

News & Comment

AIDS Panels Converge on a Consensus

Coming from different directions, an academy committee and the chairman of the Presidential AIDS commission have made similar pleas for more leadership, money, and compassion

WITH THE RELEASE last week of two landmark reports on AIDS, a remarkable consensus appears to have emerged about what needs to be done to confront the epidemic. Both reports offer a critical assessment of the government's response toward AIDS, calling many federal efforts uneven, confusing, and sluggish. What makes the reports even more powerful is that they arise from two commissions that once seemed worlds apart.

The first is a standard-issue, blue-ribbon committee composed of scientific experts, including two Nobel Prize winners, and chaired by Theodore Cooper, head of the Upjohn Company. Organized by the National Academy of Sciences and the Institute of Medicine, the panel's task was to update the academy's benchmark 1986 report. Their work produced *Confronting AIDS: Update 1988*.

The second panel is a far different one. Handpicked by the White House to represent the views of "ordinary Americans," the Presidential Commission on the Human Immunodeficiency Virus (HIV) Epidemic includes members who appear to have been selected as much for their lack of knowledge about AIDS as their conservative bent. One year ago, the commission was being angrily savaged by gay activists, AIDS patients, and members of the public health community, who accused the panel of being unfairly stacked with homophobic, right-wing ideologues. Says retired Admiral James D. Watkins, who inherited leadership of the beleaguered panel after the first chairman resigned: "AIDS was an issue surrounded by semen, blood and ignorance. We were in the last category."

Yet 1 year later, the reports by the Academy of Sciences committee and by the chairman of the Presidential Commission agree on such key issues as discrimination, testing, confidentiality, and the importance of stemming the epidemic among intravenous drug abusers. Both push for increased health education, even for school-age children, to combat the lingering ignorance about AIDS, which results in more than a third of Americans thinking that mosquitoes can transmit HIV. Both reports support increased spending for a galaxy of AIDS-related research—everything from studies on how HIV

destroys the immune system to what makes people modify their sexual behavior. There is emphasis on vaccine and drug development. There are also requests for increased spending for new facilities both at government laboratories and for extramural institutions.

The reports stress that funding for all projects should be new money, not funds pinched from existing programs. The academy



Weathering the storm. Former critics call Watkins' draft report fair and compassionate.

my panel recommends spending \$1 billion on AIDS biomedical research and \$1 billion for prevention and education efforts by 1990. Watkins asks for even higher amounts.

In particular, the draft report by Watkins is being hailed by former critics. The National Gay & Lesbian Task Force, for example, applauds the commission's "fairness, vision and courage." Indeed, much of Watkins's 269-page report, which contains almost 600 specific recommendations, mirrors the academy report. Watkins released his draft report on 2 June. It will be debated by the full 13-member commission before the final report is sent to the White House later this month. Watkins believes that his report reflects the consensus of the commission and will be approved without being

watered down.

Both reports are particularly stern with the government. The academy report calls the federal response to AIDS "uneven" and states: "The nation has suffered from the absence of strong federal leadership." Watkins complains of a burdensome bureaucracy that approaches the epidemic as "business as usual." In the final chapter of his draft report, and the one that appears to be the most controversial among his fellow commission members, Watkins states: "The commission is deeply concerned about the federal government's slow response to the HIV epidemic and believes that it is incumbent upon the federal government and the Congress to establish a public health emergency response mechanism for the future." Watkins wants President Reagan "to immediately declare the HIV epidemic a public health emergency and direct the Surgeon General to implement the public health emergency response."

The two reports call for laws to prevent discrimination against persons with AIDS or those infected with HIV. The two papers contend that being infected with HIV, rather than suffering from AIDS itself, should be the criterion for care and compensation because AIDS is only the final stage in a long clinical course. According to the academy report, "Public health measures have been complicated by the fact that AIDS first occurred in already stigmatized groups . . . and the social response to the disease has been confounded by moralistic assignments of blame." Watkins states: "As a witness at the commission's hearing on discrimination explained, individuals infected with HIV face two fights: the fight against the virus and the fight against discrimination." In the past, the Reagan Administration has opposed applying federal antidiscrimination protection to individuals infected with HIV. Secretary of Health and Human Services Otis R. Bowen said the Administration thought the issue should be addressed by the states.

In general, both reports stress the importance of voluntary testing and strict confidentiality of results. The academy recommends "expanded voluntary testing for all whose behavior may have put them at risk

of exposure," with mandatory testing only for donors of blood, tissue, and organs. Watkins agrees, but goes further in his recommendation that sexual offenders "submit to an HIV test at the earliest possible juncture in the criminal justice system," a move that the American Civil Liberties Union, for example, opposes.

Another politically loaded question about testing is who should be notified of the results. To more accurately measure the prevalence of HIV infection, Watkins believes that the Centers for Disease Control (CDC), the federal agency that tracks the epidemic, should be informed of all HIV antibody test results, though identifiers should be removed. However, the academy committee fears that mandatory reporting might discourage some individuals from being tested, and as such, should not be required.

What about sexual partners of infected persons? The academy panel believes that voluntary sexual contact notification can play a useful role. Watkins would like to see partner notification programs target those who would not know they were at risk of HIV infection. As an example, Watkins says that an unknowing wife of a bisexual infected

with HIV should be informed by the government if the husband refuses to tell her of his infection. In a similar vein, Watkins wants to make it a crime to "knowingly engage in behaviors which are likely to result in HIV transmission."

