Another indication of the Science Advisory Council's potential power is the role it has played in Denmark's deliberations over participation in the construction of the 300-Gev accelerator planned by the European Organization for Nuclear Research (CERN). The Council's advice was simply that, given Denmark's limited resources for scientific activities, many things merit greater priority than international highenergy physics. The government is yet to announce a decision.

Denmark's science policy planners, like their counterparts in other nations, live with the generally justified feeling that the politicians upon whom they depend have little understanding of the difficulties involved in the care and feeding of research, and not much more understanding of the problems involved in applying science and technology to national problems. Traditionally, the response to this plight has been the preparation of a comprehensive study and recommendations, and such are now about to emerge, along with the study of statistics on research and development. What will be recommended is a closely guarded matter, pending delivery of the report to the proper government authorities. But it is plain that the science policy planners look with envy on the organizational arrangements for scientific and technical management at the government level that exist in other countries. In particular, they note that, in one way or another, most advanced countries today accord science, technology, and related educational activity a good deal more visibility and authority in the upper echelons of government than is the case in Denmark. For example, West Germany has a Ministry of Science; Britain, a Ministry of Technology as well as a Department of Education and Science; and France, a newly amalgamated Ministry of Industrial and Scientific Development.

Whatever is recommended will no doubt be reinforced by still another

Criminal Justice R&D: New Agency Stresses Police over Corrections

To judge from public opinion polls, campaign rhetoric, and news coverage, the American people increasingly worry about "crime in the streets." But thoughtful efforts to deal with crime are hampered by the absence of a body of scientifically established knowledge about criminals and the criminal justice system in the United States.

The history of R & D in police work, criminal judicial proceedings, and corrections has been, until very recently, one of neglect. Two years ago the President's Commission on Law Enforcement and Administration of Justice reported that "a small fraction of one per cent of the criminal justice system's total budget [of over \$4 billion] is spent on research." The Defense Department, the report continued, spends 15 percent of its more than \$75 billion budget on research.

Not only were federal R & D funds for criminal justice meager, but local and state governments, which spend most of the \$4 billion expended for criminal justice, devoted even less money to research. And private industry's only contribution has been a limited technological interest in police hardware.

Even if there had been research money available, there was no sizable research community in which to spend it, and little likelihood that the results of the research would have worked their way into the decentralized, uncoordinated criminal justice facilities of the nation. The criminal justice system is actually three systems—police, courts, and corrections—operating with virtual autonomy at state, city, and county levels.

Before the 1960's there was no federal department which felt responsible for this maze of local institutions. The Justice Department saw itself primarily as the government's lawyer. In fact, the U.S. Government was merely one of the many criminal justice systems in the study that is to be made. This one will be conducted next year by the Organization for Economic Cooperation and Development (OECD), which so far has conducted nine national surveys of science policy making. Carried out by scientists and administrators from outside the country under study, the surveys have sometimes proved to be particularly valuable for research administrators trying to pound what they consider to be sense into the politicians with whom final authority rests. The studies have generally been quite thorough and, since they are conducted by outsiders, exempt from suspicions of self-serving motives. Interestingly, one of the inspirations for the studies the Danes themselves are conducting and for their request that the OECD study be made was the embarrassment they felt when they attended OECD meetings and found themselves lacking even fairly rudimentary information about science policy matters in their own country.—D. S. GREENBERG

country, with law enforcement agencies (including the FBI), a court system, and prisons operated by the Federal Bureau of Prisons in the Justice Department. These federal organizations had jurisdiction only in federal cases. Only the loosest of ties existed between federal and local criminal justice systems, primarily through the FBI.

Robert F. Kennedy is generally credited with having been the man who shifted the emphasis in the Justice Department, making it feel responsible for what happened to all Americans involved in criminal proceedings, even on the local level. Just before he left the post of Attorney General in 1964 to run for the Senate, he set up the Office of Criminal Justice (OCJ), which later engineered the bail reform act of 1965. Early in 1965 President Johnson established the Crime Commission, with the new attorney general, Nicholas Katzenbach, as chairman and James Vorenberg of Harvard, the head of OCJ, as executive director. In its report of 1967, "The Challenge of Crime in a Free Society," the commission clearly delineated the position that had begun to evolve under Kennedy: the federal government must encourage change in local criminal justice agencies and must sponsor research in this field.

The extent to which police, courts,

and corrections institutions are related seems obvious enough, but this interrelationship was not stated clearly until the 1967 report. To learn more about this extremely inefficient system of criminal justice, the commission recommended the establishment of a federal research organization—independently funded, like the National Science Foundation.

This ambitious suggestion was not implemented. But, after complex political machinations, Congress did embody another commission recommendation for R & D work in the so-called "Safe Streets Act" of 1968. The act created the Law Enforcement Assistance Administration (LEAA), a Justice Department agency which funds innovative projects by state and local criminal justice agencies. The LEAA was given an R & D arm, the National Institute of Law Enforcement and Criminal Justice, responsible for doling out research funds.

