## Science and Technology Need Careful Watching

A Congressional Subcommittee charges that science and technology are amoral, and that their side effects could become serious national difficulties

➤ A FEDERAL "early warning" system to spot the "dangerous side effects" of technology before they become "serious national difficulties" was proposed by a Congressional Subcommittee.

"Science and technology are amoral," it was charged in a report by the House Subcommittee on Science, Research and Development. Without proper scrutiny, "we may strangle in the coils of an unplanned, unwanted, but unstoppable technocracy."

Two scrutinizers were recommended by the subcommittee: a Technology Assessment Board, called TAB, to watch out for the "undesirable byproducts" of progress, and a combined House committee to coordinate the often conflicting or overlapping work of the countless government and industrial agencies concerned with technological problems.

These problems are considerable, said the Subcommittee in no uncertain terms. The report cited more than a dozen areas including:

- 1. Conservation. Man's misuse of natural resources "may be the most serious blight affecting contemporary civilization—not excluding the possibility of widespread war."
- 2. New Sources of Energy. They must be found, to replace the "traditional fossil fuel" being rapidly used up. "No feasible alternative appears to be in sight."
- 3. Cybernetics. Another must, and "an area, incidentally, in which the Soviets have been reported to be well in advance."
- 4. Information Management. A revolution is already underway, the report said, yet the subject seems "little understood by most of today's policymakers."
- 5. Increased Industrial Research and Development. Though they spend from \$4 billion to \$6 billion a year on R&D, U.S. industries comprise only "something like one-fourth" of the total American financial effort. The Federal Government, the Subcommittee indicated, may not always be able to support its present lion's share of the burden.
- 6. Transportation. On highway, airway and railway the U.S. stands in danger of becoming "bogged down in

a hopeless morass of log-jammed machinery and obsolete thoroughfares."

- 7. Urban Congestion. "Humans are not geared to the life of the ant or the bee," said the report. "When they are forced into it . . . dangerous social pressures build up which threaten the very existence of the stable family unit on which society now rests."
- 8. Education. Thanks to school and university bureaucracies, "no wonder it has become commonplace for students to say, 'We feel like IBM cards.'"

In addition, the Subcommittee singled out housing, food production, crime ("a hydraheaded monster") and national health (particularly mental health and geriatrics).

Even the greatest technological advances in recent years have brought their share of "bugs."

With automation has come unemployment, as well as a geographic shuffling that has meant the virtual disappearance of rural life.

All sorts of good things—cars, garbage grinders, insect sprays, detergents—have added to the spread of pollution. There have been major advances in the peaceful uses of atomic energy, the report said, yet "there has been little progress in devising a way to rid ourselves of the toxic by-products."

Super-ultra-microminiature electronics have aided in every field from medicine to space, but they have also brought "an all-pervasive access into the individual's private domain."

Radio and television have involved the public with politics as never before, the Subcommittee pointed out. "Still, one must be wary of the day when a magnetic public personality, provided with sufficient funds to place his image electronically before the populace as often as the psychologically programmed computers dictate, will automatically be guaranteed the election."

"We hope we have overdrawn the picture," the report concluded, "but are not certain that such is the case."



California Department of Water Resource

POLLUTION MENACE—This is a grim sight of dead fish on the bank of a California lake. The fish perished because vegetation in the lake rotted, using up dissolved oxygen.

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