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STANFORD UNIVERSITY

OFFICE OF TECHNOLOGY LICENSING 350 Cambridge Avenue, Suite 250 Palo Alto, California 94306

(415) 723-0651 Telex: 348402 STANFRD STNU Facaimile: (415) 327-1921

SENT BY ASTAN, TECH. LICENSING

January 12, 1988

Mr. Joseph Allen
Acting Director, Federal Technology
Management Policy Division
Office of Productivity,
Technology and Innovation
Department of Commerce
Room H4837
Washington, DC 20230

Ra: Exceptional Circumstance Determinations Under Public Law 96-517

Dear Mr. Allen:

With limited exception, PL 96-517 provides that a nonprofit contractor meeting certain criteria will have first option to title in inventions developed under government agency support in order that the contractor can seek to have the technology developed for public use and benefit. The law also provides that on a case by case basis, an agency may declare a specific invention as an "exceptional circumstance" case, wherein the contractor may not elect title. Such case by case exceptional circumstance uses are reviewed by the Department of Commerce.

We now have a situation where a government agency is requiring that we agree in advance to a broad category of technology that will be considered to be exceptional circumstances to be treated on a class rather than a case by case basis. This advance classification of such a broad category of technologies appears to neutralize the application of PL 96-517 and be counter to the intent of Congress.

Can you please give us an opinion of the Department of Commerce regarding this agency's practice insofar as the spirit and the letter of PL 96-517, as well as PL 98-620? As we see under a great deal of pressure to continue funding of a major contract, could we please hear from you as soon as is reasonably convenient.

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Mr. Joseph Allen January 12, 1988 Page Two

The fields that the agency specifies as exceptional circumstances are "uranian enrichment technology, the storage and disposal of divilian high-level nuclear waste and spent fuel technology, and those national security technologies which are classified, or sensitive, under Section 148 of the Atomic Energy Act (42USC2168) or control pursuant to federal export regulations as stipulated in DOD Directive 5230.25." This agency also "reserves the right to unilaterily amend this contract to identify any new technical fields which may be determined to be exceptional circumstances pursuant to 35USC202 (a) (11) . "

> Very truly yours, Mis Keines

Niels Reimers Director

NJR: kla

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FORM CD-183 (REV2-80) FORMERL : SEC-350 U.S. DEPARTMENT OF COMMERCE

ABSTRACT OF SECRETARIAL CORRESPONDENCE

TO: X

The Secretary

The Deputy Secretary

Date: NOV 2 1 1986

FILE

DECISION MEMORANDUM

From:

Under Secretary for Economic Affairs

Prepared by:

Norman J. Latker/EA/OPTI/377-0659

SUBJECT

Implementation of the Federal Technology

Transfer Act

STATEMENT OF THE ISSUE

What steps should the Department take to implement the Federal Technology Transfer Act of 1986?

ANALYSIS

On October 20, the President signed the Federal Technology Transfer Act of 1986 (P.L. 99-502), which amends the Stevenson-Wydler Act (P. L. 96-480). Commerce supported this Act as priority legislation. It builds on fundamental principles the Department developed for managing technology produced with Federal funding. The principles, which we have embodied in two previous laws and the President's Patent Policy Memorandum, give universities and businesses control of their technology and strong incentives to promote its commercial application. This Act finally extends these principles to Government-operated laboratories and, if implemented properly, can give U.S. industry practical access to nearly all unclassified technology the Government funds or produces in the laboratories.

Among the amendments are provisions that promote technology transfers by permitting agencies to authorize Government-operated laboratories to enter into cooperative research and development arrangements or licensing agreements with the private sector, subject to statutory or agency imposed conditions. The amendments also provide needed incentives

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to encourage laboratories and their scientists to examine how the results of projects funded to meet Federal needs might be adapted to commercial uses. It does this by permitting the laboratories to accept resources from the private sector under cooperative arrangements and by assuring laboratory scientists a percentage of the royalties resulting from their inventions.

From its beginning, the Administration has been striving to increase American innovation by decentralizing the management of technology coming out of Federally supported programs. The Administration's policy is widely supported in the private sector. It is viewed by state and local governments as a centerpiece of local economic development. In order to take full advantage of this unique opportunity to broaden the U. S. technology base, the department must now move forcefully to implement the President's policy.

Within the Department of Commerce the technology transfer function contained in this new Act are the programmatic responsibility of the Under Secretary for Economic Affairs. Accordingly, as a first step in implementing the Technology Transfer Act of 1986, the additional agency level and Government-wide coordinating authorities vested in you by these new amendments to the Stevenson-Wydler Act should be delegated to the Under Secretary for Economic Affairs.

When this delegation has been made, we will create a DoC committee to implement the Technology Transfer Act of 1986, of all interested Departmental units in order to expedite implementation within the Department. The committee would undertake as a primary task the further delegation of the cooperative arrangement and licensing authorities to Commerce laboratories under appropriate conditions.

RECOMMENDATIONS

1. I recommend that you delegate the authorities and responsibilities given you under these new amendments to the Stevenson-Wydler Act to the Under Secretary for Economic Affairs. (Attached at tab A is a summary of the authorities to be delegated to the Under Secretary for Economic Affairs. Also attached at tab B is a copy of Public Law 99-502, with the new authorities to be delegated underlined in red). If you agree with this proposed delegation, we will coordinate with the Assistant Secretary for Administration to amend the appropriate Departmental Orders.

| DECISION / | | | |
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| 2. | Under Secreta | ry for | oproval of the e Economic Affai echnology Transf | irs of | a DoC | committe | |
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2.

COORDINATING AUTHORITIES CREATED BY P. L. 99-502

I. Government-wide Coordinating Authority Assigned to the Commerce Department by P. L. 99-502

Section 10(q)(1)

The Secretary, in consultation with other Federal agencies, may--

- (A) make available to interested agencies the expertise of the Department of Commerce regarding the commercical potential of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;
- (B) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and
- (C) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development programs and projects.

Section 10(q)(2)

Two years after the date of the enactment of this subsection and every two years thereafter, the Secretary shall submit a summary report to the President and the Congress on the use by the agencies and the Secretary of the authorities specified in the Act...

Section 10(a)(3)

Not later than one year after the date of the enactment of the Federal Technology Transfer Act of 1986, the Secretary shall submit to the President and the Congress a report regarding—

- (A) any copyright provisions or other types of barriers which tend to restrict or limit the transfer of federally funded computer software to the private sector and to State and local governments, and agencies of such State and local governments; and
 - (B) the feasibility and cost of compiling and maintaining a current and comprehensive inventory of all federally funded training software.

II. Agency-level Coordinating Activities Created by P. L. 99-502

A. Cooperative Agreements

Section 11(a)

Each Federal agency may permit the director of any of its Government-operated Federal laboratories—

(1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section)..., and

(2) to negotiate licensing agreements...

Section 11(c)(1)

A federal agency may issue regulations on suitable procedures for implementing the provisions of this section...

Section 11(c)(3)(A)

Any agency using the authority given it under subsection (a) shall review employee standards of conduct for resolving potential conflicts of interest...

Section 11(c)(3)(B)

If...an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.

Section 11(c)(5)(A)

If the head of the agency...desires an opportunity to disapprove or require the modification of any such agreement, the agreement shall provide a 30-day period within which such action must be taken beginning on the date the agreement is presented to him or her by the head of the laboratory concerned.

Section 11(c)(5)(B)

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In any case in which the head of an agency... disapproves or requires the modification of an agreement..., the head of the agency...shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

B. Awards Program

Section 12

The head of each Federal agency that is making expenditures at a rate of more than \$50,000,000 per fiscal year for research and development in its Government-operated laboratories shall...develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for--

- (1) inventions, innovations, or other outstanding scientific or technological contributions of value to the United States due to commercial applications or due to contributions to missions of the Federal agency or the Federal Government, or
- (2) exemplary activities that promote the domestic transfer of science and technology development within the Federal Government and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.

C. Distribution of Royalty Income

Section 13(a)(1)

Except as provided in paragraphs (2) and (4), any royalties...received by a Federal agency from the licensing or assignment of inventions...shall be disposed of as follows:

- (A) (i) The head of the agency...shall pay at least 15 percent of the royalties...to the inventor....This clause shall take effect on the date of the enactment of this section unless the agency publishes a notice in the Federal Register within 90 days of such date indicating its election to file a Notice of Proposed Rulemaking pursuant to clause (ii).
- (A) (ii) An agency may promulgate... regulations providing for an alternative program for sharing royalties with inventors...

Section 13(a)(1)(A)(iii)

Any agency that has published its intention to promulgate regulations under clause (ii) may elect not to pay inventors under clause (i) until the expiration of two years after the date of the enactment of this Act or until the date of the promulgation of such regulations, whichever is earlier. If an agency makes such an election and after two years the regulations have not been promulgated, the agency shall make payments (in accordance with clause (i)) of at least 15 percent of the royalties involved, retroactive to the date of the enactment of this Act. If promulgation of the regulations occurs within two years after the date of the enactment of this Act, payments shall be made in accordance with such regulations, retroactive to the date of the enactment of this Act. The agency shall retain its royalties until the inventor's portion is paid under either clause (i) or (ii)...

Section 13(a)(1)(B)

The balance of the royalties...shall be transferred by the agency to its Government-operated laboratories, with the majority share of the royalties... going to the laboratory where the invention occurred...

Section 13(a)(2)

If, after payments to inventors under paragraph (1), the royalties received by an agency in any fiscal year exceed 5 percent of the budget of the Government-operated laboratories of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated for the purposes described in...paragraph (1)(B) during that fiscal year or the succeeding fiscal year. Any funds not so used or obligated shall be paid into the Treasury of the United States.

Section 13(a)(4)

A Federal agency receiving royalties...as a result of invention management services performed for another Federal agency or laboratory...shall retain such royalties...to the extent required to offset the payment of royalties to inventors under...paragraph 1(A), costs and expenses incurred under clause (i) of paragraph (1)(B), and the cost of foreign patenting....All royalties...remaining after payment of... royalties, costs, and expenses... shall be transferred to the agency for which the services were performed...

