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M E M O R A N D U M

May 25, 1979

TO: The Horton ad hoc Patent Committee

FROM: Newton O. Cattell NOC

I am attaching the latest from Senator Schmitt. His new Title III seems to be an improvement over his old Title II. Note the sponsorship by the Chairman of the full Committee, Mr. Cannon and the Chairman of the Subcommittee, Mr. Stevenson. Note also the joint referral to Commerce and Governmental Affairs.

I hope that those who are able will favor us with a technical assessment of the bill - and perhaps also an estimate of its impact on Dole-Bayh.

enclosure
NOC/mbt

are stolen on order and taken to clandestine garages where they are quickly "chopped up" or disassembled by highly trained crews. The body parts are then profitably sold in the legitimate auto repair market. According to the FBI, this rapidly spreading operation is "one of the most lucrative, illegitimate businesses today."

Statistics bear out the far-reaching impact of chop shop operations. In 1967, 86 percent of all stolen vehicles were recovered by law enforcement; however, by 1976, recoveries dropped to 59 percent. One reason for this dramatic decline in the recovery rate involves the fact that many of the unrecovered cars vanished into thin air—having been cut up and sold for parts. No car was left to recover.

Even when police stop and inspect trucks hauling hundreds of thousands of dollars worth of stolen body parts, they are powerless under present law to do anything, because the body parts have no identifying numbers on them. For example, the FBI in Chicago stopped a well-known auto thief hauling $250,000 worth of stolen Corvette body parts. However, the agents were unable to prove any part was stolen, and consequently had to allow the thief to drive his merchandise into a salvage yard known as one of the largest traffickers of stolen body parts in the Midwest. In short, auto theft has become a crime of huge profits and low risks.

With billion dollar profits at stake, it is no wonder that organized crime is viciously fighting to seize control of the chop shop operations. In Chicago alone, at least 16 persons have been murdered reportedly, because of their automobile theft activities. Almost all these murders have taken place in the last 4 years and none have been solved.

The impact on the consumer is overwhelming. One car is being stolen every 32 seconds in this country. And, auto theft coverage is skyrocketing nationally. In Chicago, automobile insurance rates were recently increased 16 percent.

Without Federal law enforcement assistance and new legislation to deal with the emerging "chop shop" syndrome, local police are stymied in their efforts to curb its escalation both in terms of numbers and profits.

In response to the alarming trend in motor vehicle theft, the Federal Interagency Committee on Auto Theft Prevention was formed in March 1975. The committee consists of representatives of the Office of Management and Budget, and the Departments of Transportation, Justice, State, Treasury, and Commerce. It was determined by the committee that the Federal law enforcement agencies, as well as State and local police units, lacked even the minimal enforcement tools needed to deal with these highly sophisticated and well-organized operations which are closely linked to organized crime.

Consequently, the committee drafted legislation which aggressively attacked the problem. For the past several months, my staff along with Senator BIDEN's staff have worked diligently with the Justice Department to strengthen and refine this important legislation. We are all now convinced that the Motor Vehicle Theft Prevention Act of 1979 is a superbly researched, well-written bill which will severely curb the escalating national auto theft problem.

Title II is the backbone of the bill. It gives the Secretary of the Department of Transportation the authority to promulgate regulations requiring automobile manufacturers to do the following: First, to strengthen the security systems on cars making them considerably more difficult to steal; and second, to place vehicle identification numbers of the principal body parts as a means of eliminating the black market for stolen body parts which flourishes today. The primary problem law enforcement has in investigating "chop shop" operations is that presently stolen body parts cannot be identified as stolen once they are removed from an auto. However, by marking the body parts, police can determine in a matter of minutes if a part is stolen, thus sharply reducing the ability of chop shop operators to market stolen body parts in the legitimate repair market.

The bill also provides for:

Making it a Federal offense, punishable by a $5,000 fine or 5-year imprisonment, or both, to alter the VIN. Professional "chop shop" operators could be fined $25,000 or imprisoned 10 years, or both.

Amending the National Stolen Property Act to include vehicle titles, so as to restrain fraudulent titling schemes.

Expanding the racketeering influenced and corrupt organizations (RICO) statute to cover "chop shop" operations. Those individuals who traffic in stolen vehicles and their parts could have their businesses seized by Federal authorities, and forfeited.

Prohibiting the sale or advertisement of devices used to break into automobiles.

Permitting the U.S. Customs Service to arrest individuals attempting to export a stolen auto. Currently, customs agents can only arrest narcotics or navigation law violators.

Giving authority to the Secretary of Treasury to issue regulations to make it more difficult to export stolen motor vehicles.

Directing the Attorney General to conduct a comprehensive study of the growing theft of agricultural and construction equipment.

The Senate Permanent Subcommittee on Investigations, of which I am the ranking minority member, has recently held important hearings into organized crime activities and will continue to do so. We have seen some significant patterns in organized crime activity. For example, time and again, we have seen organized crime find new sources of revenue in nontraditional areas.

