in disputes between environmentalists and polluting industries—as many believe it does—environmentalists are typically overwhelmed by the economic and political firepower of their adversaries. The point is illustrated by the current controversy over the registration of ferriamicide, a pesticide proposed for use on fire ants in nine southern states. The agency has been pressured by congressmen from those states into approving the use of ferriamicide, despite the objections of much of the EPA staff as well as outside environmentalists.

Attempts at eradicating fire ants have been clouded with misfortune for those who live on or near the 190 million acres they infest.‡ The pesticides used against the ants have been DDT, aldrin/dieldrin, heptachlor/chlordane, and Mirex, each one banned in turn as a suspect carcinogen by the EPA. Mirex, the last, was banned in 1976 after a long battle between environmentalists and the southern states, particularly Mississippi, where most of the ants are encamped.

Less than 2 months after Mirex was

‡A curious fact surrounding the fire ants controversy is that the number of acres they infest has been increasing every year, despite consistent applications of various pesticides including Mirex. Expertly using reverse logic, the D.C. District Court recently concluded that "this fact must be deemed irrelevant in the absence of a clear indication as to the extent of the infestation which would have resulted had there been no Mirex."

banned, Mississippi officials asked EPA for emergency permission to fight the ants with ferriamicide. Ferriamicide is a mixture of Mirex, an amine, and ferrous chloride. In practical application, it is three-fourths Mirex, but in the new formulation it is thought to photodegrade more rapidly. EPA received more than 20,000 letters supporting Mississippi's application to use ferriamicide, including 14 from U.S. senators, 47 from representatives, and three from governors.

At the same time the application was pending, amendments to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)—EPA's basic pesticide authority—were pending in a House-Sen-

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Do Trains Still Run on Time Because of Mussolini?

Totalitarian government is not to be recommended, Mancur Olson says, but it has done wonders for the countries that have experienced it in the 20th century. Olson, an economist at the University of Maryland, won grants from the National Science Foundation (NSF), the National Bureau of Economic Research, and three foreign governments (Germany, Japan, and France) to present his theory at an international conference in Washington, D.C., on 8 December. The audience included a number of distinquished economists, among them Nobelist Sir John Hicks of Oxford, Karl Christian von Weizsacker of the University of Bonn, Raganar Bentzel of the University of Uppsala, R. C. O. Matthews of Cambridge, and about 40 others.

Olson began work on this project in 1975 when he was looking into the reasons why the noncommunist nations have widely differing rates of economic productivity. Rather than examine the incentives to growth, which preoccupy most analysts, he decided to focus on the obstacles. In particular, he wanted to find out why the United States and Britaintwo countries with a long record of political freedom and stability, friendly settings for capitalist enterprise - have not grown as fast as the former Axis nations, Germany, Japan, and Italy. The United States and Britain are now near the bottom of the heap when nations are ranked by productivity.

One cannot attribute the difference to

the personal industriousness of the natives, Olson decided, or to the idea that the Axis countries had their dilapidated factories destroyed by war. He concluded that more attention should be given to the role of narrow-based interest groups in slowing innovation and growth. He argued that the broadness or narrowness of a nation's labor unions and trade associations is what distinguishes one economy from another.

The working hypothesis, he wrote, is that "highly encompassing organizations will prefer policies which are less restrictive of growth than common-interest organizations or collusions that control only a negligible proportion of the resources in a society." Japan and Germany are growing rapidly, he argued, because their totalitarian rulers wiped out the narrow-based economic groups and these have now been replaced by broad-based groups. The latter tend to weigh national economic interests along with parochial group interests when making demands on the government. Thus, "countries which have had democratic freedom of organization without upheaval or invasion the longest will suffer the most from growth-repressing organizations and combinations." As they age, countries with stable economies begin to suffer what Olson calls "institutional sclerosis." a disease that has been cured most effectively in this century by the kind of surgery that totalitarian government performs.

Olson's paper is controversial, needless to say. His office already has received 1000 requests for reprints, and economists around the world are sharpening their pencils for the counterattack. Participants in the Washington confer-

ence had many criticisms, a common one being that the thesis itself was too narrow. Nevertheless, it will be an important subject of debate. With the help of the NSF and interested foreign governments, Olson is preparing to gather data from around the world to buttress his thesis with more concrete evidence.

The New Wave in Testing: Computer to Measure IQ

Bureaucrats are not thought to be great innovators, yet the latest development in IQ or ability testing comes from the federal government. Richard McKillip, director of the U.S. Civil Service Commission's (CSC) office of personnel research, recently described a technique developed by his staff which he believes is in the forefront of psychometry. (McKillip gave a general report on his office's work during a public meeting on the use of standardized tests in the United States, held at the National Academy of Sciences on 17 and 18 November. The NAS has asked a committee chaired by Yale psychologist Wendell Garner to examine the fairness and accuracy of testing procedures used in education and business.)