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D. Record Keeping

Section 11(c)(6)

Each agency shall maintain a record of all agreements entered into under this section.

Section 13(c)(1)

In making their annual budget submissions Federal agencies shall submit...summaries of the amount of royalties...received and expenditures made... under this section.

E. Federal Laboratory Consortium

Section 10(e)(1)

There is hereby established the Federal Laboratory Consortium for Technology Transfer...which, in cooperation with Federal laboratories and the private sector, shall—

(E) utilize...the expertise and services of...the Department of Commerce..., as necessary.

Section 10(e)(2)

... The representatives to the Consortium shall include... a representative appointed from each Federal agency with one or more member laboratories.

Section 10(e)(7)(C)

The heads of Federal agencies...may provide such additional support for operations of the Consortium as they deem appropriate.



UNITED STATES DEPARTMENT OF COMN Associate Under Secretary for Economic Affairs

Washington, D.C. 20230

(202) 377-3708

28 JAN 1988

Mr. Niels Reimers
Director, Office of Technology
Licensing
350 Cambridge Avenue, Suite 250
Palo Alto, California 94306

Dear Mr. Reimers:

Thank you for your January 12 letter regarding exceptional circumstance determinations under P. L. 96-517 as amended by P.L. 98-620. As you clearly pointed out in your letter it is the intention of the Congress and the Administration that the exceptional circumstance clauses of the law be used only when absolutely necessary to "better promote the policy and objectives" of the law.

There are four instances when an agency may take title to an invention under the Act:

- When the contractor is not located in the U.S. or has a place of business here and is subject to the control of a foreign government;
- o in exceptional circumstances when the agency can demonstrate that by taking title it will "better promote the policy and objectives of this chapter";
- o when it is determined that the ownership is necessary to protect the security of foreign or counter intelligence activities; or
- o If the funding agreement involves a Department of Energy Government-owned, contractor-operated (GOCO) laboratory primarily dedicated to naval nuclear propulsion or weapons related programs.

If the situation in which you are involved falls under the second category of exceptional circumstance, the agency must assume a significant burden of proof outlined in this Department's implementing regulations 37 CFR Part 401.3e and Section 202 of Title 35, United States Code. The Department of Commerce also has a role in reviewing agency determinations to ensure they are consistent to the policy and objectives of this Chapter. Contractors have the right to appeal for an administrative review of such determinations which are outlined in 37 CFR Part 401.4.

I am quite troubled to learn that agencies are attempting to place broad categories of technologies under exceptional circumstance provisions. While I cannot make a judgment on the contract in which you are now involved, the Department has been informed that other universities are being asked to accept similar provisions. The Department of Commerce, as a result of a request to the Secretary by Senator Domenici and Congressman Bustamante, is now reviewing a number of these contracts. use of exceptional circumstance was intended to be just that -exceptional. Public Law 96-517 as amended, and the President's Executive Order 12591 is the centerpiece of the Administration's technology transfer policy. If contractors are asked to accept broad categories of technologies as falling under the exceptional circumstance provisions as a condition for government grants and contracts, there is a potential to undo the impact of these policies.

I appreciate your contacting my office, and hope you will keep us advised as to the outcome.

Joseph Allen

Adting Director, Office of Federal Technology Management

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OFFICE OF TECHNOLOGY LICENSING 350 Cambridge Avenue, Suite 250 Pale Alto, California 94306

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January 12, 1988

Mr. Joseph Allen
Acting Director, Federal Technology
Management Policy Division
Office of Productivity,
Technology and Innovation
Department of Commerce
Room H4837
Washington, DC 20230

Re: Exceptional Circumstance Determinations Under Public Law 96-517

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Mr. Joseph Allen January 12, 1988 Page TWO

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Very truly yours,

Neil Kum

Miels Reimers Director

MIRIKLA

UNITED STATES DEPARTMENT OF COMMERCE Associate Under Secretary for Economic Affairs

Washington, D.C. 20230

(202) 377-3708

DRAFT

Mr. Niels Reimers, Director Office of Technology Licensing 350 Cambridge Avenue, Suite 250 Palo Alto, California 94306

Dear Mr. Reimers:

Thank you for your January 12th letter regarding exceptional circumstances determinations under Public Law 96-517 as amended by Public Law 98-620. You correctly point out that generally nonprofit contractors have "first option" to title in inventions developed under government funding.

However, the Department of Energy (DoE) has in accordance with 35 U.S.C. 202(b)(1) made a Determination of Exceptional Circumstances in three technology areas:

- Storage and disposal of civilian high-level nuclear waste and spent fuel;
- 2. Uranium enrichment programs; and
- 3. Classified technology and unclassified but sensitive technology under Section 148 of the Atomics Energy Act of 1954, as amended, or DoD Directive 5230.25.

The Congress, in enacting Sections 202(b)(4) and 203(2) of Title 35 U.S.C. has provided a contractor with a right to appeal when "...it believes that a determination is contrary to the policies and objectives of this Chapter [18] or constitutes an abuse of discretion by the agency...."

Section 203(2) along with this Department's regulations (37 CFR Part 401) at Section 401.4 (attached) provide you with the right to an administrative review of a determination made by an agency under 35 U.S.C. 202.

DRAFT

The appeal should be made to the head of the Agency (DoE) or his/her designee for a decision. If the decision is unfavorable, the contractor may file a petition within 60 days after the decision is made to the U.S. Court of Claims.

I hope this information is helpful.

Sincerely,

Joseph Allen

REDUCING THE COST OF AGENCY PATENT OPERATIONS

1. ISSUE

What can be done to reduce the patent costs of the agencies?

DISCUSSION

The Federal Government obtains about 1000 U. S. patents a year, or about 1% of all issued. Three agencies, DOD, NASA, and Energy obtain most of these patents. There are opportunities for significant cost reduction in these three agencies that would also lead to increased commercial use of Federally developed technology to benefit the economy.

The principle costs are for:

- a. Staff, patent attorneys, and support. While most departments have from one to three patent attorneys, these three agencies together employ about 200.
- b. Patent Office charges for filing and maintaining active patents. These have recently been increased to \$3200 for full coverage to support the Patent Office through user fees.
- c. Payments to private sector patent attorneys to supplement agency staff.

RECOMMENDATIONS

Each of the following recommendations will reduce the costs of Government patent operations while protecting the Government's right to use inventions it has funded.

a. Allow nonprofit organizations that are contract operators of

Government laboratories to own inventions. P. L. 96-517 and OMB

Circular A-124 require agencies to allow small business and

nonprofit organizations to own inventions. An exception is provided that allows agencies to own inventions made in GOCOs. Energy in particular, has insisted on owning inventions that come from its National labs. This practice was cited in a recent—Energy Research Advisory Board report as reducing the benefits that come from the labs, many of which are operated by universities or other nonprofits. Each agency has authority to allow nonprofit GOCO operators to own inventions. In Energy's case, this would significantly reduce agency patent costs, while leaving inventions with the organizations best positioned to exploit them.

- b. Reverse NASA and Energy statutes that require Government ownership of contractor inventions unless waivers are granted. Although the Government is moving toward contractor ownership of inventions, the Statutes of Energy and NASA require Government ownership as a normal mode. Reversing these laws would remove the need for case-by-case determinations and the attendant staff requirements.
- c. Implement the President's Patent Policy Memorandum through a single patent ownership clause based on A-124 to be used with all R&D contractors. The President's Memorandum of February 18, 1983 requires agencies to allow all R&D contractors to own inventions under the same or substantially the same policy as P. L. 96-517 extends to small business and nonprofit organizations. Information from several agencies and universities indicates that the number of inventions reported has increased as a direct result of A-124 in spite of lower R&D funding. If the standard A-124 clause were extended to all contractors through the Federal Acquisition

Regulation, there would be a substantial reduction in complexity and patent staffs of all three agencies. The draft FAR patent part, which was finally withdrawn at the direction of the Vice President, was drafted by patent attorneys from DOD, NASA, and Energy. It went in the opposite direction by requiring increased complexity and patent attorney involvement.

- d. <u>Support legislation for statutory invention disclosures</u>. Some inventions come from Federal employees working in Government labs. S.1538 would provide a low cost technique for protecting the Government's interest in employee inventions that have little commercial potential. This Bill has good chances of passage and should be supported by the Administration.
- e. Apply A-76 to routine patent attorney functions such as filing applications. Rather than maintaining highly paid patent attorneys to perform routine operations such as filing patent applications, there would be savings from calling on private sector attorneys as needed.

IMPACT

These recommendations will lead to:

- a. Significant tangible reductions in the cost of DOD, NASA, and Energy patent operations.
- b. Improved relations with all R&D contractors that are not now operating under A-124. This can mean lower procurement costs since more firms will be interested in contracts that give them clear, hassle-free title to inventions.

c. Greater commercial use of Government-funded technology to create new products, jobs, and perhaps industries.

Outside of the patent staffs of DOD, NASA, and Energy, there is wide agreement among the other agencies, the private sector, and Presidential advisory committees with these recommendations and the results they will achieve.

Department of Energy Patent Operations Costs

- 1. <u>Current Costs</u>: How many patent attorneys does DOE employ? Indicate the FY 83 patent related costs for Federal staff, Patent Office -- charges, outside patent attorneys, GOCO patent attorneys and other.
- 2. Patents: In FY 83, how many invention reports were received, how many patent applications were filed and how many patents were received? Please break out these numbers by invention source; e.g. Federal employees, nonprofit GOCO operators, small business and nonprofit organizations (A-124) and other contractors. How many of these applications were filed for procurement protection and how many for technology transfer. How many patents were licensed for commercial use under exclusive licenses in FY 83?
- 3. GOCOs: What cost reduction could be achieved if the nonprofit operators of Government-owned labs were allowed to own inventions on the same terms as all other nonprofit organizations are treated under OMB Circular No. A-124? Include costs of ownership waiver processing and contractor surveillance.
- 4. Other Contractors: What further reductions could be achieved if this same A-124 policy and clause were extended to all R&D contractors? Include costs of contractor surveillance. If there are legal or other constraints preventing use of A-124 for all contractors, what can the agency do to remove them?
- 5. OMB Circular No. A-76: Which elements of the patent function are scheduled for review in accordance with A-76?