In its interim report issued in February, the Presidential Commission proposed spending about \$1.5 billion a year for 10 years to stem the AIDS epidemic among the country's estimated 1.1 million intravenous drug users, offering "treatment on demand" at 2500 new facilities (*Science*, 4 March, p. 1087). The academy committee agrees, and reports that "the gross inadequacy of federal efforts to reduce HIV transmission among IV drug abusers . . . is now the most serious deficiency in current efforts to control HIV infection in the United States."

Finally, the academy report suggests that a standing AIDS advisory committee be established to make recommendations to the government and monitor the nation's response to the epidemic. The panel concludes: "HIV infection is a rapidly moving target; a sustained, well-guided effort is needed if we are to remain attentive to its course and thwart its effects."

■ WILLIAM BOOTH

Pentagon Boosts a Small Rocket

Two aerospace firms officially announced on 3 June that they are jointly developing a new commercial launch vehicle: the Pegasus, a booster that will be carried aloft and launched from a conventional aircraft in much the same manner as the old X-15 rocket plane, which it closely resembles.

The partners—the Orbital Sciences Corporation of Fairfax, Virginia, which was formed 6 years ago to develop booster rock-

ets for space shuttle payloads, and the Hercules Aerospace Company of Wilmington, Delaware, which has been making solid-fueled missile stages for more than 30 years—also announced on 3 June that their first customer will be the Defense Advanced Research Projects Agency, which has selected the Pegasus to launch a series of small experimental satellites starting in the summer of 1989. For those first flights the

rocket will be launched from the same modified B-52 that the National Aeronautics and Space Administration (NASA) used for the X-15 program; for later flights the partners plan to procure and modify a commercial airliner.

According to Orbital Sciences and Hercules spokesmen, the three-stage, solid-fuel booster will have a payload capacity of about 150 to 500 kilograms, depending upon the orbit, or about twice the capacity of an identical rocket launched from the ground. Its cost of roughly \$6 million will accordingly be about half that of a ground launch.

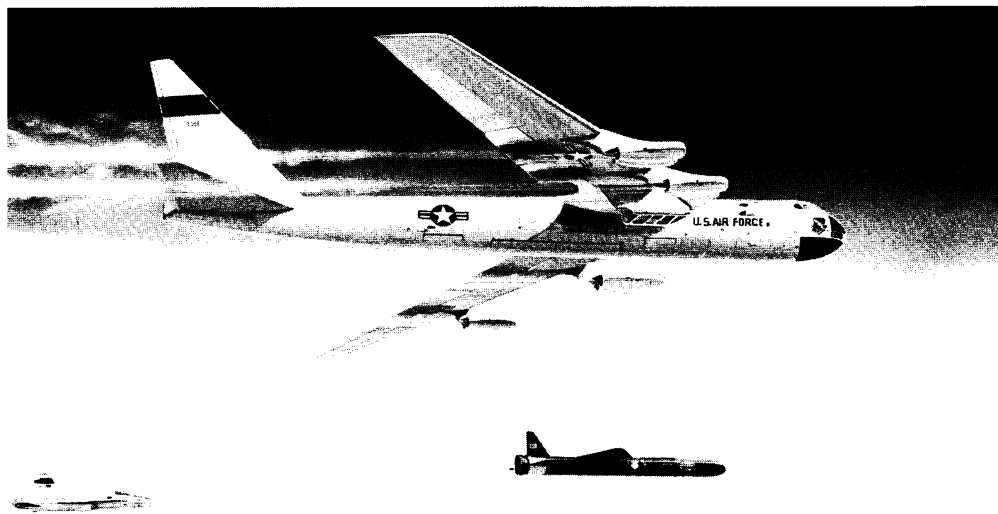
At those prices, Orbital Sciences president David Thompson told *Science*, one can envision research teams launching small scientific satellites far more frequently than they do now—within the time frame for a typical Ph.D., for example—and for only a fraction of the current cost. The possibilities include astronomical instruments put up at short notice to monitor transient phenomena such as the recent supernova, and compact materials processing packages that can be brought back into the atmosphere and retrieved.

In fact, says Thompson, Pegasus can even launch payloads of up to 70 kilograms on trajectories to comets, asteroids, and the moon. The company has had some preliminary discussions with NASA about using the Pegasus for such missions.

More generally, the partners see a potential market for about 12 government payloads per year in Pegasus' weight range, mostly for NASA and Defense Department research, and a somewhat hazier market for roughly another dozen commercial and international payloads, mostly communications, remote sensing, and materials processing.

To keep the costs low and the performance high, the Pegasus will be fabricated almost entirely out of a high-strength carbon composite material, and will be built at Hercules' new automated rocket plant near Salt Lake City. More savings come from the fact that the Pegasus will be launched from an aircraft flying at an altitude of 12 kilometers instead of from the ground. For example, aerodynamic drag is minimized because the vehicle is already above 75% of the atmosphere when it starts, and the need to fight against gravity is minimized because a stubby wing on the first stage generates lift. In addition, the carrier aircraft can take off from any convenient airport, fly out over the ocean where no one will be endangered and fire the Pegasus into any desired orbital inclination. The result is a substantial reduction in the constraints that help make a ground launch so expensive.

■ M. MITCHELL WALDROP



Orbital Sciences Corporation/Hercules Aerospace Company

Pegasus at launch. An artist's conception of the booster's maiden flight next year.