

Vietnam-Laos-Cambodge." The group asked about his role in Jason and about the bombing of dikes. Gell-Mann is reported to have said he had come to discuss physics and not Indo-China; he then gave his planned lecture. The following day the demonstration occurred again, but this time, according to French newspaper accounts, Gell-Mann was escorted to the street by administrators from the college.

At the Institute Guglielmo Marconi at the University of Rome, in the beginning of July, Drell was to give a theoretical-physics seminar. A group of demonstrators demanded that Drell denounce US policy in Vietnam and discuss and denounce his role in Jason. Drell refused, but for ten minutes he discussed Jason and giving advice to the government; after that the demonstrators left and Drell began his physics lecture. About 15 minutes later a larger group, employing a bullhorn, returned and protested much more intensively; so Drell simply gathered up his papers and left.

Three weeks later Drell and two other physicists were to lecture on quantum electrodynamics at the summer school of the Institut d'Etudes Scientifiques de Cargèse in Corsica. It was the last week of a four-week summer school, which was attended by 25-30 students plus faculty. Again Drell was asked to denounce his participation in Jason and to condemn publicly "American war crimes." Drell refused, offering instead to discuss Jason with the students any

time after giving his first physics lecture. This offer was rejected, and then Drell asked those who wanted him to start lecturing to stand. Only about five students rose, and Maurice Levy, director of the institute, said that if Drell could not talk the school would terminate. Levy then gave the students until noon the next day to find a way to let Drell give his physics lectures. Efforts to resolve the conflict failed and the school ended a week early.

At Columbia a campaign against the Jason group is being conducted by the New York SESP group, according to Foley. Since March, every Wednesday the group has been picketing the front door of the Pupin physics building and handing out literature. Foley told us that at the end of April, when many US campuses were in turmoil, the SESP group, together with a group of faculty members from other New York colleges, occupied Pupin for four days. Things then quieted down. In June Ruderman's apartment house in Greenwich Village was picketed by demonstrators who handed out literature about his involvement in Jason. In August demonstrators held a 24-hour vigil at Foley's apartment house in Manhattan; as a result, he says, he received a couple of poison-pen letters. The other Columbia members of Jason, Norman Christ, Garwin and Leon Lederman, do not live in Manhattan. Foley says the object of the SESP action is to force the Jason members to resign. —GBL

1971-72 financial year the Harwell and Culham (fusion) laboratories of the UKAEA received a total of £6.1 million for research not directly oriented towards nuclear reactors; £2.5 million came from industry and the remainder from the government. In the present financial year the comparable figures are £7.4 million total, with £3 million from industry, and in 1973-74 the income from industry is expected to be £3.4 million. So the share from industry has been rising, and by 1975 it is expected to amount to about 50% of the total nonreactor research funds. Work on reactors and what is called "underlying research" directed towards reactors is separately funded by direct government grant. In 1971-72 this reactor research accounted for about 55% of the total income of the laboratory from all sources.

Because of the general economic depression in the UK, Harwell's work for industry has not increased as fast in the last 12 months as had been hoped. Marshall thinks there are signs that it's beginning to pick up again, but he has a slight worry that his plans depend on a return of confidence in the British industrial scene. "If that turns sour, we might find ourselves in some difficulty." The contracts are not limited to British industry—a few are from abroad, and there have been "lively discussions" with some US firms—but foreign support is as yet a small part of the total.

**In terms of manpower,** the size of the Harwell laboratory is still decreasing, as it has every year since 1962. Whether that trend can be reversed depends on whether the industrial-contract work can grow at a rate large enough to offset the rundown in reactor research. Marshall hopes it can; he points out that if you have a continuous decrease over a period of a decade you start getting age imbalances, and the overall health of the organization suffers. Here again he is supported by the Rothschild Report, which maintains that the size of an establishment should vary depending on the demands of the program, not upon political judgments. While admitting that the laboratory is not compensating for all its "wastage"—retirements and resignations—Marshall says he is recruiting "at a modest level, and a substantial fraction of that level consists of Britishers who wish to return to this country from America."

We asked what exciting physics research was in progress at Harwell. Marshall listed several topics, including Mössbauer work on biological compounds, surface phenomena over a wide area of science, catalytic phenomena observed with electron microscopes, laser-scattering investigations of turbulence, and ultrasonic holography.

## Congress increases NSF funds for 1973

Congress has appropriated \$619 million plus \$7 million in foreign currency for the National Science Foundation for fiscal year 1973. More funds have been given for some education programs than the administration had asked for, and the overall program received more than the requested \$647.418 million plus \$7 million in foreign currency.

The \$619-million sum is the same amount as was appropriated for FY 1972, but funds that had been impounded by the Office of Management and Budget in FY 1971 and FY 1972 because of the Administration's wish to cut back on spending for education and for institutional support of science were freed for FY 1973. These funds together with the foreign currency bring the total NSF funding up to \$657.2 million. Of the freed funds, \$9.5 million from FY 1971 and \$21.7 million from FY 1972 may be used for any part of the NSF program.

For the third year in a row, Congress has granted more money than that requested by the Administration for education programs. NSF had asked for \$12 million for the Institutional Im-

provement for Science program, but Congress instructed NSF to spend at least \$18 million, down \$3 million from the FY 1972 level. An increase of \$6 million over the requested funding level was also ordered for graduate-student support, bringing it to \$20 million, the same amount allotted in FY 1972. Congress added \$1.0 million to the \$70 million requested for the Science Education Improvement Program, a total of \$71.0 million, \$4.9 million more than in FY 1972. —SMH

## Harwell

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ful in answering these critics. Harwell was in fact already operating very closely in accordance with various recommendations of the Rothschild Report.

A second problem was that of persuading British industry to accept the idea and come forward with ideas and projects. Marshall knew in 1968 that there was not a good tradition in the UK of industry placing contracts for extramural research, but he thought this tradition could be broken. Events appear to be proving him right. In the