

• FRANCE CREATES NATURE MINISTRY: A new ministry for the "protection of nature and the environment" has emerged from the first reshuffling of the French Cabinet since Premier Georges Pompidou took over in June 1969. The ministry, according to French diplomatic sources, will combine functions performed in the United States by the Environmental Protection Agency and the President's Council on Environmental Quality, and will generally oversee the country's physical development. The new minister is Robert Poujade, a young Gaullist politician who became secretary general of the ruling party, UDR, in 1967. The secretary general of the ministry is Serge Antoine, who headed the High Committee on the Environment that was charged with formulating a national environmental policy. The first business of the new ministry will be to implement the 100 measures recommended by the committee. The ministry's budget for fiscal year 1972 will be 100 million francs (\$25 million).

• ENVIRONMENTAL STATE-

MENTS: The President's Council on Environmental Quality (CEQ) has announced that it will require federal agencies to publicly disclose environmental impact statements 90 days before the decisions which they affect are made, and 15 days before any public hearings. The impact statements, required by the Environmental Quality Act of 1969, must be prepared on any planned legislation or administrative actions which significantly affect the environment. The law says the statements must be made public, but citizens' groups have complained that they are released too late for the public to exert any influence on the final decision. The new CEQ guidelines were issued following congressional hearings and are expected to take effect after a 45-day comment period.

• LABOR SAYS WHOA TO ENGI-NEERS: All fields of engineering have been dropped from the Department of Labor's list of occupations for which preference is given in immigration. Since no national manpower shortage exists, would-be engineering immigrants must now show proof that they have a job in the United States before being granted a visa.

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tice R&D. In fact, Clarence Coster, associate administrator of LEAA, told Science that the Institute had been besieged by aerospace firms wanting to use their unemployed systems development talents, but that proposals from these firms tended to be too grandiose and expensive for law enforcement systems. The Institute does seem to favor small grants and contracts, which are typically less than \$200,000. Nonetheless, private firms are the largest performers of R&D for the Institute. Hughes Aircraft, for example, is studying police procedures for control of crowds and demonstrations. Universities are also undertaking a large share of the work, such as the study of prevention and control of burglary being done by the University of California at Davis. Local and state governments, particularly state police forces, and federal laboratories like the National Bureau of Standards are also involved. The Institute is also supporting about 50 graduate students with fellowships for research in criminal justice.

Post Office Budget Rising

The tradition-oriented "rain or shine" image of the Post Office is changing slowly to that of a modern and mechanized, gadget-happy organization as part of creating an engineering competence in an agency which previously had none. Post Office R&D spending has more than tripled in the last 2 years to reach \$60 million, and Harold Faught, Assistant Postmaster General for Research and Engineering, believes that it will continue to climb for a while. What ultimately will be established as a "sensible level of effort" Faught does not know, but he points out that 2 percent of the total budget of over \$8 billion (a percentage used elsewhere in the government to justify R&D budgets) would entail almost another tripling of R&D spending.

The keynote of the Post Office R&D effort is systems development rather than research, with the main emphasis on programs to give the Post Office some immediate help in its struggle with 82 billion pieces of mail per year. Priority projects in what the Post Office calls a "cautious crash program" include the design of heavy-equipment handling machines, separate facilities for bulk mail, and the development of a code sort system for letter mail. When fully operational, the code sort system will use sophisticated optical character readers to code letters with house number, street name, and zip

code in a way that could be read by simple and inexpensive sorting machines operating under computer control, thus allowing complete mechanization of mail handling. Going into operation now in more than 18 central post offices is a zip-mail translator system which uses computer-assisted sorting machines. Other major projects include industrial engineering work to design more efficient operating procedures and work on improved retailing services such as vending machines for Post Office lobbies. With regard to the far future, the Post Office is looking into the possibilities of electronic mail, a start toward which is the current Telex mailgram program.

About 85 percent of the Post Office R&D work is contracted out. There has been a wide range of industrial involvement in Post Office programs, including defense contractors such as the Institute for Defense Analyses and the Mitre Corporation. General Dynamics, for example, did a survey of the current state of the art in electronic mail devices. The Post Office is supporting some university work on basic problems, such as pattern recognition for optical character readers, and is also making use of the National Bureau of Standards. In-house industrial engineering staff is being increased, and the Post Office recently moved into its new laboratory in Rockville, Maryland, which will be used for machine testing, advanced development of fluidics devices, and work on closed circuit TV systems. Overall, Post Office programs show an increased use of computers, such as the XDS Sigma II being used in a mail-sorting experiment in Cincinnati, and of electronics in general.

Expanded R&D programs in civilian agencies have also brought in a new breed of technical men. In three out of the four agencies-DOT, HUD, and the Post Office-the top research administrators themselves represent a conversion of manpower from aerospace and defense R&D to domestic technical problems. Cannon in DOT was formerly director of Stanford University's Guidance and Control Laboratory. Before that he had been chief scientist for the Air Force and had worked in the aerospace industry. Faught came to the Post Office from Westinghouse's Astronuclear Laboratory, where he had spent 21 years, and where as general manager he guided that firm's work on nuclear powered space systems. Harold Finger, Assist-

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