Nixon Men Take Over

The institute was less than a year old at the time Richard Nixon became President, and last spring it was turned over to two Nixon appointees—both of them staff men for the Crime Commission. Charles H. Rogovin, LEAA director, worked on organized crime for the commission, and Henry S. Ruth, Jr., director of the institute, had been deputy director of the commission under Vorenberg.

New leadership does not seem to have changed the basic emphasis of the institute's research-police work. The fiscal 1969 institute budget of \$2.9 million devoted more money to research on police work than to courts and corrections combined. In their \$17.9 million budget request for fiscal 1970-cut sharply in the House appropriations committee and now awaiting Senate action after a plea from Attorney General Mitchell-the institute retains the police-work emphasis. The proposed budget calls for \$9 million-more than half the institute's total-for Detection and Apprehension Development, which consists largely of developing better police hardware and techniques, better alarms, and better crimeproofing of cities.

Research projects from last year's budget which fit into this category include the development of a new, lighterweight, portable transceiver for the beat-walking policeman; a study of the police vehicle; a study of ways to improve the police beat system; studies of the crime laboratory, including identification of dried blood and neutronactivation analyses of evidence; and programs for training police to deal with family disturbances, which account for a surprisingly large proportion of their calls. Other projects being considered include the development of better locks and better alarm systems for buildings.

Institute officials freely admit and defend this emphasis on police studies. "The problems are better defined for police," explains Irving Slott, assistant director of the institute. "In other areas we can do little more than basic studies. In corrections, for example, you could line the room with books about the subject, but we still don't know what works."

Slott and LEAA director Rogovin both deny strongly that there is any pressure on them, from the Attorney General or anyone else, to respond to a particular political demand. Nonetheless, the institute is no ivory tower: its priorities are clearly affected by the growing public fear of "crime in the streets." "Stranger-to-stranger personal crime is crucial," says Slott. "This is what people are afraid of, even though two-thirds of all murders in the U.S. are committed by people known to their victims."

Marvin Wolfgang, director of the Center for Studies in Criminology and Criminal Law at the University of Pennsylvania, admits that "people's fears give considerable buttressing to the undertaking of work on street crimes. The best way to deal with this fear, short-term, is at the police level." Wolfgang offers an unusual justification for concentrating on police: the whole criminal justice system, or "non-system" as he calls it, is so poor that "putting money in preventive, deterrent efforts involving police may have a greater payoff, by keeping people from first entering the system by getting arrested." Improved police work, while it might seem to lead to more arrests, actually would mean fewer because it would deter criminals, he argues.

As Wolfgang and Slott both suggest, one of the reasons for emphasizing the role of the police in reducing crime is the almost total failure, in this country and elsewhere, to develop corrections institutions that do any correcting. An estimated 80 percent of all crime in the United States is committed by persons who have spent some time being "corrected" in a jail, prison, or juvenile detention facility. "What has been passed off as research on corrections in the past," says one official of the U.S. Bureau of Prisons, "was really just data collection." While some states, such as California, have pioneered in prison research and reform, the official continued, other states have made virtually no changes in their prison systems in modern times. The poor organization of the system is indicated by the distribution of personnel and funds: ninetenths of all corrections personnel and four-fifths of all corrections money are in prisons and jails, according to the Crime Commission report, even though two-thirds of all people being corrected are out on parole or probation.

Rehabilitation Research Minor

The institute's response to this corrections crisis is minor by comparison with its police-work research. The proposed budget for fiscal 1970 devotes only \$900,000 to rehabilitation—\$500,-000 for adult offenders and \$400,000 for juveniles; this is only one-tenth of its proposed expenditures on police work, for detection and apprehension of criminals.

The area of the courts has also received relatively little attention; this, Rogovin says, is due "in part to the feeling of the judiciary that it must remain isolated from the rest of the system. But now," he adds, "there is a growing interest on the part of the judiciary to be involved in all aspects of criminal justice."

Both the institute and LEAA focus on unorganized crime, colloquially known as "crime in the streets." Their research effort on organized crime is, for the time being, minimal: the proposed 1970 budget calls for \$200,000 to study organized crime and ways to control it. Even this small plunge into organized crime, however, seems to be causing some hard feelings toward LEAA on the part of another wing of the Justice Department, the FBI. On two occasions the FBI has turned down offers to be represented in LEAA projects dealing with organized crimeonce in the formation of an advisory council and once in the convening of a conference. Each time the FBI mentioned, in a letter to LEAA, that its manpower was all tied up and that it had "extensive programs" of its own in organized crime. An LEAA spokesman said, however, that the FBI has cooperated with LEAA in a council on matters outside the realm of organized crime.