NASA Patent Operations Costs

- 1. <u>Current Costs</u>: How many patent attorneys does NASA employ? Indicate the FY 83 patent related costs for staff, Patent Office charges, __ outside patent attorneys, and other.
- 2. Patents: In FY 83, how many invention reports were received, how many patent applications were filed and how many patents were received? Please break out these numbers by invention source; e.g. Federal employees, nonproft GOCO operators, small business and nonprofit organizations (A-124), and other contractors. How many of these applications were filed for procurement protection and how many for technology transfer? How many patents were licensed for commercial use under exclusive licenses in FY 83?
- 3. Contractor patents: What cost-reductions could be achieved if the patent policies and clause of A-124 were extended to all R&D contractors? Include costs of contractor surveillance. If there are legal or other constraints preventing use of A-124 for all contractors, what can the agency do to remove them?
- 3. OMB Circular No. A-76: Which elements of the patent function are scheduled for review in accordance with A-76?

Department of Defense Patent Operations Costs

- 1. <u>Current costs</u>: How many patent attorneys do DOD and the three services employ? Indicate the FY 83 patent related costs for staff, Patent Office charges, outside patent attorneys, and other.
- 2. Patents: In FY 83, for each service, how many invention reports were received, how many applications were filed, and how many patents were received? Please break out these numbers by invention source; e.g. Federal employees, nonproft GOCO operators, small business and nonprofit organizations (A-124), and other contractors. How many of these applications were filed for procurement protection and how many for technology transfer? How many patents were licensed for commercial use under exclusive licenses in FY 83?
- 3. <u>Size of service patent staffs</u>: Why is there such a difference in the size of the three services' staffs in relation to their R&D budgets?
- 4. Contractor patents: What cost reductions could be achieved (by service) if the patent policies and clause of A-124 were extended to all R&D contractors? Include costs of contractor surveillance. If there are any legal or other constraints preventing use of A-124 for all contractors, what can the agency do to remove them?
- 5. Federal employee inventions: What savings can be expected through use of "statutory invention disclosures" as would be authorized in S.1538? Include staff and filing charge reductions.
- 6. OMB Circular No. A-76: Which elements of the patent function are scheduled for review in accordance with A-76?

unnecessary duplication of special service functions; and to authorize all departments and agencies of the executive branch of the Federal Government which do not have such authority to provide reimbursable specialized or technical services to State and local governments.

The provision of technical expertise to State and local governments under this act rests on the assumption that these goods and services cannot be furnished through ordinary business channels. As stated in Title III, Sec. 302:

. . . such services shall include only those which the Director of the Bureau of the Budget [now the Office of Management and Budget] through rules and regulations determines Federal departments and agencies have special competence to provide. Such rules and regulations shall be consistent with and in furtherance of the Government's policy of relying on the private enterprise system to provide those services which are reasonably and expeditiously available through ordinary business channels.

Legislative History

January 26, 1967—S. 698 introduced (Government Operations). July 2, 1968—Senate report: 1456 to accompany S. 698.

July 23, 1968—Companion bill: H.R. 18826, introduced (Government Operations).

July 29, 1968—S. 698 passed Senate after adoption of committee amendments.

August 2, 1968—House report: 1845 to accompany H.R. 18826. September 15, 1968—S. 698 passed House amended in lieu of H.R. 18826.

October 1, 1968—House agreed to conference report.

October 4, 1968—Senate agreed to conference report.

October 16, 1968—Measure signed into law by the President.

Military Procurement Authorization Act of 1969/Public Law 91-121 (S. 2546) November 19, 1969

Military Procurement Authorization Act of 1970/Public Law 91-441 (H.R. 17128) October 7, 1970

Description.—Title II, Section 203 of the Military Procurement Act of 1969 authorizing funding for the Department of Defense, provides:

None of the funds authorized to be appropriated by the act may be used to carry out any research project or study unless such project or study has a direct and apparent relationship to a specific military function or operation.

Title II, Section 204 of the Military Procurement Authorization Act of 1970 contained similar but not identical language:

None of the funds authorized to be appropriated to the Department of Defense by this or any other act may be used to finance any research project or study unless such project has, in the opinion of the Secretary of Defense, a potential relationship to a military function or operation.

Implications.—The Department of Defense, which is responsible for approximately half the Federal R&D budget, asserts that it is constrained in the application of DOD technology to meet State and local needs by the provisions of Public Law 91–121, later modified by Public Law 91–441. However, the history of the two bills indicates that the intention of Congress was not to entirely restrict non-defense oriented research and development activities in military laboratories. After Public Law 91–121 was enacted, the Department of Defense

terminated various projects which did not appear to have "a direct and apparent relationship" to a military operation. The latter bill modified the restriction, limiting the funding of projects to those determined by the Secretary of Defense to have a "potential relationship" to the defense endeavor.

The general interpretation of the legislation and the discussion concerning the modification of the original language of the restriction is that technology transfer efforts are valid provided they do not interfere with the primary mission activities of the Department of Defense and provided they are furnished on a cost-reimbursable basis. These endeavors are viewed as salient to the support of Government and thus strengthen our national defense. The practical guideline which has been followed in the past few years is that spending for nondefense-specific research and development by DOD be limited to 3 percent of the total funds.

Uncertainty has surrounded the issue of whether the so-called Mansfield Amendment to the Military Procurement Authorization Act continues to be valid. This question was addressed in a report written by David R. Siddall, Legislative Attorney, American Law Division, of the Congressional Research Service, dated March 16, 1978, which is included verbatim:

VALIDITY OF PUBLIC LAW 91-441 SECTION 204, THE MODIFIED "MANSFIELD AMENDMENT"

In 1969 Senator Mansfield proposed and the Congress passed an amendment to the military procurement authorization law for fiscal year 1970 which prohibited funds authorized by that act from being used to carry out research projects or studies not having "a direct and apparent relationship to a specific military function or operation." Public Law 91-121 & 204 83 Stat. 206

or studies not having "a direct and apparent relationship to a specific military function or operation." Public Law 91-121, § 204, 83 Stat. 206.

In 1970 the authorization bill for 1971 (H.R. 17123) was passed by the House without any similar amendment being included. The Senate Armed Services Committee recommended that the provision be included in the bill without change "in order to provide the same restrictions on research and development funds for fiscal year 1971." Senate Report 91-1016 at pp. 99-100. On the Senate floor, this Committee amendment to H.R. 17123 was considered as part of an amendment proposed by Senator McIntyre to add a section expressing the sense of Congress that funds for the National Science Foundation should be increased. 116 Congressional Record 30367. The Amendment unanimously passed the Senate. H.R. 17123 therefore went to conference containing a Senate-passed section 204 with language identical to the Mansfield Amendment, which was section 203 of the immediately preceding military procurement authorization act (Public Law 91-121).

In Conference the language of the Senate-passed section 204 was modified from the original provision requiring "a direct and apparent relationship to a specific military function or operation" to a requirement that the Secretary of Defense determine the existence of "a potential relationship to a military function or operation." A second change to the section altered the language so that instead of the provision applying "to funds authorized to be appropriated by this Act," the provision was made applicable to "funds authorized to be appropriated to the Department of Defense by this or any other Act" (emphasis added). The question presented is whether this second change, providing for the section to be applicable to "any other" act, is permanent law applicable to all subsequent Defense Department funds for research projects and studies.

The original version which the Senate placed in H.R. 17123 specifically applied only to funds authorized by the Act. The language was specifically changed in conference to include "any other act." There was no comment concerning this change in the Conference Report on the bill (House Report 91-1473), nor in debate on the House floor.

In the Senate, however, this change in language was discussed. 116 Congressional Record 34585-86. Senator Mansfield, questioning whether the addition of "any other act" would include the previous year's Act, queried Senator Stennis as to whether the "prohibition is prospective only, and in no way retroactive to up the

[&]quot; GAO Report. Means for Increasing the Use of Defense Technology for Urgent Public Problems."p. 23-24.

standards required last year in the funding research." Senator Stennis' reply, made after consideration of the issue, was that the section "acts prospectively only and will not affect funds for fiscal year 1970, the fiscal year just closed, funds that have not been expended." Senator Mansfield later in the same discussion restated the agreed interpretation that "its application, if any, will be under the terms laid down by future appropriations acts."

The conferees specifically removed language from this section which would have limited its application to funds authorized by the Act itself. Language was added to make the section applicable to "any other Act." This language was agreed upon by the conferees after spending "... an awful lot of time determining the proper course of action. ... "(Rep. Rivers, 116 Congressional Record 34152 col. 3) We therefore conclude that section 204 of Public Law 91-441 continues in force until repealed or amended and its provisions are applicable to all Defense Department funds used to finance research projects and studies.

Intergovernmental Personnel Act of 1970/Public Law 91-648 (S. 11) January 8, 1971

Description.—The Intergovernmental Personnel Act of 1970 was developed to strengthen the ability of State and local governments to deal with the problems under their jurisdiction. The various needs were expressed in House Report 91-1722 to accompany S. 11:

Growth in population and increasing urbanization of the United States are greatly extending State and local government responsibilities. Citizens are demanding more effective government, better education for their children, more and better roads and public transit facilities, clean and plentiful water, unpolluted air, better police and fire protection, more and better recreation facilities, more and better hospitals, better facilities for the treatment of mental illness, programs for safeguarding economic security, and many other services. New and urgent urban problems have developed. . . .

These mushrooming demands generally have been beyond the financial capabilities of the State and local governments to meet. Accordingly, there has been

a continually increasing need for Federal aid . . .