The new technique, called tailored testing, uses microcomputers to accomplish in a fraction of the time, and with possibly greater accuracy, what paper and pencil tests are designed to do. In McKillip's vision of the future, a candidate applying to the CSC will sit at the television screen of a microcomputer and, in

ate conference committee. Sitting on the committee were seven (of 24) congressmen from the nine states seeking permission to use ferriamicide. Because EPA earnestly desired most of the FIF-RA amendments in order to revamp its ailing pesticide program, agency officials needed to avoid alienating the conference committee members. As a result, agency staffers struggled to find a way to approve the petition: an aide to Steven Jellinek wrote his boss that he "found the argument for the existence of an emergency (on ferriamicide) a bit thin but am at a loss at how to make it stronger."

On 8 March, while the conference

committee was still empaneled, EPA administrator Costle granted the ferriamicide petition, despite the opposition of EPA's pesticide branches of fish and wildlife, chemistry, and toxicology. The agency acknowledged that no data were available on ferriamicide's rate of photodegradation, toxicity to humans, expected residues in food, bioaccumulation, biomagnification, and toxicity to mammals—in short, every critical issue but that of political pressure. In a note to Jellinek about a strategy for disclosing the approval, EPA deputy administrator Barbara Blum wrote, "If it's a political decision, we want to make the most of it." EDF, which had lobbied against the approval of ferriamicide, subsequently sued EPA to reverse the decision. Although EDF lost all but a technical issue of proper notice and hearing in a federal district court, the group intends to appeal to a higher court, and thinks it may win. "It was like a hydra," says Butler. "We lopped off Mirex and it came back as ferriamicide."

The incident is not, of course, the only time EPA policy has been affected by congressional pressure. EPA delayed for 5 years its guidelines for controlling chemical spills—which occur more than 700 times each year—under the Federal Water Pollution Control Act because it feared alienating members of Congress.

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taking a 30-minute quiz, earn a mental ability score just as valid as the one he would earn today by taking a 4½-hour written exam. In trial runs, the computer was able to measure an examinee's verbal ability with great accuracy after asking an average of only eight questions. According to the CSC, 90 percent of the people who were given the test as an experiment liked it better than the regular Civil Service exam.

One of the test's creators, CSC researcher Vern Urry, said he was not surprised that most people thought the test was about right because it is designed to give them that feeling. The beauty of the tailored test, Urry said, is its efficiency. It eliminates questions that are too hard or too easy and asks only those that seem to be in the applicant's range of ability. It works as follows. Although there are as many questions on file in a computerized test as on a regular exam, the questions are kept in banks rated according to difficulty. When the examinee begins the test, he is first asked a question of median difficulty. If he answers correctly, the computer immediately moves on to a higher bank. If he makes a mistake, the computer drops to an easier level. The machine quickly zeroes in on what it considers to be the applicant's true ability and keeps asking questions until it has confirmed its judgment, and then gives a

The government is far ahead of private industry in this technology, and the test's inventors are eager to put it to use. Urry and McKillip would like to begin using microcomputer testing for the Civil Service by 1980, but they believe they may be prevented from doing so by budget trimmers. Urry said that the tailored test, de-

spite a large initial cost, is in fact cheaper than the system now in use. He calculated that if the Civil Service PACE exam were converted to a computerized system, the changeover would cost \$1.3 million at first, but would pay for itself in 3 years from savings gained in the printing, distribution, and scoring of tests. From then on, Urry said, it would reduce actual costs.

Califano Takes the Pledge, to Cut HEW Costs \$1 Billion

One of the masters of political alchemy in the Carter Administration, Joseph Califano, Secretary of Health, Education, and Welfare, displayed his skill again in December when he transformed the leaden subject of HEW bookkeeping into the pure gold of publicity. Califano's "national conference on fraud, abuse, and error," staged on 13 and 14 December in Washington, D.C., was packed to the walls with more than 1200 federal and local officials who came to learn how the Secretary intends to trim his budget in the coming years.

President Carter came to deliver the keynote speech and take credit for winning several victories in the "war on waste and fraud in government," a cause that is close to his heart. Many reporters and photographers were on hand to record the claims and promises, including Carter's boast that the inspector general of HEW, Thomas Morris, has saved taxpayers \$500 million since he began work in 1977. The President said he planned

to ask every federal agency to follow this example.

Califano likes to say that his agency's budget (about \$181 billion in fiscal 1979) ranks beneath only two others in size—those of the U.S. government and the Soviet Union. Because HEW is enormous, even its sneezes cost millions. In the season of the tax revolt, Califano has turned this liability into an asset by giving his own department a public flogging. He promised, for example, that he would slash at waste and fraud so vigorously that HEW expenses for fiscal year 1979 would be reduced by \$1 billion.

Where will the slashing be done? According to a paper published by HEW's inspector general, most of it will take place in the area of health care financing, a category of federal spending that is scheduled to be reduced by \$530 million in 1979. Welfare and other forms of income maintenance will yield a predicted saving of \$189 million next year; education funding, \$306 million; and "other," \$52 million. Health care heads the list for future years as well. The inspector general claims to have identified \$1.9 billion in unnecessary health expenditures that could be eliminated "under current laws and with the current staff resources" allowed by Congress. Most of the cost reductions will come about, it is said, through computerized surveillance of medical aid and income support pay-

According to HEW spokesman Robert Wilson, the conference itself was a bargain for the taxpayer. Participants had to pay their own travel expenses and an admission fee of \$60. The whole exercise cost \$15,000—cheap.

Eliot Marshall.