In addition to setting priorities, the institute and LEAA face all the other problems of creating a new research establishment, plus a few problems which are peculiar to the local agencies with which the federal officials have to work. One question, of course, is that of how funds should be distributed, and to whom. In their manner of distribution, LEAA's Office of Law Enforcement Programs and the institute differ sharply. When LEAA was created, there was a bitter fight in Congress about whether it should dispense its money through block grants to the states or (as big-city personnel preferred) give it out at the discretion of LEAA, presumably where it was most needed-in the big cities. A compromise was reached: 85 percent of LEAA's project grants are block grants to states, and 15 percent are discretionary. Rogovin admits that urban criminal justice people are dissatisfied with discretionary funding of only 15 percent, "but they seem prepared to work with that figure." He adds that the states, on the average, are giving 25 to 40 percent of their block funds to local governments for their use, "so it's being done in a spirit of fair play."

Institute Budget \$2.9 Million

The institute has a much smaller budget than the Office of Law Enforcement Programs---\$2.9 million, as compared with \$48 million for action and planning grants in fiscal 1969-but the institute dispenses this smaller amount entirely through discretionary funding. Recognizing the newness of the research field, it devoted part of its limited first-year resources to encouraging new people into the field. In a project known as Exercise Acorn it gave out "starter" grants of up to \$5000 to 50 of 500 applicants, including several in universities which will work directly with criminal justice agencies.

Getting university researchers and local criminal justice agencies, especially police, to work together is one of the institute's major problems. Such cooperation was notably lacking in the smattering of university research done before the institute was created. It is a two-sided difficulty: police forces do not have a good image in many university communities, and university scholars are not always well received in police departments. Rogovin feels that the problem of the police's image almost

Simmons Named Chief Scientist

Gene Simmons, professor of geophysics at M.I.T., has been named chief scientist at NASA's Manned Spacecraft Center (MSC). Simmons, who will retain his professorship at M.I.T. and work part time in Houston, will assume the scientific responsibilities formerly held by Wilmot Hess, who resigned last summer as full-time science director. Administrative responsibilities formerly held by Hess will be assumed by Anthony Calio, a fulltime NASA administrator. Simmons' chief duty will be to plan space experiments and to oversee the Center's science program.

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dissolves when contact is made. "When the 'outsider' gets in and starts to deal with police, there is a development of mutual respect," he says. "The outsider learns that the police are not inflexible about learning from outsiders." Even if police departments are willing to cooperate, most of them are not equipped to participate in meaningful research efforts. James Q. Wilson, professor of government at Harvard and a police-work expert, says that some of the larger police forces have research departments, but that "many of them are misused-downgraded to the point of simply preparing lists of numbers for the FBI's Uniform Crime Reports." Wilson believes that, if police departments want to increase their research capability so that they can utilize federal research funds in concert with universities, "they will definitely have to go outside for civilian personnel."

The shortage of truly professional people-not only in police work but in corrections and, to a smaller extent, in courts-creates another problem for LEAA and the institute: technology transfer. Assuming that some successful techniques are derived from all this research, how do you get the hundreds of local and state organizations to use them? Rogovin claims that the discretionary funds give the LEAA some power of persuasion, and he believes that, "simply through our daily contact with state planning people, we can disseminate ideas. As communities to be affected become more sophisticated," he concludes, "technology transfer is improved."

Except for the emphasis on police work, it is difficult to find patterns in the institute's research projects; the institute people know they are dealing with a wide-open field, and their choice of projects to support indicates an attempt to reach out in many directions. Some of the more exotic ones last year included an analysis of the occurrence of the XYY chromosome configuration in man and its relation to criminality, and a study of law enforcement on the Indian reservation of the Mississippi Choctaws. It does seem that a considerable amount of attention is paid to the possibility of using scientific management techniques to improve the efficiency of crime prevention programs, police operations, and especially the courts, with their tremendous backlog of pending cases. Among the first-year projects there was also a sprinkling of sponsored conferences, held in an effort to bring people together and to disseminate information in a field where scholarly communication has been dreadfully inadequate.

Institute Horizons Limited

Wide-ranging as the institute's present and projected program is, it almost completely avoids the area which the Crime Commission recognized as the root of the crime problem. "A community's most enduring protection against crime," the report said, "is to right the wrongs and cure the illnesses that tempt men to harm their neighbors." This sweeping solution, Slott confesses, is outside the new agency's purview. "It is not within our scope to change the social characteristics that make a man a criminal," Slott says. "We can do something about police, courtroom operation, and corrections institutions."

If the interest of researchers during the first year is any indication, the institute will have no trouble finding research personnel to pursue this endin a few private institutions for urban studies, in many university sociology departments and law schools, and especially in a small but growing number of university-related centers for the study of criminology. How good the research will be, what will be done with it, and whether the emphasis on police studies is a good idea remain to be seen. Only a year old, the institute has not yet begun significant in-house evaluation. As Slott says, with the tone of a man apprehensive about the fate of his budget, "We had nothing finished to show Congress."

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