The need of State and local governments for substantial financial assistance is only one of the main facets of the overall problem of meeting the demands of our citizens and of making our population centers fit places to live. Also critical is the fact that many of the States and local governments, now and in the fore-seeable future, lack the highly qualified administrative, professional, and technical personnel in the numbers required to plan, innovate, organize, and execute the wide variety of necessary programs.

This legislation created a program of grants and training assistance designed to give State and local personnel the administrative, professional, and technical skills vital to governmental operation. Intergovernmental cooperation in grants administration is fostered through the establishment of an Advisory Council on Intergovernmental Personnel Policy appointed by the President. Not to exceed 15 members, the Council acts to advise the President on programs, problems, and policies concerning public administration, State and local capacity building, training, and intergovernmental assignment of personnel.

Grants are made available to State and local jurisdictions for programs to develop and institute improved personnel administration methods. State and local employees may be permitted to participate in Federal training programs under the provisions of this law and funds are designated for nonnational jurisdictions to ". . . train and educate . . . professional, administrative and technical employees and officials." Title IV provides for the temporary assignment of personnel from States and localities to the Federal Government and vice-versa.

Legislative History

January 15, 1969—S. 11 introduced (Government Operations).
January 30, 1969—Companion bills: H.R. 5546, introduced (Education and Labor).

October 21, 1969—Senate report: 91-489 to accompany S. 11. October 27, 1969—Senate passed S. 11 with committee amendments. December 14, 1970—House report: 91-1733 to accompany S. 11.

December 21, 1970—House passed S. 11 amended.

December 22, 1970—Senate agreed to House amendments. January 8, 1971—Measure signed into law by the President.

Additional Relevant Legislation Concerning the IPA.—The Treasury, Postal Service, and General Government Appropriation Act of 1978 (Public Law 95-81) approved July 31, 1977, appropriated an additional \$20 million under the Intergovernmental Personnel Act of 1970 for grants for State and local personnel and management improvements.

National Science and Technology Policy, Organization and Priorities Act of 1976/Public Law 94-282 (H.R. 10230) May 11, 1976

Description.—Title I, section 102(a)(5) of the National Science and Technology Policy, Organization, and Priorities Act of 1976 enunciated as a principle to be included in a national policy for science and technology:

The development and maintenance of a solid base for science and technology in the United States, including: (a) strong participation of and cooperative relationships with State and local governments . . .; (b) the maintenance and strengthening of diversified scientific and technological capabilities in Government . . .; (c) effective management and dissemination of scientific and technological information . . .; and (e) promotion of increased public understanding of science and technology.

This section underscores the need to reflect the views of State and local government in policy formulation. It states that scientific and technological activities which encompass shared interests with Federal, State, and local jurisdictions should be identified and "... cooperative relationships should be established which encourage the appropriate sharing of science and technology decisionmaking, funding

support, and program planning and execution."

Title II, section 205(b) created the Intergovernmental Science, Engineering, and Technology Advisory Panel to assist the Director of the Office of Science and Technology Policy (also established by this act) in identifying and promoting Federal programs to increase State, local, and regional utilization of federally-funded research and development. Situated within the Executive Office of the President, the Panel has the responsibility for determining existing and potential mechanisms for incorporating the needs of State and local jurisdictions in the decision-making processes of the Federal departments and agencies. (See discussion on the Intergovernmental Science, Engineering and Technology Advisory Panel for a complete description of the Panel and its activities.)

Legislative History

(For a full discussion on the generation of the Intergovernmental Advisory Panel concept see the discussion on ISETAP).

OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION U.S. DEPARTMENT OF COMMERCE

Organizational Goals and Activities

The Office of Productivity, Technology, and Innovation (OPTI) promotes the <u>productivity and international competitiveness</u> of U.S. industry by encouraging the development and application of emerging technology and by other productivity enhancing techniques. No other U.S. Government unit has this as its sole mission.

OPTI's <u>four goal areas</u> are: technological innovation and related business development; flexible automation; reskilling of management and the general workforce; and productivity and quality enhancement.

OPTI uses <u>four mechanisms</u> to accomplish these goals: removal of government policy or regulatory barriers; development of incentives; provision of strategic information; and provision of catalytic services. All of OPTI activities fall into one or more of the categories made below. A few of OPTI's activities are shown as examples:

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| Barrier Removal | Antitrust Law Liberalization for R&D | Antitrust Law Liberalization for Shared Mfg. | Technical Assistance Re. Proposed Legislation | Metric Con- version Assis- tance | |
| Incentives | law changes; lab | Linking FCIM to State Econ. Dev.; DoD Procurement | Training; Publi- | DoC-Wide Task Forces Re. DoC Services to Business | |
| Information | Technology Assessments; Business Analysis Tools | Manual on FCIM Decisionmaking | Successes of Interactive Videodisc Tech. | Productivity Information, Enhancement Techniques | |
| Catalytic Services | Innovative R&D | State Workshops; DoD Mfg. Initiative; Networking | Conference on Advanced Edu- cation Tech- nology | Workshops | |

Background

OPTI's mission has a special urgency. Global forces of change are continually restructuring U.S. and world economies. The most important force of change is the accelerating global explosion of new technology that has generated about 90% of all scientific knowledge in just the last 30 years, and that will double again by the end of the century. Product and process life cycles will collapse to less than five years. Equipment, facilities, and human skills are becoming prematurely obsolete. Another force is the impact of lesser developed countries (now comprising some 85% of the world population) on the industrial scene. They are capturing shares of existing global markets using low cost labor and natural A third force of change is the "targeting" by other countries of existing U.S. markets and, increasingly, new technologies which have a multitude of business applications. strategy involves government subsidized, vertically-integrated consortia designed to capture global market share with predatory pricing.

U.S. industrial survival in this hyper-competitive global marketplace will depend increasingly on leading edge technology, and on accelerated investments in flexible, computer-integrated manufacturing systems that can continuously adapt production to changing market needs and neutralize low cost labor advantages.

It is not enough for the U.S. to <u>generate</u> and acquire new technology through R&D. It must rapidly translate that technology into new products and processes, and effectively penetrate thousands of different market niches, and on a scale aimed at capturing sizable shares of the global market. Reskilling of our workforce, especially business managers, must go hand in hand with this continuous process of industrial restructuring, as must constant attention by business managers to opportunities for productivity enhancement.

Many barriers exist to achieving these critical objectives. They include outmoded anticompetitive antitrust laws, the high cost of U.S. capital, destructive product liability laws, dozens of well-intentioned but negative regulatory laws, bureaucratic procedures that need selective modification, and inadequate information for international technology-based business expansion especially by smaller companies. Incentives are needed to increase access to low cost capital for high risk, and encourage long-term investments in advanced technology and automated manufacturing. Also required are strengthened patent (e.g. for U.S. process patents) and copyright laws, faster transfer of federally funded technology into the private sector, and increased use of world technical and patent literature.

Summary of OPTI's Major Programs Since Its Inception in 1981:

- o Industrial Technology Partnerships ... OPTI helped the private sector knit together the varied technical and financial resources of the nation into a more efficient innovation system to create new products and processes. For example, it encouraged the private sector to establish R&D Limited Partnerships (RDLPs), which OPTI helped transform from non-traditional tax shelters into legitimate investment vehicles for tapping new non-government sources of R&D funding (amounting to more than \$3b). Through workshops and publications, OPTI aids the formation of private sector R&D cooperative programs to develop next generation technology. The National Cooperative Research Act of 1984 was an OPTI-inspired initiative. To date, over 60 cooperative ventures have registered under that Act.
- Federal Technology Management Policy ... OPTI helped change Federal laws, regulations, and policies that inhibit the use of important new Federally-funded technologies. The Federal Government funds about half of the \$110 billion spent annually on R&D in the U.S., but too little of the Federal share has been converted by the private sector into new products and/or processes. By modifying Federal invention ownership rules, and encouraging Government laboratory collaborative research with industry and other groups, OPTI has is changing this. For example, new laws were passed (the most recent being the Technology Transfer Act of 1986), and a Presidential Memorandum and an Executive Order were issued.
- o Focal Point for Technology Development and Application Policy ... OPTI works with cabinet policy councils, the President's Science Advisor, and individual Federal agencies on a broad spectrum of issues concerning the development and commercialization of technology.
- o State and Local Government Cooperation ... OPTI provides state and local governments with information and training to help them include technological innovation in their economic growth planning. OPTI's Innovation Data Analysis Center (IDAC) produces comprehensive industry and state economic profiles to support this effort.
- Advanced Management Training and Assistance ... OPTI offers advanced management training in the innovation process and the use of analytical models (e.g. "constraint analysis") to help businesses make more informed decisions on technology projects. The use of special business tools like sensitivity analysis (an OPTI-developed computer software package to quantify the importance of inputs like energy,

labor, materials, to rate of return etc.) is taught. Help is provided in identifying sources of innovation information or services (e.g. incubators, science parks, state government development centers, etc.). OPTI also assists states and the private sector in establishing "shared" flexible manufacturing [FMS] and computer integrated manufacturing [CIM]) production facilities.

- o Metric Conversion Assistance ... To support the voluntary transition to metric usage, OPTI provides policy coordination within the Federal Government and distributes information to businesses on the metric system and its importance to U.S. export objectives. More than 3,500 requests for information are filled annually.
- o <u>Information and Assistance for International Joint Ventures</u>
 ... This is provided to U.S. technology-based businesses in their exploration of international joint venture opportunities. Meetings are held with representatives of foreign nations interested in coventuring with smaller U.S. technology-based firms.
- o <u>Productivity Information</u> ... OPTI operates the Commerce Productivity Center—a national clearinghouse of "best practice" information and techniques for improving productivity and quality. Its library consists of more than 9,000 items from many sources. About 1,000 client requests for information are filled annually.
- O Recognition for Excellence ... The National Medal of Technology was established by Public Law 96-480 (Stevenson-Wydler Act) to recognize individuals or companies for outstanding contributions to technological innovation and manpower. OPTI administers the medal selection Advisory Committee, solicits nominations, and carries out steps leading to these prestigious annual awards by the President.

