THE WHITE HOUSE

Office of the Press Secretary (Los Angeles, California)

For Immediate Release

April 10, 1987

EXECUTIVE ORDER

FACILITATING ACCESS TO SCIENCE AND TECHNOLOGY

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Technology Transfer Act of 1986 (Public Law 99-502), the Trademark Clarification Act of 1984 (Public Law 98-620), and the University and Small Business Patent Procedure Act of 1980 (Public Law 96-517), and in order to ensure that Federal agencies and laboratories assist universities and the private sector in broadening our technology base by moving new knowledge from the research laboratory into the development of new products and processes, it is hereby ordered as follows:

Section 1. Transfer of Federally Funded Technology.

- (a) The head of each Executive department and agency, to the extent permitted by law, shall encourage and facilitate collaboration among Federal laboratories, State and local governments, universities, and the private sector, particularly small business, in order to assist in the transfer of technology to the marketplace.
- (b) The head of each Executive department and agency shall, within overall funding allocations and to the extent permitted by law:
 - (1) delegate authority to its government-owned, government-operated Federal laboratories:
 - (A) to enter into cooperative research and development agreements with other Federal laboratories, State and local governments, universities, and the private sector; and
 - (B) to license, assign, or waive rights to intellectual property developed by the laboratory either under such cooperative research or development agreements and from within individual laboratories.
 - (2) identify and encourage persons to act as conduits between and among Federal laboratories, universities, and the private sector for the transfer of technology developed from federally funded research and development efforts;
 - (3) ensure that State and local governments, universities, and the private sector are provided with information on the technology, expertise, and facilities available in Federal laboratories;
 - (4) promote the commercialization, in accord with my Memorandum to the Heads of Executive Departments and Agencies of February 18, 1983, of patentable results of

federally funded research by granting to all contractors, regardless of size, the title to patents made in whole or in part with Federal funds, in exchange for royalty-free use by or on behalf of the government;

- (5) implement, as expeditiously as practicable, royalty-sharing programs with inventors who were employees of the agency at the time their inventions were made, and cash award programs; and
- (6) cooperate, under policy guidance provided by the Office of Federal Procurement Policy, with the heads of other affected departments and agencies in the development of a uniform policy permitting Federal contractors to retain rights to software, engineering drawings, and other technical data generated by Federal grants and contracts, in exchange for royalty-free use by or on behalf of the government.
- Sec. 2. Establishment of the Technology Share Program. The Secretaries of Agriculture, Commerce, Energy, and Health and Human Services and the Administrator of the National Aeronautics and Space Administration shall select one or more of their Federal laboratories to participate in the Technology Share Program. Consistent with its mission and policies and within its overall funding allocation in any year, each Federal laboratory so selected shall:
- (a) Identify areas of research and technology of potential importance to long-term national economic competitiveness and in which the laboratory possesses special competence and/or unique facilities;
- (b) Establish a mechanism through which the laboratory performs research in areas identified in Section 2(a) as a participant of a consortium composed of United States industries and universities. All consortia so established shall have, at a minimum, three individual companies that conduct the majority of their business in the United States; and
- (c) Limit its participation in any consortium so established to the use of laboratory personnel and facilities. However, each laboratory may also provide financial support generally not to exceed 25 percent of the total budget for the activities of the consortium. Such financial support by any laboratory in all such consortia shall be limited to a maximum of \$5 million per annum.
- Sec. 3. Technology Exchange -- Scientists and Engineers. The Executive Director of the President's Commission on Executive Exchange shall assist Federal agencies, where appropriate, by developing and implementing an exchange program whereby scientists and engineers in the private sector may take temporary assignments in Federal laboratories, and scientists and engineers in Federal laboratories may take temporary assignments in the private sector.
- Sec. 4. International Science and Technology. In order to ensure that the United States benefits from and fully exploits scientific research and technology developed abroad,
- (a) The head of each Executive department and agency, when negotiating or entering into cooperative research and development agreements and licensing arrangements with foreign persons or industrial organizations (where these entities are directly or indirectly controlled by a foreign company or government), shall, in consultation with the United States Trade Representative, give appropriate consideration:

- (1) to whether such foreign companies or governments permit and encourage United States agencies, organizations, or persons to enter into cooperative research and development agreements and licensing arrangements on a comparable basis;
- (2) to whether those foreign governments have policies to protect the United States intellectual property rights; and
- (3) where cooperative research will involve data, technologies, or products subject to national security export controls under the laws of the United States, to whether those foreign governments have adopted adequate measures to prevent the transfer of strategic technology to destinations prohibited under such national security export controls, either through participation in the Coordinating Committee for Multilateral Export Controls (COCOM) or through other international agreements to which the United States and such foreign governments are signatories.
- (b) The Secretary of State shall develop a recruitment policy that encourages scientists and engineers from other Federal agencies, academic institutions, and industry to apply for assignments in embassies of the United States; and
- (c) The Secretaries of State and Commerce and the Director of the National Science Foundation shall develop a central mechanism for the prompt and efficient dissemination of science and technology information developed abroad to users in Federal laboratories, academic institutions, and the private sector on a fee-for-service basis.
- Sec. 5. Technology Transfer from the Department of Defense. Within 6 months of the date of this Order, the Secretary of Defense shall identify a list of funded technologies that would be potentially useful to United States industries and universities. The Secretary shall then accelerate efforts to make these technologies more readily available to United States industries and universities.
- Sec. 6. Basic Science and Technology Centers. The head of each Executive department and agency shall examine the potential for including the establishment of university research centers in engineering, science, or technology in the strategy and planning for any future research and development programs. Such university centers shall be jointly funded by the Federal Government, the private sector, and, where appropriate, the States and shall focus on areas of fundamental research and technology that are both scientifically promising and have the potential to contribute to the Nation's long-term economic competitiveness.
- Sec. 7. Reporting Requirements. (a) Within 1 year from the date of this Order, the Director of the Office of Science and Technology Policy shall convene an interagency task force comprised of the heads of representative agencies and the directors of representative Federal laboratories, or their designees, in order to identify and disseminate creative approaches to technology transfer from Federal laboratories. The task force will report to the President on the progress of and problems with technology transfer from Federal laboratories.

