on the ground worked successfully for more than a year.

Despite modest success with the generation of power, the historic focus of the nuclear quest has been reactors for propulsion—a quest that has resulted in several fiascoes. One such program was an attempt, begun in 1955, to construct a nuclear-powered rocket. The challenge was graphically summed up by Glenn T. Seaborg, then chairman of the AEC: "What we are attempting to make is a flyable compact reactor, not much bigger than an office desk, that will produce the power of Hoover Dam from a cold start in a matter of minutes."

The purpose of the project was never quite clear. At first envisioned for use on ICBM's, the reactors were later viewed as power for interplanetary voyages. Test engines roared to life in 1962. A decade later the Rover program at Los Alamos National Laboratory in New Mexico had consumed $1.4 billion, but had not produced a nuclear-powered rocket. The story of grand goals and poor payoff was repeated in the saga of the nuclear-powered aircraft, which ate up a billion dollars without ever getting off the ground.

By 1972, governmental support for such nuclear adventures had worn thin. With the demise of the AEC and the Joint Congressional Committee on Atomic Energy around 1973, support collapsed. Plans for nuclear planes, rockets, and space reactors were scrapped.

An autopsy of the era points to a number of factors that contributed to early demise: The programs had been oversold. Enthusiasm for nuclear technology often outran the capacity to deal with complex problems posed by high temperatures. Some symposium panelists cited the impact of Admiral Hyman Rickover, "father" of the nuclear navy and a high AEC official, who opposed work on compact nuclear reactors (*Science*, 18 June 1976, p. 1210). Public fear of things nuclear also contributed, as did social unrest. Perhaps most important, the missions had not been well defined. Why was a nuclear airplane that could fly for months without refueling a necessary part of the nation's arsenal? The programs were often case studies in pure infatuation with nuclear power.

By the late 1970's, however, exotic uses of nuclear power again started to exert a fascination, this time in conjunction with military missions in space. The Pentagon drew up specifications for a reactor that would put out 100 kilowatts and operate without human intervention for 7 years. Today, the main project is a reactor known as the SP-100, which is

OMB Plans Level NIH Budget

The Office of Management and Budget (OMB) has proposed major organizational changes among health care agencies under the Department of Health and Human Services (HHS). It would also freeze, in fiscal year 1984, the current operating budget of the National Institutes of Health (NIH).

According to an internal OMB document sent to HHS Secretary Richard Schweiker, the budget office proposes to dramatically diminish the duties of the assistant secretary of health. The post is currently held by Edward N. Brandt, Jr., who, like his predecessors, is known as a strong defender of biomedical research and health programs. His office oversees the Public Health Service, including NIH, the Centers for Disease Control, the Food and Drug Administration, the Alcohol, Drug Abuse, and Mental Health Administration, and the Health Resources Administration. OMB would reduce the office to a unit that concentrates solely on health policy. Schweiker, a staunch advocate of preventive medicine, is reportedly steaming mad about the proposed changes and has already protested to the budget office.

OMB also would hold the line on NIH's present operating budget which is almost sure to total about $4 billion, pending the passage of appropriations legislation. The budget office would allot NIH $4.0 billion for FY 1984. Schweiker had requested $4.1 billion. OMB would increase the number of new and competing awards to 5000 from 4100 in FY 1983, but the amount of money available for each grant would be reduced. The document also suggested that funding for both direct and indirect costs be cut, which is sure to raise a hue and cry once again from institutions receiving federal grant money. Last year, the Administration proposed shaving 10 percent from overhead reimbursement, but the NIH appropriations bill for FY 1983 is expected to restore the funds. Indirect costs cover expenses for such things as building maintenance, libraries, and electricity.

OMB would also consolidate several health-related agencies under NIH. It would dissolve the Alcohol, Drug Abuse, and Mental Health Administration and transfer its research functions to NIH. Mental health research was originally conducted at NIH before the creation of the broader health agency. NIH, under the OMB proposal, would also absorb the National Center for Health Statistics and the National Center for Health Services Research. The budgets of the three agencies are not included in the $4.0 billion that OMB has proposed.

The budget office would also begin charging fees to patients treated at the NIH hospital to be consistent with the practice at institutions receiving institute funds. NIH patients previously have not been billed for treatment because they are participating in experimental therapy. Yet patients undergoing experimental treatment at other institutions supported by NIH have been required to pay basic hospital costs. An NIH official in an interview said that it is unclear how much revenue the change in policy could generate.

Another federal agency, the National Institute for Occupational Safety and Health, would also fall under the OMB ax. Its budget would be slashed by almost 25 percent to $41 million or $43 million. The institute's budget is currently $56 million; in FY 1981, it was $67 million.

There is also an unconfirmed report that OMB would eliminate the commissioned corps of the Public Health Service, but the OMB document contained no such proposal. The corps consists of 5900 physicians, nurses, and other health professionals who can be called on to serve with the military in emergencies. About 1000 professionals at NIH are corps members and, as a result, receive added bonuses and benefits.

President Reagan is likely to face strong congressional resistance to the proposed changes, especially concerning the NIH budget. The Administration proposed for FY 1983 a $3.7 billion budget for the institutes, but Congress is about to increase it by $300 million. The House and Senate are likely to go to conference on the NIH appropriations bill before the lame-duck session concludes. The House has already passed the bill, and a Senate appropriations subcommittee recently passed legislation similar in its provisions.—**MARJORIE SUN**