Assistant Secretary for Productivity, Technology, and Innovation (includes the National Technical Information Services): Dr. D. Bruce Merrifield, 202-377-1984

Director, Office of Productivity, Technology, and Innovation: Dr. Jack Williams, 202-377-1091

Note: A list of about 70 OPTI accomplishments is available upon request.

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unnecessary duplication of special service functions; and to authorize all departments and agencies of the executive branch of the Federal Government which do not have such authority to provide reimbursable specialized or technical services to State and local governments.

The provision of technical expertise to State and local governments under this act rests on the assumption that these goods and services cannot be furnished through ordinary business channels. As stated in Title III, Sec. 302:

. . . such services shall include only those which the Director of the Bureau of the Budget [now the Office of Management and Budget] through rules and regulations determines Federal departments and agencies have special competence to provide. Such rules and regulations shall be consistent with and in furtherance of the Government's policy of relying on the private enterprise system to provide those services which are reasonably and expeditiously available through ordinary business channels.

Legislative History

January 26, 1967—S. 698 introduced (Government Operations). July 2, 1968—Senate report: 1456 to accompany S. 698.

July 23, 1968—Companion bill: H.R. 18826, introduced (Government Operations).

July 29, 1968—S. 698 passed Senate after adoption of committee amendments.

August 2, 1968—House report: 1845 to accompany H.R. 18826. September 15, 1968—S. 698 passed House amended in lieu of H.R. 18826.

October 1, 1968—House agreed to conference report.

October 4, 1968—Senate agreed to conference report.

October 16, 1968—Measure signed into law by the President.

Military Procurement Authorization Act of 1969/Public Law 91-121 (S. 2546) November 19, 1969

Military Procurement Authorization Act of 1970/Public Law 91-441 (H.R. 17123) October 7, 1970

Description.—Title II, Section 203 of the Military Procurement Act of 1969 authorizing funding for the Department of Defense, provides:

None of the funds authorized to be appropriated by the act may be used to carry out any research project or study unless such project or study has a direct and apparent relationship to a specific military function or operation.

Title II, Section 204 of the Military Procurement Authorization Act of 1970 contained similar but not identical language:

None of the funds authorized to be appropriated to the Department of Defense by this or any other act may be used to finance any research project or study unless such project has, in the opinion of the Secretary of Defense, a potential relationship to a military function or operation.

Implications.—The Department of Defense, which is responsible for approximately half the Federal R&D budget, asserts that it is constrained in the application of DOD technology to meet State and local needs by the provisions of Public Law 91-121, later modified by Public Law 91-441. However, the history of the two bills indicates that the intention of Congress was not to entirely restrict non-defense oriented research and development activities in military laboratories. After Public Law 91-121 was enacted, the Department of Defense

terminated various projects which did not appear to have "a direct and apparent relationship" to a military operation. The latter bill modified the restriction, limiting the funding of projects to those determined by the Secretary of Defense to have a "potential relationship" to the defense endeavor.

The general interpretation of the legislation and the discussion concerning the modification of the original language of the restriction is that technology transfer efforts are valid provided they do not interfere with the primary mission activities of the Department of Defense and provided they are furnished on a cost-reimbursable basis. These endeavors are viewed as salient to the support of Government and thus strengthen our national defense. The practical guideline which has been followed in the past few years is that spending for nondefense-specific research and development by DOD be limited to 3 percent of the total funds.

Uncertainty has surrounded the issue of whether the so-called Mansfield Amendment to the Military Procurement Authorization Act continues to be valid. This question was addressed in a report written by David R. Siddall, Legislative Attorney, American Law Division, of the Congressional Research Service, dated March 16, 1978, which is included verbatim:

VALIDITY OF PUBLIC LAW 91-441 SECTION 204, THE MODIFIED "MANSFIELD AMENDMENT"

In 1969 Senator Mansfield proposed and the Congress passed an amendment to the military procurement authorization law for fiscal year 1970 which prohibited funds authorized by that act from being used to carry out research projects or studies not having "a direct and apparent relationship to a specific military function or operation." Public Law 91-121, § 204, 83 Stat. 206.

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In Conference the language of the Senate-passed section 204 was modified from the original provision requiring "a direct and apparent relationship to a specific military function or operation" to a requirement that the Secretary of Defense determine the existence of "a potential relationship to a military function or operation." A second change to the section altered the language so that instead of the provision applying "to funds authorized to be appropriated by this Act," the provision was made applicable to "funds authorized to be appropriated to the Department of Defense by this or any other Act" (emphasis added). The question presented is whether this second change, providing for the section to be applicable to "any other" act, is permanent law applicable to all subsequent Defense Department funds for research projects and studies.

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¹² GAO Report. Means for Increasing the Use of Defense Technology for Urgent Public Problems. p. 23-24.

standards required last year in the funding research." Senator Stennis' reply. made after consideration of the issue, was that the section "acts prospectively only and will not affect funds for fiscal year 1970, the fiscal year just closed, funds that have not been expended." Senator Mansfield later in the same discussion restated the agreed interpretation that "its application, if any, will be under the terms laid down by future appropriations acts."

The conferees specifically removed language from this section which would have limited its application to funds authorized by the Act itself. Language was added to make the section applicable to "any other Act." This language was agreed upon by the conferees after spending "... an awful lot of time determining the proper course of action. ..." (Rep. Rivers, 116 Congressional Record 34152 col. 3) We therefore conclude that section 204 of Public Law 91-441 continues in force until repealed or amended and its provisions are applicable to all Defense Department funds used to finance research projects and studies.

Intergovernmental Personnel Act of 1970/Public Law 91-648 (S. 11) January 8, 1971

Description.—The Intergovernmental Personnel Act of 1970 was developed to strengthen the ability of State and local governments to deal with the problems under their jurisdiction. The various needs were expressed in House Report 91-1722 to accompany S. 11:

Growth in population and increasing urbanization of the United States are greatly extending State and local government responsibilities. Citizens are demanding more effective government, better education for their children, more and better roads and public transit facilities, clean and plentiful water, unpolluted air, better police and fire protection, more and better recreation facilities, more and better hospitals, better facilities for the treatment of mental illness, programs for safeguarding economic security, and many other services. New and urgent urban problems have developed.

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a continually increasing need for Federal aid . . .

The need of State and local governments for substantial financial assistance is only one of the main facets of the overall problem of meeting the demands of our citizens and of making our population centers fit places to live. Also critical is the fact that many of the States and local governments, now and in the foreseeable future, lack the highly qualified administrative, professional, and technical personnel in the numbers required to plan, innovate, organize, and execute the wide variety of necessary programs.

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of personnel.

Grants are made available to State and local jurisdictions for programs to develop and institute improved personnel administration methods. State and local employees may be permitted to participate in Federal training programs under the provisions of this law and funds are designated for nonnational jurisdictions to ". . . train and educate . . . professional, administrative and technical employees and officials." Title IV provides for the temporary assignment of personnel from States and localities to the Federal Government and vice-versa.

Legislative History

January 15, 1969-S. 11 introduced (Government Operations). January 30, 1969—Companion bills: H.R. 5546, introduced (Education and Labor).

October 21, 1969—Senate report: 91-489 to accompany S. 11. October 27, 1969—Senate passed S. 11 with committee amendments. December 14, 1970—House report: 91-1733 to accompany S. 11.

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December 22, 1970—Senate agreed to House amendments. January 8, 1971-Measure signed into law by the President.

Additional Relevant Legislation Concerning the IPA .- The Treasury, Postal Service, and General Government Appropriation Act of 1978 (Public Law 95-81) approved July 31, 1977, appropriated an additional \$20 million under the Intergovernmental Personnel Act of 1970 for grants for State and local personnel and management improvements.

National Science and Technology Policy, Organization and Priorities Act of 1976/Public Law 94-282 (H.R. 10230) May 11, 1976

Description.—Title I, section 102(a)(5) of the National Science and Technology Policy, Organization, and Priorities Act of 1976 enunciated as a principle to be included in a national policy for science and technology:

The development and maintenance of a solid base for science and technology in the United States, including: (a) strong participation of and cooperative relationships with State and local governments . . .; (b) the maintenance and strengthening of diversified scientific and technological capabilities in Government . . . ; (c) effective management and dissemination of scientific and technological information . . .; and (e) promotion of increased public understanding of science and technology.

This section underscores the need to reflect the views of State and local government in policy formulation. It states that scientific and technological activities which encompass shared interests with Federal, State, and local jurisdictions should be identified and ". . . cooperative relationships should be established which encourage the appropriate sharing of science and technology decisionmaking, funding

support, and program planning and execution."

Title II, section 205(b) created the Intergovernmental Science, Engineering, and Technology Advisory Panel to assist the Director of the Office of Science and Technology Policy (also established by this act) in identifying and promoting Federal programs to increase State, local, and regional utilization of federally-funded research and development. Situated within the Executive Office of the President, the Panel has the responsibility for determining existing and potential mechanisms for incorporating the needs of State and local jurisdictions in the decision-making processes of the Federal departments and agencies. (See discussion on the Intergovernmental Science, Engineering and Technology Advisory Panel for a complete description of the Panel and its activities.)

Legislative History

(For a full discussion on the generation of the Intergovernmental Advisory Panel concept see the discussion on ISETAP).