- (b) Specifically, the report shall include:
- (1) a listing of current technology transfer programs and an assessment of the effectiveness of these programs;
- (2) identification of new or creative approaches to technology transfer that might serve as model programs for Federal laboratories;
- (3) criteria to assess the effectiveness and impact on the Nation's economy of planned or future technology transfer efforts; and
- (4) a compilation and assessment of the Technology Share Program established in Section 2 and, where appropriate, related cooperative research and development venture programs.
- Sec. 8. Relation to Existing Law. Nothing in this Order shall affect the continued applicability of any existing laws or regulations relating to the transfer of United States technology to other nations. The head of any Executive department or agency may exclude from consideration, under this Order, any technology that would be, if transferred, detrimental to the interests of national security.

RONALD REAGAN

THE WHITE HOUSE, April 10, 1987.

THE WHITE HOUSE

Office of the Press Secretary (Los Angeles, California)

For Immediate Release

April 10, 1987

FACT SHEET

"Facilitating Access to Science and Technology"

The Executive Order on Facilitating Access to Science and Technology initiates a number of steps designed to promote cooperation between the Federal Government, State and local governments, industry and academia in cooperative research and the commercialization of research. These steps will:

- 1. Direct Federal departments and agencies to improve the transfer of federally developed technology and technical information to the marketplace by:
 - -- encouraging Federal laboratories to collaborate with State and local governments, universities and business, particularly small business, through cooperative research and development agreements;
 - -- licensing intellectual property developed through the cooperative research and development agreements or by individual Federal laboratories;
 - -- encouraging "science entrepreneurs" to act as conduits between Federal laboratories, universities, and the private sector;
 - -- implementing royalty-sharing programs for Federal inventors; and
 - -- developing a uniform Federal policy permitting Federal contractors to retain rights to software, engineering drawings, and other federally generated technical data, in exchange for royalty-free use by the government.
- 2. Direct the Secretaries of Agriculture, Commerce, Energy, and Health and Human Services and the Administrator of the National Aeronautics and Space Administration to select one or more of their laboratories to participate in the "Technology Share Program," involving multi-year joint basic and applied research with consortia of U.S. firms and universities.
- 3. Direct the President's Commission on Executive Exchange to assist Federal agencies in developing and implementing an exchange program whereby scientists and engineers in the private sector may take temporary assignments in Federal laboratories and scientists and engineers in Federal laboratories may take temporary assignments in the private sector.

4. Direct:

a. Federal agencies, when negotiating or entering into cooperative research and development agreements and licensing arrangements with foreign persons or industrial organizations directly or indirectly controlled by a foreign company or government, to give consideration in consultation with the

United States Trade Representative to whether the country: offers comparable research and development and licensing opportunities for U.S. nationals and companies and protects U.S. intellectual property rights;

- b. the Secretary of State to develop a recruitment policy encouraging scientists and engineers from across the Federal Government, academia, and industry to serve in U.S. embassy assignments abroad; and
- c. the Secretaries of State and Commerce and the Director of the National Science Foundation to develop a central mechanism for the prompt and efficient dissemination of science and technology information developed abroad to users in Federal laboratories, academic institutions, and the private sector on a fee-for-service basis.
- 5. Direct the Secretary of Defense to identify within 6 months a list of funded technologies that would be potentially useful to U.S. industries and universities and to then accelerate efforts to make these technologies more readily available.
- 6. Direct Federal agencies to examine the potential for including the establishment of university-based research centers in engineering, science, or technology in the strategy and planning for any future R&D programs. Such centers would be jointly funded by the Federal Government, the private sector, and, where appropriate, the States and would focus on areas of fundamental research and technology that are both scientifically promising and have the potential to contribute to the nation's long-term economic competitiveness.
- 7. Direct the Director of the Office of Science and Technology Policy to convene within 1 year an interagency task force of Federal research agencies and their laboratories to assess the progress in transferring technologies from Federal laboratories and to develop and disseminate additional creative approaches to technology transfer.

The President's intention to issue an Executive order was announced in January as part of his 43-point Competitiveness Initiative.

THE WHITE HOUSE

Office of the Press Secretary (Los Angeles, California)

For Immediate Release

April 10, 1987

STATEMENT BY THE PRESIDENT

I believe a vigorous science and technology enterprise involving the private sector is essential to our economic and national security as we approach the 21st century. Accordingly, I have today issued an Executive Order "Facilitating Access to Science and Technology."

It is important not only to ensure that we maintain American preeminence in generating new knowledge and know-how in advanced technologies, but also that we encourage the swiftest possible transfer of federally developed science and technology to the private sector. All of the provisions of this Executive order are designed to keep the United States on the leading edge of international competition.

#