to the point where they are attracted to the idea of sacrificing their lives for it. Such groups deliberately isolate themselves from the rest of the world, which is a very effective way of encouraging paranoia and solidifying the group's belief in the reality it has created for itself.

Adding interest to terrorism as a group phenomenon is the fact that almost all modern terrorist groups come from the less oppressed strata of society. Even historically, Walter Laqueur has written, "they are elitists, contemptuous of the masses, believing in the historical mission of a tiny minority."

A paper prepared in 1976 by the U.S. Air Force lends weight to this generalization with sociological data collected on more than 350 terrorists in 18 organizations from Latin America, the Middle East, Europe, and Asia. The authors found that terrorists were typically in their early 20's, urban, and from the upper middle class. Two-thirds of them had some university training, mainly in the humanities, social sciences, law, and medicine. Terrorists were usually recruited in the universities, where they were first exposed to Marxism. The authors quoted a saying that there was a Tupamaro for every upper-class Uruguayan family. The only group that did not conform to this profile was the Irish Republican Army, which is mainly a working-class movement and is also the only movement lacking significant participation of women.

The involvement of women is clearly a phenomenon worthy of more examination. It has often been represented as an "aberrant" extension of feminist movements. Jonas, at the conference, offered an alternative, sociobiological explanation—that primate females can become very violent when defending their young, and perhaps female terrorists shed ordinary inhibitions against violence for the parallel purpose of protecting the "oppressed."

The "science" of terrorism—compared by Laqueur to the science of chemistry in the 17th century—has a long way to go. Much information has been gathered on the mechanisms of terrorism—the organization, financing, tactics, and communications—but there is little knowledge available to be put to practical use. So far, all we have learned is "how to solve yesterday's problems," is the cheerless assessment of Robert Kupperman, chief scientist at the Arms Control and Disarmament Agency who compares terrorist groups to fast-mutat-

ing organisms that are always a step ahead of the latest antibiotics.

The field may have a more predictable future than terrorism itself. A new international journal, *Terrorism*, made its appearance last year. The American Psychiatric Association has a new task force on terrorism. And behavioral scientists have a new organization to encourage

political investigations—the International Association of Political Psychology, which held its first meeting in September.

So whether terrorism is on the wane or whether it is on the way to becoming the surrogate warfare of the future, study of the problem, abetted by the active interest of governments everywhere, can be expected to thrive.—CONSTANCE HOLDEN

## OSHA Carcinogen Policy Delayed

Laboratory researchers apprehensively awaiting announcement of a federal policy on occupational exposure to carcinogenic chemicals have several more months to bite their nails. The policy, expected from the Occupational Safety and Health Administration (OSHA) by 1 January, has been delayed, probably until March. The agency, however, appears to have already tipped its hand on the issue of greatest interest to academic researchers: whether or not academic and other labs will be exempt from the policy, which has been criticized as costly and unfairly burdensome (*Science*, 3 November). The verdict, if the agency's own review of the criticism is to be believed, is that a blanket exemption will not be granted, but special exceptions may be allowed on a chemical-by-chemical basis. The war, it seems, has been lost, but the battle won.

The review of the criticism appears in a "regulatory analysis" of the OSHA proposal prepared by OSHA officials for the public hearing record. It was prepared under an agreement between OSHA and the inflation fighters in the White House Council on Wage and Price Stability (CWPS) that some estimate of the total cost of the policy would be calculated. The report, along with a rebuttal by CWPS, was released on the hearing's closing date, prompting the chemical industry to get the hearing record reopened for a final say and leading to the delay in the policy's announcement.

OSHA has contended all along that the cancer policy would in essence impose no costs peculiar to itself, since the normal process of standard-setting for carcinogens would merely be accelerated. As a result, the "regulatory analysis" deals with many issues besides cost, and among them is the question of an exemption for labs. Two ways to exempt labs and other users of small quantities of hazardous chemicals are available, the analysis says. One is to establish an action level, usually a fraction of the permissible level of exposure to a chemical, which if never exceeded in a lab would exempt the lab from most provisions of the policy, such as continuous air monitoring. Another possibility is to set a "percentage exclusion" level, which would enable labs that handle small concentrations of hazardous chemicals in mixtures to escape the policy's requirements. Neither was "proposed as part of the cancer policy because the Agency believes they may not be appropriate in all cases of carcinogen regulation," the analysis says.

Both forms of exemption can be considered in the hearings on the separate categories into which each chemical must be placed, however (confirmed carcinogen, suspected carcinogen, and not a carcinogen), where there is an opportunity for public comment; OSHA's analysis indicates that the agency will in fact be amenable to such exemptions when warranted. "In many cases, imposing continuing measurement obligations where exposure levels are very low taxes the limit of reliable measurement and diverts resources from other efforts while providing little additional reduction in exposure," the agency acknowledges. Noting the comments received from laboratory researchers along these lines, the agency nevertheless concludes that "these issues are particularly suited for resolution in individual substance proceedings," raising doubts, of course, about whether OSHA has actually saved any work for itself by proceeding with the broad standard: each controversial issue laid over to the separate hearings on each chemical diminishes the usefulness of setting the broad policy.—R. JEFFREY SMITH