9364

THE WHITE HOUSE

Office of the Press Secretary
(Geneva, Switzerland)

FOR RELEASE AT 10:00 AM Local
4:00 AM EST

November 21, 1985

U.S. FACT SHEET

MAGNETIC FUSION RESEARCH

Fusion is the energy source of the sun. Magnetic fusion (also known as controlled thermonuclear fusion) is the process of combining together hydrogen nuclei to produce helium, with the release of energy. This requires raising the hydrogen to a very high temperature (millions of degrees) and confining the plasma with strong magnetic fields. The essential features of this process have been demonstrated circa 1983 in several devices in various laboratories.

Since the 1950s, scientists of several nations have been engaged in magnetic fusion energy research. Steady progress has been made toward understanding the underlying problems of magnetic fusion.

Magnetic fusion energy offers the potential for an inexhaustible supply of energy in the mid-to-late twenty-first century, but there are many unanswered questions that need to be solved and economic problems which must be overcome before practical and commercial use of fusion is realized.

The United States, the Soviet Union, Western Europe, and Japan all have fusion energy research programs, and there is a substantial amount of cooperation between them. For example, U.S. and Soviet scientists regularly visit each other's laboratories, and both sides have benefitted from these exchanges.

President Reagan and General Secretary Gorbachev today advocated the widest practical development of international cooperation in obtaining this source of energy which is essentially inexhaustible for the benefit of all mankind.

The United States and the Soviet Union are consulting with other countries with resources and expertise to contribute to this research effort.

Regarding the transfer of technology, the basic knowledge of fusion devices is well understood by scientists of many nations, and advanced devices have been designed and operated by several nations, including the Soviet Union. U.S. and allied participation in this project will, as always, be governed by strict adherence to existing COCOM guidelines to prevent the transfer of sensitive technology with military potential.

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