CHAPTER 18--PATENT RIGHTS IN INVENTIONS AND RIGHTS TO TECHNOLOGICAL KNOW-HOW MADE WITH FEDERAL ASSISTANCE

- 200. Policy and objective (OMITTED)
- 201. Definitions

As used in this chapter--

- (a) The term "Federal agency" means any executive agency as defined in section 105 of title 5, United States Code, and the military departments as defined by section 102 of title 5, United States Code.
- (b) The term "funding agreement" means any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government. Such term includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under the funding agreement as herein defined.
- (c) The term "contractor" means any person, small business firm, or nonprofit organization that is a party to a funding agreement.
- (d) The term "invention" means any invention or discovery which is or may be patentable or otherwise protectable under this title, or any novel variety of plant which is or may be protectable under the Plant Protection Variety Act (7 U.S.C. 2321 et seq.)
- (e) The term "subject invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement: Provided, That in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act (7 U.S.C. 2041(d)) must also occur during the period of the contract performance.
- (f) The term "practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

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- (g) The term "made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- (h) The term "small business firm" means a small business concern as defined at section 2 of Public Law 85-536 (15 U.S.C. 632) and implementing regulations of athe Administrator of the Small Business Administration.
- (i) The term "nonprofit organization" means universities and other institutions of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) including operators of Government-owned, contractor-operated laboratories; or any nonprofit scientific or educational qualified under a State nonprofit organization statute.
- (i) The term "technological know-how" means knowledge produced or compiled by research, development or engineering that is, or if held in confidence, could become a commercial product or of value in making a commercial product when so designated by a contractor, and which shall after such designation, be exempted from disclosure under subsection 552(a) of title 5 of the United States Code in accordance with subsection 552(b)(2) of title 5.
- (A) The term "writing" means any material written by a contractor or a person other than a nonprofit organization or small business firm that is a party to a funding agreement, that may be protected by copyright in accordance with title 17 of the United States Code.

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202. Disposition of rights

- (a) Each nonprofit organization or small business firm may, within a reasonable time after disclosure as required by paragraph (c)(l) of this section, elect to retain title to any subject invention, and may elect to retain title to and protect any technological know-how, or writing developed under this funding agreement: Provided, However, That a funding agreement may provide otherwise
 - (i) when the contractor is not located in the United States, does not have a place of business located in the United States, or is subject to the control of a foreign government,
 - (ii) in exceptional circumstances when it is determined by the agency that restriction or elimination of the right to retain title to any subject invention will better promote the policy and objectives of this chapter,

- (iii) when it is determined by a Government authority which is authorized by statute or Executive order to conduct foreign intelligence or counter-intelligence activities that the restriction or elimination of the right to retain title to any subject invention is necessary to protect the security of such activities, or
- (iv) when the funding agreement includes the operation of a Government-owned, contractor-operated facility of the Department of Energy primarily dedicated to that Department's naval nuclear propulsion or weapons related programs and all funding agreement limitations under this subparagraph on the contractor's right to elect title to a subject invention are limited to inventions occuring under the above two programs of the Department of Energy.

The rights of the nonprofit organization or small business firm shall be subject to the provisions of paragraph (c) of this section and other provisions of this chapter.

- The rights of the Government under subsection (a) shall not be exercised by a Federal agency unless it first determines that at least one of the conditions identified in clauses (i) through (iii) of subsection (a) exists. Except in the case of subsection (a)(iii), the agency shall file with the Secretary of Commerce, within thirty days after the award of the applicable funding agreement, a copy of such determination. the case of a determination under subsection (a)(ii), the statement shall include an analysis justifying the determination. In the case of determinations applicable to funding agreements with small business firms, copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration. the Secretary of Commerce believes that any individual determination or pattern of determinations is contrary to the policies and objectives of this chapter or otherwise not in conformance with this chapter, the Secretary shall so advise the head of the agency concerned and the Administrator of the Office of Federal Procurement Policy, and recommend corrective actions.
- (2) Whenever the Administrator of the Office of Federal Procureement Policy has determined that one or more Federal agencies are utilizing the authority of clause (i) or (ii) subsection (a) of this section in a manner that is contrary to the policies and objectives of this chapter, the Administrator is authorized to issue regulations describing classes of situations in which agencies may not exercise the authorities of those clauses.
- (3) At lease once each year, the Comptroller General shall transmit a report to the Committees on the Judiciary of the Senate and House of Representatives on the manner in which

this chapter is being implemented by the agencies and on such other aspects of Government patent policies and practices with respect to federally funded inventions as the Comptroller General believes appropriate.

- (4) If the contractor believes that a determination is contrary to the policies and objectives of this chapter or constitutes an abuse of the discretion by the agency, the determination shall be subject to the last paragraph of section 203(2).
- (c) Each funding agreement with a small business firm or nonprofit organization shall contain appropriate provisions to effectuate the following:
- (1) That the contractor disclose each subject invention to the Federal agency within a reasonable time after it becomes known to the contractor personnel responsible for the administration of patent matters, and that the Federal Government may receive title to any subject invention not disclosed to it within such time.
- (2) That the contractor make a written election within two years after disclosure to the Federal agency (or such additional time as may be approved by the Federal agency) whether the contractor will retain title to a subject invention: Provided, That in any case where publication, on sale, or public use, has initiated the one year statutory period in which valid patent protection can still be obtained in the United States, the period for election may be shortened by the Federal agency to a date that is not more than sixty days prior to the end of the statutory period: And provided further, That the Federal Government may receive title to any subject invention in which the contractor does not elect to retain rights or fails to elect rights within such times.
- (3) That a contractor electing rights in a subject invention agrees to file a patent application prior to any statutory bar date that may occur under this title due to publication, on sale, or public use, and shall thereafter file corresponding patent applications in other countries in which it wishes to retain title within reasonable times, and that the Federal Government may receive title to any subject inventions in the United States or other countries in which the contractor has not filed patent applications on the subject invention within such times.
- (4) With respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferrable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world: Provided, That the

funding agreement may provide for such additional rights; including the right to assign or have assigned foreign patent rights in the subject invention, as are determined by the agency as necessary for meeting the obligations of the United States under any treaty, international agreement, arrangement of cooperation, memorandum of understanding, or similar arrangement including military agreement relating to weapons development and production.

- (5) The right of the Federal agency to require periodic reporting on the utilization or efforts at obtaining utilization that are being made by the contractor or his licensees or assignees: Provided, that any such information as well as any information on utilization or efforts at obtaining utilization obtained as part of the proceeding under section 203 of this chapter shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.
- (6) An obligation on the part of the contractor, in the event a United States patent apaplication is filed by or on its behalf or by any assignee of the contractor, to include within the specification of such application and any patent issuing thereon, a statement specifying that the invention was made with Government support and that the Government has certain rights in the invention.
 - (7) In the case of a nonprofit organization,
 - (A) a prohibition upon the assignment of rights to a subject invention in the United States without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions (provided that such assignee shall be subject to the same provisions as the contractor);
 - (B) a requirement that the contractor share royalties with the inventor;
 - (C) except with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, a requirement that the balance of any royalties or income earned by the contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, be utilized for support of scientific research or education;
 - (D) a requirement that, except where it proves infeasible after a reasonable inquiry, in the licensing of subject inventions shall be given to small business firms;

and

- (E) with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, requirements
 - that after payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, 100 percent of the balance of any royalties or income earned and retained by the contractor during any fiscal year up to an amount equal to 5 percent of the annual budget of the facility, shall be used by the contractor for scientific research, development, and education consistent with the research and development mission and objectives of the facility, including activities that increase the licensing potential of other inventions of the facility; provided that if said balance exceeds 5 percent of the annual budget of the facility, that 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent shall be used for the same purposes as described above in this clause; and
 - (ii) that, to the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by contractor employees on location at the facility.
- (8) The requirements of sections 203 and 204 of this chapter.
- (9) That a nonprofit organization may own and protect any writing or technological know-how created under a contract if the contractor, in accordance with regulations authorized under section 206 of this title:
 - (A) delivers or retains for future delivery, and provides the funding Federal agency with the license to use the writing or technological know-how required in the contract, and
 - (B) preserves in confidence and marks any writings or materials containing technological know-how delivered to the funding Federal agency as "technological know-how."
- (d) If a contractor does not elect to retain title to a subject invention in cases subject to this section, the Federal agency may consider and after consultation with the contractor grant requests for retention of rights by the inventor subject to the provisions of this Act and regulations promulgated hereunder.

- (e) In any case when a Federal employee is a coinventor of any invention made under a funding agreement with a nonprofit organization or small business firm, the Federal agency employing such coinventor is authorized to transfer or assign whatever rights it may acquire in the subject invention from its employee to the contractor subject to the conditions set forth in this chapter.
- (f)(1) No funding agreement with a small business firm or nonprofit organization shall contain a provision allowing a Federal agency to require leasing to third parties of inventions owned by the contractor that are not subject inventions unless such provision has been approved by the head of the agency and a written justification has been signed by the head of the agency. Any such provision shall clearly state whether the licensing may be required in connection with the practice of a subject invention, a specifically identified work object, or both. The head of the agency may not delegate authority to approve provisions or sign justifications required by this paragraph.
- (2) A Federal agency shall not require the licensing of third parties under any such provision unless the head of the agency determines that the use of the invention by others is necessary for the practice of a subject invetnion or for the use of a work object of the funding agreement and that such action is necessary to achieve the practical application of the subject invention or work object. Any such determination shall be on the record after an opportunity for an agency hearing. Any action commenced for judicial review of such determination shall be brought within sixty days after notification of such determination.
 - 203. March-in rights (OMITTED)
 - 204. Preference for United States Industry

Notwithstanding any other provision of this chapter, no small business firm or nonprofit organization which receives title to any subject invention and no assignee of any such small business firm or nonprofit organization shall grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the Federal agency under whose funding agreement the invention was made upon a showing by the small business firm, nonprofit organization, or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potenatial licensees that would be

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likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

205. Confidentiality

Federal agencies are authorized to withhold from disclosure to the public information disclosing any inventions in which the Federal Government owns or may own a right, title, or interest (including a nonexclusive license) for a reasonable time in order for a patent application to be filed. Federal agencies shall not be required to release copies of any document which is part of an application for patent filed with the United States Patent and Trademark Office or with any foreign patent office.

206. Uniform clauses and regulations

The Secretary of Commerce may issue regulations which may be made applicable to Federal agencies implementing the provisions of sections 202 through 204 of this chapter and shall establish standard funding agreement provisions required under this chapter. The regulations and the standard funding agreement shall be subject to public comment before their issuance.

- 207. Domestic and foreign protection of federally owned inventions (OMITTED)
- 208. Regulations governing Federal licensing

The Secretary of Commerce is authorized to promulgate regulations specifying the terms and conditions upon which any federally owned invention, other than inventions owned by the Tennessee Valley Authority, may be licensed on a nonexclusive, partially exclusive, or exclusive basis.

