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network is built around Honeywell 6000 series computers, first manufactured in May 1964 by General Electric and now two generations behind up-to-date computer technology. These computers process information in what is called "batch" or "sequence" modes. They work just one step at a time, relying on patterns of intricate, preprogrammed steps. Colonel Perry Nuhn, the Pentagon's director for information systems and command, control, and communications, put it this way. "Say the PLO hijacks a plane and lands it somewhere in a desert. If I've got to provide help, I need to know where the nearest airfields are, how much fuel they have on hand, how long their runways are, and dozens of other support questions. Wimex computers can't answer questions that are this specific. They may have to dump out information about a whole set of nearby countries and all their airfields. And you've got to go through the doggone things by hand."

More modern computers, in contrast, can perform many steps simultaneously, nimbly taking instructions only from the relevant parts of a program. This also allows a computer, even while being questioned, to incorporate other information, such as data from a satellite. The GAO insists that the Pentagon back in 1971 had the opportunity to buy such "real time" equipment but decided not to. "The need for real time processing . . . was known to DOD before the Honeywell computers were purchased, and other computers available at the time could have provided that capability."

The Pentagon both admits and denies the "batch processing" problem, depending on the source. All officials, however, defend the Honeywell 6000's on economic grounds. The bulk purchase of 35 of these computers was made for 35 percent less than the General Services Administration schedule price. Skeptics at the GAO see this low bid as a "buy in" or the intentional selling of computers below cost so that the real money can be made when additions to the system are made. Indeed, extensive additions running into hundreds of millions of dollars have been made in an effort to make the Wimex system operate in an interactive mode, and much of the equipment and software has been purchased from Honeywell. Some military commands, such as the Strategic Air Command, have gone to the extra expense of installing real time computers in their efforts to "work around" the problems of the Wimex system.

Batch processing is not the only problem that plagues the Wimex system. Another is that it is operating at near capacity. "They really have no wartime or crisis surge capacity left to send the right planes to the right places and load the right stuff," says E. L. Dreeman of the Stanford Research Institute, who

Sakharov Protests Mount

Fears that Andrei Sakharov may be expelled from the Soviet Academy of Sciences at its meeting on 4 March have prompted an outpouring of protest from Western scientists that is unprecedented in its scope and intensity.

A poll taken of members of the National Academy of Sciences shows that three-quarters of those responding intend to opt out of any official scientific exchange with the Soviet Union until such time as Sakharov is released from his internal exile in Gorki.

Many Academy members favor even stronger action. Half of the 262 respondents say they "would approve of a general cut-off in federally funded scientific exchange" until Sakharov is released. The poll of the 1280-member Academy was conducted by the Federation of American Scientists.

The Council of the Academy informed its Soviet counterpart by cable on 24 February that all bilateral symposia arranged by the two academies would be suspended for the next 6 months because of the Soviet government's actions against Sakharov. Sakharov is a foreign associate of the National Academy of Sciences.

Russian scientists heard the treatment of Sakharov criticized at the scientific forum held in Hamburg, West Germany, from 18 February to 2 March. Not only did NAS president Philip Handler warn that scientific interchanges with the Soviets might "soon dissolve in bitterness and anger," but a similar message was delivered by Alexander Todd, president of the British Royal Society. Without a change in the Soviet Union's behavior toward Sakharov and other scientists, Todd said, he saw "little future for true cooperation between us."

The outcome of the 4 March meeting of the Soviet Academy of Sciences could be of widespread significance. Some observers of the Soviet scene consider that if Sakharov is expelled from the Academy, he is likely to be put on trial, and that his trial could be followed by a wave of repression perhaps similar to that of the Stalinist era.

For Sakharov to be expelled, however, required a two-thirds majority of the Soviet Academy's 250 full members. Moreover, in a democratic vestige rooted in the Academy's charter, drawn up by Lenin himself, the balloting is secret. "The expulsion of Sakharov from the Soviet Academy would represent a politicization of the Academy which Lenin himself had sought to prevent," the Federation of American Scientists observed in appealing to Soviet scientists to resist pressure to vote for expulsion.

At a press conference held by the Federation in Washington, D.C., Sakharov's stepdaughter Tanya Yankelevich noted rumors that A. P. Aleksandrov, president of the Soviet Academy, and Nicolai Basov, a Nobel prize-winner, might be unable to attend the 4 March meeting because of illness. The Soviet authorities, she suggested, might wish these two scientists to keep their hands clean so as not to be ostracized by Western scientists on their frequent visits abroad.

Sakharov's wife, Yelena Bonner, asked members of the Academy for their support at a meeting with reporters in Moscow on 9 February. In a statement addressed to "our Soviet scientists," she noted how much conditions for scientists had improved since the Stalin era: "You are keeping silent out of fear of losing all that. But by keeping silent, you can lose even more. By your silence, you can help bring the country and yourselves back to those times, which were as terrible as a nightmare. Everyone knows that there is not a family in the land that was not touched by it, and many remember the footsteps on the stairs at night and the hushed question, 'Have they come for me or my neighbor?'

"Don't worry, they haven't come for you, not yet. For the present they have come for Sakharov and for those who do not keep silent."—N.W.

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