NEWS

Nuclear Weapons in Europe

by our Washington Correspondent

A RARE glimpse of the extent and nature of the nuclear umbrella that the United States has erected over Europe is provided in a report prepared by staff members of the Senate Foreign Relations Committee. It indicates, among other things, that as many as 7,000 nuclear warheads are stockpiled in more than 100 special ammunition sites throughout Europe and, although all the weapons are in United States custody, about two-thirds of them are for use by European forces. Some of the weapons are constantly loaded, ready to be unleashed on command.

The report has been heavily censored by the Department of Defense and it is tantalisingly devoid of detail. Nevertheless, it lifts a fraction of the veil of secrecy that surrounds European nuclear defence planning and it brings together—and confers official status on—information which has previously appeared unofficially in the public record. It also emphasises the extent to which Europe is dependent on the United States for its defence.

Although delivery systems capable of carrying nuclear weapons were deployed by the United States in Europe during the 1950s, warheads were not stockpiled until President Eisenhower formally proposed the idea at a NATO Heads of Government meeting in 1957. Since then, the buildup of American nuclear weapons in European bases has been governed by a set of bilateral agreements between the United States and individual European governments. One of the agreements provides that the location of storage sites is to be determined by the NATO Supreme Allied Commander in Europe (SACEUR)—who is also commander in chief of American forces in Europe—in agreement with United States military authorities and the government of the country concerned. The agreements also specify that the weapons will remain in the custody of United States personnel, and that the 'user country' will pay the costs of stockpiling them.

The bilateral agreements are broad and they do not identify individual nuclear weapons systems. In fact, the Senate committee report states that it was not until 1967—a full ten years after stockpiling began—that the United States finally agreed to provide Euro-

pean governments with details of the nuclear weapons stockpiled in their territory or stored elsewhere for use of their troops. (That revelation begs the question of how NATO managed to carry out sensible defence planning without knowing the nature of the weapons that the United States had installed in Europe.)

Robert S. McNamara, Secretary of Defense, announced in 1966 that there were then some 7,000 nuclear warheads stockpiled in Europe, a figure which the report notes "was the first, last and only official revelation regarding the size and disposition of the American nuclear armory in Europe". The total has since fluctuated and the present level has been deleted from the report, but 80% of the land-based warheads are for tactical weapons which can be used for offence or defence and the rest are purely defensive.

The warheads are stored in special

igloos, in sites surrounded by double fences which are floodlit at night. Some of the weapons, including a proportion of those for use by European forces, are always maintained on what is termed quick reaction alert, ready to be fired as soon as the order is given. The proportion of the total nuclear force which is ready to be unleashed depends on the general state of alert in the NATO forces.

An agreement drawn up by NATO members in 1969 provides for consultation among member governments before nuclear weapons are used in Europe. According to the Senate report, it would work like this. A request for the use of nuclear weapons in the defence of NATO, which comes from either a member government or from a major NATO commander, or any possibility that a nuclear power may use nuclear weapons to defend NATO, will be communicated immediately to all NATO

RESEARCH SPENDING

Battelle Forecast of Increase

by our Washington Correspondent

ESTIMATING the amount of money that will be spent on research and development in 1974 is a risky business, particularly in the light of the great uncertainties in the economic outlook. Nevertheless, according to the annual forecast of the Battelle-Columbus Laboratories, the total amount to be spent on research and development in the United States next year is expected to reach about \$32,400 million—an increase of some \$2,300 million over this year's expenditure. The Battelle forecast is perhaps the most widely expected of all the exercises in crystal-ball gazing that are carried out in the United States to predict funding for research and development.

Although the expected increase would be mostly swallowed up by inflation—which is reckoned to be running at about 5% for research and development costs—it would nevertheless, represent a modest growth in purchasing power. Industry is expected to provide a relatively large increase in research funds, and support from the Federal Government is also expected to grow, according to the report.

Battelle acknowledges, however, that the forecast could be upset by energy shortages and other factors. On the one hand, if the energy crisis leads to widespread recession, industrial research and development could be hard hit. But, on the other, the energy crisis is likely to stimulate increased research and development on energy production and conservation.

The forecast sees the Federal Government providing about \$16,800 million, industry more than \$13,700 million, universities and colleges about \$1,500 million and non-profit institutions about \$480 million. Industry is therefore expected to provide about 42% of the total research and development funding next year, compared with 31% ten years ago. But the increases will not come from every industrial sector, for the forecast predicts that four industrial groups—food manufacturers, chemical companies, instrument makers and producers of electrical machinery—will increase their research and development funding at a rate greater than the rate of inflation. Expenditures by other industry groups will probably not even keep pace with inflation.