

downwind populations. At present, the M55 rockets are stored in depots at Anniston, Alabama; Richmond, Kentucky; Pine Bluff, Arkansas; Tooele, Utah; and Umatilla, Oregon.

Due to uncertainties about the stockpile's exact rate of deterioration, the panel urged the Army to take additional safety precautions until most of the stockpile can be destroyed. It recommended, for example, that exhaust vents at each storage depot be monitored continuously instead of periodically; that safety procedures and evacuation plans be redrawn to take into consideration the possibility of extremely serious accidents; and that onsite medical personnel receive training in toxic chemicals.

In two of its harshest criticisms, the panel said that the Army had been observed using forklifts to transport M155 rockets "in a manner that was not as safe as it could have been," and that it had not used the "maximum care expected" during the installation of new explosive charges into chemical munitions that are old but not yet obsolete.

The panel went on to say that the installation of such explosives should be stopped, on the grounds that it will greatly complicate the eventual destruction of the munitions involved. An Army spokesman says that the purpose of this effort, known as "uploading," is to increase U.S. readiness to fight a war with chemical weapons, and that the effort has been under way since 1983. However, a well-informed member of the NRC panel speculates that the real purpose is merely to add to the stockpile of so-called "usable" chemical weapons, in anticipation of a congressional requirement that two older, but "usable," chemical weapons be destroyed for every new binary chemical weapon produced. (Congress has thus far refused to authorize binary production.)

In a brief statement, the Army said that it was "pleased to receive an endorsement" of its previously announced plans to incinerate some of the chemical weapons stockpile, and that it would study the other recommendations carefully. According to a spokesman, the Army plans to obtain public comment on the stockpile destruction at a series of hearings to be held near the depots next year. A final decision may not be made until 1986.

—R. JEFFREY SMITH

Biogen Cuts 13 Percent Including Scientists

Biogen, one of the best known of the new breed of biotechnology companies, recently announced its first major staff cutbacks. The firm cut 56 employees, or 13 percent, of the company's total staff "across the board," according to Biogen spokesman Peter Feinstein. The layoff was distributed about evenly between the company's U.S. operations in Cambridge, Mass. and its European center in Geneva, Switzerland, Feinstein says. Although he declined to say how many scientists have been laid off, other sources indicate that at least ten are affected so far.

Biogen, like many other start-up biotechnology companies, has gone through a rapid expansion during the past few years. Since 1979, when the company consisted of three employees, the staff increased to a peak of about 430 earlier this year. Although the decision to reverse this growth was "very carefully considered," Feinstein says, it "occurred rapidly." The cuts, which have affected all levels of staff except senior management, "have not cut any corporate activities," he says. The move was an "adjustment for over-hiring."

Biogen's overall position remains "quite healthy," Feinstein says. "This act strengthens the company." The company reported cash assets of \$69.4 million at the end of the third quarter, 30 September, with a 9-month operating loss in 1984 of about \$11 million.—JEFFREY L. FOX

France Proposes Shuttle Competitor

Paris. France is proposing to its fellow members of the European Space Agency (ESA) that they jointly finance the development of a reusable manned space vehicle that would operate in direct competition with the U.S. space shuttle. Details of the five-seater, 17-tonne spacecraft, known as Hermes, were described last week by Jean-Louis Lions, the new president of France's National Centre for Space Studies (CNES), which has

been working on preliminary ideas for the past 4 years. It would be one-third the size of the shuttle. Development costs are currently put at \$1.4 billion, and CNES officials estimate that it could be launched by 1996.

Lions said that the proposal for a European shuttle was directly in line with the desire that had been expressed "at the highest political levels" in France for a space policy that was independent of the United States "in all the major fields of the future." This would include both the servicing and retrieval of satellites, and perhaps construction of a European space station.

France is proposing Hermes as one of three major development projects to be undertaken by ESA over the next decade, the other two being participation in the U.S. space station and the development of an entirely new version of the Ariane launcher powerful enough to put Hermes and its five-person crew into orbit. However, the Hermes project is expected to be the most controversial of the three.

—DAVID DICKSON

Comings and Goings

At the National Institutes of Health, **Anthony S. Fauci** has been named director of the National Institute of Allergy and Infectious Diseases, where he has been doing research on immunoregulation since 1972. The top post in the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases is expected to be filled by endocrinologist **Mortimer Lipsett**. Lipsett, another long-term NIH'er, is director of the National Institute of Child Health and Human Development.

When **Daniel E. Koshland** accepted the editorship of *Science* last summer, he announced his resignation as editor of the *Proceedings of the National Academy of Sciences (PNAS)*, effective the first of the year when he picks up the *Science* reins from **Philip H. Abelson**. Koshland, a biochemist at the University of California at Berkeley, will devote 50 percent of his time to *Science*. Abelson becomes science adviser to the AAAS. And **Maxine F. Singer** of the National Cancer Institute will succeed Koshland in the *PNAS* post, which is a part-time position.