- 209. Restrictions on licensing of federally owned inventions
- (a) No Federal agency shall grant any license under a patent or patent application on a federally owned invention unless the person requesting the license has supplied the agency with a plan for development and/or marketing of the invention, except that any such plan may be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.
- (b) A Federal agency shall normally grant the right to use or sell any federally owned invention in the United States only to licensee that agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

- (c)(1) Each Federal agency may grant exclusive or partially exclusive licenses in any invention covered by a federally owned domestic patent or patent application only if, after <u>either</u>.
 - (i) at least one public notice of the availability of the invention for licensing in the Federal Register or the journal established in accordance with section 213 of this title, or
 - (ii) public notice of intent to award a license to a specific intended licensee, and opportunity for filing written objections, it is determined that --
 - (A) the interests of the Federal Government and the public will best be served by the proposed license, in view of the applicant's intentions, plans, and ability to bring the invention to paractial application or otherwise promote the invention's utilization by the public;
 - (B) the desired practical application has not been achieved, or is not likely expeditiously to be achieved, under any nonexclusive license which has been granted, or which may be granted on the invention;
 - (C) exclusive or partially exclusive licensing is a reasonable and necesary incentive to call forth the investment of risk capital and expenditures to bring the invention to practical application or otherwise promote the invention's utilization by the public; and
 - (D) the proposed terms and scope of exclusivity are not greater than reasonably necessary to provide the incentive for bringing the invention to practical application or otherwise promote the invention's utilization by the public.
- (2) A Federal agency shall not grant such exclusive or partially exclusive license under paragraph (1) of this subsection if it determines that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws.
- (3) First preference in the exclusive or partially exclusive licensing of Federally owned inventions shall go to small business firms submitting plans that are determined by the agency to be within the capabilities of the firms and equally likely, if executed, to bring the invention to practical application as any plans submitted by applicants that are not

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small business firms.

- (d) After consideration of whether the interests of the Federal Government or United States industry in foreign commerce will be enhanced, any Federal agency may grant exclusive or partially exclusive licenses in any invention covered by a foreign patent application or patent, after public notice and opportunity for filling written objections, except that a Federal agency shall not grant such exclusive or partially exclusive license if it determines that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the United States in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with antitrust laws.
- (e) Any grant of a license shall contain such terms and conditions as the Federal agency determines appropriate for the protection of th interests of the Federal Government and the public, including provisions for the following;
- (1) periodic reporting on the utilization or efforts at obtaining utilization that are being made by the licensee with particular reference to the plan submitted: Provided, That any such information may be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code;
- (2) the right of the Federal agency to terminate such license in whole or in part if it determines that the licensee is not executing the plan submitted with its request for a license and the licensee cannot otherwise demonstrate to the satisfaction of the Federal agency that it has taken or can be expected to take within a reasonable time, effective steps to achieve practical application of the invention;
- (3) the right of the Federal agency to terminate such license in whole or in part if the licensee is in breach of an agreement obtained pursuant to paragraph (b) of this section; and
- (4) the right of the Federal agency to terminate the license in whole or in part if the agency determines that such action is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license and such requirements are not reasonably satisfied by the licensee.
 - 210. Precedence of chapter (OMITTED)
- 211. Relationship to antitrust laws (OMITTED)

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212. Disposition of rights in educational awards (OMITTED)

213. Journal of inventions and technology

- (a) The Secretary of Commerce shall establish a journal to be published at least four times a year to facilitate invention licensing and technology transfer. The journal shall be self-supporting two years after enactment of this section.
 - (b This journal shall include:
- (1) Announcements of inventions owned by the Government that are available for licensing, with adequate information on the nature and uses of each invention; the types, terms and restrictions on licenses the agency is seeking if determined; and the point of contact for additional information.
- (2) Similar announcements that Government contractors and Federal employees may wish to make of inventions in which the Government has an interest.
- (3) Notices of opportunities for collaboration in research and development activities at Federal laboratories.
 - (c) In addition, this journal may include:
- (1) Announcements of other inventions that individuals or organizations may wish to advertise as available for licensing.
- (2) Announcements of other technology that is available for transfer from any source, such as computer programs.
- (3) Announcements or advertisements of technologies sought by Federal agencies, their laboratories, or other parties.
- (3) Articles that pertain to technology, particularly to and from Federal agencies and laboratries.
- (4) Private sector advertisments related to the subject matter of the journal.
- (d) In establishing this journal, the Secretary of Commerce may:
- (1) Enter into procurement contracts and cooperative arrangements that are not procurement contracts with private sector organizations for producing and disseminating the Journal.
- (2) Provide for inclusion and distribution of all or selected contents of the journal through Government or commercial data base services

(3) Permit Commerce Departmental employees who contribute to establishment of this journal to resign or retire and be employed immediately by a private sector organization involved in producing or disseminating the journal.

SEC 11 COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

- (a) GENERAL AUTHORITY. -- Each Federal agency may permit the director of any of its Government-operated laboratories--
- (1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons (including licensees of inventions owned by the Federal agency); and
- (2) to negotiate licensing agreements under section 207 of title 35, United States Code, or under other authorities for Government-owned inventions of Federal employees that may be voluntarily assigned to the Government.
- (b) ENUMERATED AUTHORITY.--Under agreements entered into pursuant to subsection (a)(1), a Government-operated Federal laboratory may (subject to subsection (c) of this section)--
- (1) accept, retain, and use funds, personnel services, and property from collaborating parties and provide personnel, services and property to collaborating parties;
- (2) grant or agree to grant in advance, to a collaborating party, patent licenses or assignments, or options thereto, in any invention made in whole or in part by a Federal employee under the agreement, retaining a nonexclusive, nontransferrable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government and such other rights as the Federal laboratory deems appropriate;
- (3) grant or agree to grant in advance to a collaborating party copyright licenses, other licenses, assignments, or options thereto in any writing or technological know-bow produced by a Federal employee under the agreement, retaining such rights as the Federal laboratory considers appropriate:
- (4) waive, subject of reservation by the Government of a nonexclusive, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government, in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made under the agreement by a collaborating party or employee of the collaborating party, and

- (5) to the extent consistent with any applicable agency requirements and standards of conduct, permit employees or former employees of the laboratory to participate in efforts to commercialize inventions they made while in the service of the United States.
 - (c) CONTRACT CONSIDERATIONS. --
 - (d) DEFINITION. -- As used in this section --
- (1) the term "cooperative research and development agreement" means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, thorugh its laboratories, provides personnel, services, facilities, equipment, or other resources toward the conduct of specified research or developmental efforts which are consistent with the missions of the laboratory; except that section 105 of title 17 of the United States Code is not applicable to the results of such arrangements: the results of such arrangements are exempted disclosure under subsection 552(a) of title 5 of the United States Code in accordance with paragraph 552(b)(3) of title; and such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code; and
- (2) the term "technological know-how" means knowledge produced or compiled under a cooperative agreement by research, development, or engineering that, if held in confidence, could become a commercial product or of value in making a commercial product when so designated by the director of the Federal laboratory, and
- (3) the term "laboratory" means a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government.

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SEC 11 COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

- (a) GENERAL AUTHORITY.-- Each Federal agency may permit the director of any of its Government-operated laboratories--
- (1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations (including corporations, partnerships, and limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons (including licensees of inventions owned by the Federal agency); and
- (2) to negotiate licensing agreements under section 207 of title 35, United States Code, or under other authorities for Government-owned inventions of Federal employees that may be voluntarily assigned to the Government and to negotiate licensing agreements for writings and technological know-how produced by Federal employees.
- (b) ENUMERATED AUTHORITY. -- Under agreements entered into pursuant to subsection (a)(1), a Government-operated Federal laboratory may (subject to subsection (c) of this section) --
- (1) accept, retain, and use funds, personnel services, and property from collaborating parties and provide personnel, services and property to collaborating parties;
- (2) grant or agree to grant in advance, to a collaborating party, patent licenses or assignments, or options thereto, in any invention made in whole or in part by a Federal employee under the agreement, retaining a nonexclusive, nontransferrable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government and such other rights as the Federal laboratory deems appropriate;
- (3) grant or agree to grant in advance to a non-Federal collaborating party copyright licenses, other licenses, assignments, or options thereto in any writing or technological know-how produced by a Federal employee under the agreement, retaining such rights as the Federal laboratory considers appropriate:
- (4) waive, subject of reservation by the Government of a nonexclusive, irrevocabbe, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government, in advance, in whole or in part,

any right of ownership which the Federal Government may have to any subject invention made under the agreement by a collaborating party or employee of the collaborating party, and

- (5) to the extent consistent with any applicable agency requirements and standards of conduct, permit employees or former employees of the laboratory to participate in efforts to commercialize inventions they made while in the service of the United States.
 - (c) CONTRACT CONSIDERATIONS . --
 - (d) DEFINITION. -- As used in this section --
- (1) the term "cooperative research and development agreement" means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, thorugh its laboratories, provides personnel, services, facilities, equipment, or other resources toward the conduct of specified research or developmental efforts which are consistent with the missions of the laboratory; except that such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code; and
- (2) the term "technological know-how" means knowledge produced or compiled by research, development, or engineering that, if held in confidence, could become a commercial product or of value in making a commercial product when so designated by the director of the Federal laboratory, and which shall after such designation, be exempted from disclosure under subsection 552(a) of title 5 of the United States Code in accordance with paragraph 552(b)(2) of title 5: Provided That this exemption shall expire three years after the director's designation if the knowledge is not leased, assigned, or otherwise transferred in confidence to a U.S. firm before the end of the three year period for commercialization by the firm:
- (3) the term "writing" means any material written by a laboratory employee: Provided That section 105 of title 17 of the United States Code is not applicable to such writing, and that such writing may be determined to contain technological know-how in accordance with paragraph (2) above, and
- (4) the term "laboratory" means a facility or group of facilities owned, leased, or otherwise used by a Federal agency, a substantial purpose of which is the performance of research, development, or engineering by employees of the Federal Government.

