

## NEWS IN BRIEF

● **HEW FUNDS:** The President has signed a compromise appropriations bill for the Departments of Labor and Health, Education, and Welfare. President Nixon had vetoed an earlier \$19.7-billion appropriations bill as inflationary. The House and Senate conferees agreed on a \$19.4-billion appropriation for the current fiscal year, but will allow Nixon to trim the bill by 2 percent. This 2 percent cut reduces the final total to about \$19 billion.

● **PILL WARNING:** The Food and Drug Administration announced last week it plans to require insertion of a simply worded leaflet about possible health hazards into packages of birth control pills. The leaflet cautions women about blood clots and other possible side effects. It notes that the hormones in the pills have caused cancer in animals but that there is no proof they cause cancer in humans. No other prescription drug requires a warning aimed at the user; usually such warnings go to doctors and druggists instead.

● **NUCLEAR PACT:** The Nuclear Nonproliferation Treaty was officially declared to be in force last week after more than 40 nations ratified the pact. The treaty was originally signed by the three sponsors, the United States, Britain, and the Soviet Union, on 1 July 1968. Under the pact, adhering nations pledge not to transfer or acquire atomic weapons. Two of the five nuclear powers, Red China and France, did not sign.

● **BRAIN DRAIN DECREASES:** The number of scientists, engineers, and physicians immigrating to the United States decreased sharply in fiscal 1969, according to the National Science Foundation. The total of immigrant scientists and engineers dropped by 21 percent—from 13,000 in 1968 to 10,300 in 1969, and the total of physicians by 8 percent—from 3,060 in 1968 to 2,800 in 1969. The brain drain decrease is attributed to changes in the immigration laws.

● **ATOMIC PIONEERS AWARD:** The special Atomic Pioneers Award was presented by President Nixon to Vannevar Bush, James B. Conant, and Leslie R. Groves for their "exceptional contributions to the national security." Glenn T. Seaborg, chairman of the Atomic Energy Commission, prior

to reading the citations said, "This is the first of a kind, and the only presentation that will be made of this award. . . ." Bush was cited for his work as director of the Office of Scientific Research and Development during World War II. Conant and Groves were cited for their work in the development of nuclear weapons systems, including the atomic bomb.

● **ABORTION RULING:** The Supreme Court has let stand a decision by California's high court declaring the state's abortion law unconstitutional. The law, since superseded by a more liberal one, prohibited abortions except when "necessary to preserve" the mother's life; California's Supreme Court had ruled this phrase was too vague for a doctor to know when his actions were legal.

● **INSTRUCTIONAL TECHNOLOGY:** The Nixon Administration has relayed to Congress without comment a report calling for massive federal spending to promote use of instructional technology in the schools. The report was written by the Commission on Instructional Technology, chaired by Dean Sterling M. McMurrin of the University of Utah's Graduate School. It recommends establishment of a National Institutes of Education, patterned after the National Institutes of Health, to train teachers and promote use of instructional technology. The commission recommends an initial financing of \$565 million. The report is available from the Academy for Educational Development, Inc., 1424 16th St. NW, Washington, D.C. 20036.

● **NATURAL GAS AUTO FUEL:** More than 1000 federal cars and light trucks will be converted this year to use of natural gas as fuel, according to officials of the General Services Administration. In testimony before the Senate Commerce environmental subcommittee, officials said that an experiment with natural gas fuel, begun last October with federal cars in Los Angeles, has cut noxious exhaust emissions by about 80 percent and fuel costs by 25 percent. The vehicles, however, can travel only 52 miles before their fuel tanks must be refilled or replaced, so each of the experimental cars is equipped with a device permitting re-conversion to gasoline, thus giving the cars a normal range.

of the annual budget of the National Science Foundation. Illness that could hamper or endanger the astronauts' activity on the moon surface was a particular worry as the time for the first Apollo landings drew near, and preventive medicine became a watchword in the medical program.

Physically, the program has been centered in the MSC's Lunar Receiving Laboratory, in which quarantine facilities for both moon rocks and astronauts returning from lunar landing missions are located. The medical labs are in the quarantine area of a building, which, like chemical and biological warfare research facilities and virus research labs, is kept under negative air pressure. What the NASA facility looks like, in fact, is a viral isolation unit combined with a very well equipped clinical pathology laboratory that has somehow been transported from an affluent medical center.

The work of the Houston group did not change radically from the Gemini to the Apollo periods. The Apollo missions required the astronauts to pass through the earth's atmosphere, which provides protection from galactic radiation and solar flares should they occur. But flight experience through Apollo 12 has proved radiation exposure to have been well within limits established as safe. No serious solar-flare episodes occurred during missions and it is estimated that the worst recorded flares of the past decade would have given astronauts a depth dose of some 25 rads, less than that acquired in routine diagnostic procedures. The record proves not that there is no danger but that risks are minimal.

The astronauts seem to have found the one-sixth gravity on the moon much pleasanter than the zero gravity of space, but weightlessness can apparently be regarded as much less of a drawback to spaceflight than was foreseen by many. Motion sickness affected five of the six Apollo 8 and 9 astronauts to some degree, but all ultimately adapted. The Apollo cabins are larger than those of the predecessor spacecraft, and motion sickness seems to have been related to the astronauts' greater ability to move about.

At the beginning of the Apollo program there was some medical concern about a recorded loss of red blood cell mass and cardiovascular deconditioning in earlier flights. In the Project Gemini and first Apollo flights it was found that there was a decrease in mass in the astronauts' red blood cells. After