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SUGGESTIONS FOR AGENCY REGULATIONS TO IMPLEMENT P.L. 99-502 (Stevenson-Wydler section numbers after codification are shown)

1. STATUTORY PROVISION.

11(c) CONTRACT CONSIDERATIONS. -- (1) A Federal agency may issue regulations on suitable procedures for implementing the provisions of this section; however, implementation of this section shall not be delayed until issuance of such regulations.

COMMENT

Agency regulations could be drawn from several sources including:

- o Provisions of subsection 11(c).
- Other provisions of the Stevenson-Wydler Act as amended.
- o P.L. 96-517 and implementing regulations for licensing Government-owned inventions.
- o P.L. 98-622 on Statutory Invention Registrations
- o Executive Order 10096 on Government Employee Inventions.
- o Other agency or laboratory authorities for collaboration and technology technology transfer.
- o Government-wide conflict of interest rules, agency specific conflict of interest provisions, and agency interpretations.
- o Existing agency delegations of authority and procedures for their revision.

SUGGESTIONS

It will probably be several years before the opportunities and problems in the Act are fully understood. It is too soon to try to develop extensive and detailed regulations. As a minimum, an agency could provide for review of proposed licenses and cooperative agreements in its delegations of authority and issue no regulations at all.

Above the minimum, an agency could indicate its intent to comply with the Act, offer guidelines for handling the most likely situations, and provide for case-by-case review of each license or cooperative agreement. The level of the review could be a function of the size and complexity of the agreement.

We recommend this approach and suggest that an agency cover only the most important points in an initial issuance. The term "laboratory" should defined in the agency's context.

Because of the definition of cooperative research and development agreement, neither procurement policies in the Federal Acquisition Regulation nor assistance policies in OMB circulars apply to R&D agreements. Agencies should be sure that policies suitable for arms-length relationships are not applied to the detriment of cooperative R&D agreements.

2. STATUTORY PROVISION

(2) The agency in permitting a Federal laboratory to enter into agreements under this section shall be guided by the purposes of this Act.

COMMENT

The Act has no "purposes" section, but the preamble says it is:

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to promote technology transfer by authorizing Government-operated laboratories to enter into cooperative research agreements and by establishing the Federal Laboratory Consortium for Technology Transfer within the National Bureau of Standards, and for other purposes.

SUGGESTION

The emphasis is on laboratories, not agencies. This is decentralization legislation, and agency implementations should be consistent with this purpose.

3. STATUTORY PROVISION

(3) (A) Any agency using the authority given it under subsection (a) shall review employee standards of conduct for resolving potential conflicts of interest to make sure they adequately establish guidelines for situations likely to arise through the use of this authority, including but not limited to cases where present or former employees or their partners negotiate licenses or assignments of titles to inventions or negotiate cooperative research and development agreements with federal agencies (including the agency with which the employee involved is or was formerly employeed).

COMMENT

S. 65, the precursor of this Act included the following section:

It shall be the policy of the Government to encourage the efforts of Government employees or former employees to obtain commercialization of inventions made by them while they were in the Service of the United States, and it shall not be a violation of the provisions of 18 U.S.C. 207 for former employees or the partners of employees to negotiate licenses or cooperative research and development arrangements relating to such inventions with Federal agencies, including the agency with which the employee is or was formerly employed. Federal employees or former employees who receive royalty payments or participate (whether as a principal of, a consultant to, or an employee of an organization that is attempting to commercialize the invention, or otherwise) in efforts to commercialize their inventions shall not, because of such receipt or participation, be deemed to be in violation of section 203, 205, 207, 208, or 209 of title 18 of the United States Code. In the case of an active employee of the Government, this section is not intended to negate any requirements which the agency may have concerning the need for approval of outside employment.

This provision had OMB and Justice approval in June of 1985. It was dropped from the bill by the Senate staff because:

- o It was thought to be unnecessary. Since the authorities in bill are specific, they should take precedence over the general conflict of interest provisions of title 18.
- o The provision would have required referral to the Senate Judiciary Committee, and might have led to delays. After the provision was dropped, the Judiciary Committee requested a 30 referral anyway.

The example in the Act comes directly from the original bill, and we believe can be taken as the type of activity that Congress intends. Two further indications of Congressional intent are:

- o Section 14 requires agencies to allow employees to own inventions the agency does not intend to patent and commercialize. There have been a number of cases where agencies, particularly NASA, have allowed employees to leave a laboratory, obtain licenses to their inventions, and subsequently sell products based on the inventions to the Government.
- o Section 10(a) now includes the following policy statements:
 - Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.

Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of job performance of scientists and engineers in the laboratory.

The relevant conflict of interest sections of 18 U.S.C. are:

- o 203 -- Compensation to Members of Congress, officers, and others in matters affecting the Government.
- o 205 -- Activities of officers and employees in claims against and other matters affecting the Government.
- 207 -- Disqualification of former officers and employees;
 disqualification of partners of current offficers and employees.
- o 208 -- Acts affecting a personal financial interest.
- o 209 -- Salary of Government officials and employees payable only by United States.

These sections are concerned with situations where the interests of the United States are likely conflict with those of others. Most include an "unless otherwise provided by law" caveat. They largely speak to individuals, not agencies. They don't appear to be written for a situation where a Federal and a non-Federal party agree to cooperate on a mutually beneficial basis authorized by law, and a Federal employee may need interests in both parties for the cooperation to be effective,

SUGGESTIONS

- o The Act says that agencies can permit employees and former employees to participate in efforts to commercialize their inventions to the extent consistent with any applicable agency requirements and standards of conduct (paragraph 11(b)(4)). The agency requirements and standards of conduct need not be those in effect before the Act was passed. There is nothing to prohibit agencies from making special provisions for use with the Act, and full implementation may require them.
- o It may be wise to allow a waiver of existing standards of conduct to handle early agreements on a case-by-case basis until there is a body of experience.
- o Probably the best way to protect an employee from a conflict of interest situation is to provide for his/her involvement with the private sector in a cooperative agreement as part of the resources provided by the laboratory.

o Except for managing inventions they have been allowed to own, employees should be required to cooperate with the private sector through a laboratory agreement.

4. STATUTORY PROVISION

(B) If, in implementing subparagraph (A), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.

SUGGESTION

Most of the statutory based obstacles apply to all agencies and agency-by-agency legislation is not the best way to resolve them. Further, the Executive Branch tends to prefer administrative discretion to interpret laws over more detailed statutes. In light of the obvious intent of the Act, agencies should try to interpret existing statutes as permitting the types of individual involvement necessary to do what the Act anticipates. Agencies may plan to use the biannual Commerce report on implementation to recommend statutory changes.

5. STATUTORY PROVISION

(4) The laboratory director in deciding what cooperative research and development agreements to enter into shall --

(A) give special consideration to small business firms, and consortia involving smfall business firms...

SUGGESTION

This should be easy. Some technologies, requiring extensive resources and capitalization will not be suitable for small business, while other technologies can only be to commercialized through small business. So long as a laboratory can show that it fairly considered or tried to find small business collaborators, there should be no problem.

6. STATUTORY PROVISION

(4)(B) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such inventions will be manufactured substantially in the United States and, in the case of any industrial organization or other person subject to the control of a foreign company or government, as

appropriate take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative reserch and development agreements and licensing agreements.

COMMENT

The first part of this involving domestic manufacture is easy. Universities do it all the time. While the Act does not say the domestic preference must be included in licensing agreements, there is a similar provision in Federal patent licensing statute, 35 U.S.C. 209.

At this time, nobody knows how to handle the second part about whether a foreign government would allow a U.S. firm similar opportunities to collaborate. It is not reasonable to expect most laboratory directors to know what other countries are allowing, or in some cases, who controls what appears to be a domestic firm.

SUGGESTIONS

- o Implement the first requirement on domestic manufacture by including a statement in the license or cooperative agreement that the non-Federal party agrees to substantially manufacture in the United States products sold in the United States that use the invention or results of the cooperative research.
- o Advise laboratory directors that pending more direct guidance, they should avoid cooperative agreements or licenses with companies of other countries where they have reason to believe U.S. companies would not have similar opportunities. A rule of reason on what the directors can know should apply. A helpful correlation may also be found between the export licensing restrictions and countries where U.S. companies would not have similar opportunities.
- The Government may develop policies on this provision, and sources of the information necessary to apply them. Until that happens, lab directors who do not already have an international program, should be advised to emphasize the domestic manufacture provision. This will probably take care of most problems related to this provision and they should ask agency headqarters for guidance in other foreign involvement situations.

7. STATUTORY PROVISION

(5) (A) If the head of an agency or his designee desires an opportunity to disapprove or require the

modification of any such agreement, the agreement shall provide a 30 day period within which such action must be taken beginning on the date the agreement is presented to him or her by the head of the laboratory concerned.

SUGGESTIONS

- o Initial delegation should be made to a level in the agency that understands the Act and the operations of laboratories. The delegation should include authority to delegate further as appropriate.
- o Consider a system of approvals where the level of approval required is a function to the magnitude of the agreement. Those that only commit small amounts of a person's time or use of minor facilities could be approved at lower levels -- or even be excluded from approval.
- o First of a kind agreements or licenses might require higher approvals that subsequent agreements or licenses of that are similar. Agreements or licenses partially similar those already approved but which differ in some respects should only be reviewed for issues raised by the differences.

STATUTORY PROVISION

(5)(B) In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented under this section, the head of the agency or such designee shall transmit a written explanation to the head of the laboratory concerned.

SUGGESTION

Be sure the written emplanation must be transmitted to the head of the laboratory within the thirty day period.

9. STATUTORY PROVISION

(6) Each agency shall maintain a record of all agreements entered into under this section.

SUGGESTION

Every two years, the Secretary of Commerce is to report to the President and the Congress on agencies' use of the authorities in the Act. The agency records of agreements will be needed for this report.