In the case of the recent, highly professionalized auto theft operations, this legislation would provide the means necessary to thwart the professional automobile thieves and organized crime elements. Placement of identification numbers on various sheet metal parts is reliably estimated to cost the manufacturer no more than $5. This is a small price to pay to deter these criminals and deny them illicit profits. Elimination of these stolen car operations would save American consumers billions of dollars annually in reduced insurance and police enforcement costs.

As Americans continue to drive in greater numbers, and as the need for automobile transportation increases, because of urban sprawl, professional auto theft will surely continue to grow exponentially if left unchecked. Through the Motor Vehicle Theft Prevention Act of 1979, we have an opportunity to provide our law enforcement agencies with the means to successfully fight organized crime. All that remains is for the Congress to implement this well-targeted plan.

Mr. ROBERT C. BYRD subsequently said:

Mr. President, I ask unanimous consent that the Motor Vehicle Theft Prevention Act of 1979, introduced earlier by the Senator from Delaware (Mr. BIDEN), for himself and the Senator from Illinois (Mr. PERCY), be jointly referred to the Committee on the Judiciary and the Committee on Commerce, Science, and Transportation.

The PRESIDING OFFICER. Without objection, it is so ordered.

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By Mr. SCHMITT (for himself, Mr. CANNON, and Mr. STEVENSON):

S. 1215. A bill entitled the "Science and Technology Research and Development Utilization Policy Act"; to the Committee on Commerce, Science, and Transportation and the Committee on Governmental Affairs, jointly, and if one committee orders the bill reported, the other committee has 60 days in which to act, by unanimous consent.

SCIENCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT UTILIZATION POLICY ACT

Mr. SCHMITT. Mr. President, today I am introducing for myself, Senator STEVENSON, and Senator CANNON, the Science and Technology Research and Development Utilization Policy Act. The purpose of this legislation is to maximize the return to the public from our national investment in research and technology development by establishing a uniform Federal policy for the management and utilization of inventions developed under Federal contracts.

This bill is a revised version of S. 3627, a bill I introduced prior to the conclusion of the 95th Congress. Subsequent to its introduction I circulated the bill to leaders in industry, business, academia, government, and other vital sectors of our national economy for comment. Responses have been most encouraging and helpful. The revised bill which I and my distinguished cosponsors are introducing today reflects the many thoughtful views and suggestions of those who responded to my request for comments.

DECLINING INNOVATION

Mr. President, as most of my colleagues are undoubtedly aware, recent economic indicators suggest that the United States is experiencing an alarming decline in the rate of technological innovation and economic growth. Symptoms of this decline are reflected in the growing international trade deficit, diminishing national productivity, and the increasing

penetration of domestic markets by foreign competitors.

The Senate Science, Technology, and Space Subcommittee, chaired by Senator STEVENSON and on which I serve as the ranking member, has had a long-standing interest in the industrial innovation process and Federal policies which adversely impact upon it. For the past 2 years the subcommittee in cooperation with the Banking Committee has conducted extensive oversight hearings examining the direction of Federal R. & D. and the Federal Government's role in promoting the development, application, and diffusion of new technologies. The problems are varied and complex—overburdensome and costly regulations, lack of an overall trade policy, counterproductive tax policies, and inadequate funding of basic research, to name just a few. Nevertheless, there are steps which the Federal Government can and should take to reverse the downward trend in the development of new products and processes.

GOVERNMENT PATENT POLICY

The role of the Federal Government in the industrial innovation process cannot be overstated. For more than a decade, Federal agencies have funded nearly two-thirds of this Nation's expenditures on R. & D. During this past fiscal year alone, the Federal Government provided more than $29 billion in research and development support. As a result of this huge national investment, thousands of inventions are identified each year which have traditionally formed a valuable source of new products and technology development.

Unfortunately, Federal policies and procedures for the management of the results of Federal R. & D. contracts have operated in the past to inhibit the process by which such benefits are made available to the American consumer. The fact that the Federal Government presently holds title to about 28,000 inventions developed with the assistance of Federal R. & D. funds and yet only 5 percent of these Government-owned inventions have ever been effectively utilized, helps to convince me that the present policies are not providing the maximum return to the public from its annual investment in science and technology research and development.

Mr. President, this is not a new problem. For the past 30 years, debate has flourished over the most appropriate Federal policy for determining ownership rights to the products of Government-funded research. Typically, the debate, and any hope for substantial patent policy reform, becomes bogged down in the "title" versus "license" arguments. National commissions, interagency studies, and two executive orders have failed to achieve the long-desired goal of a comprehensive Government patent policy. Individual Federal agencies commonly operate under varying statutory policies and procedures. Processing of normal waiver applications can take up to 2 years depending on the agency involved. The nature of the controversy clearly demands a legislative solution.

Federal patent policies which were originally designed to protect the public interest by preventing the so-called giveaway have in fact operated to discourage contractor bidding, eliminate incentives to innovate or disclose inventions, and delay the commercialization of inventions developed under Federal contracts. Ultimately, it is the American public who suffers from these misguided policies through the failure of potentially significant technological inventions to reach the marketplace.

SCIENCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT UTILIZATION POLICY ACT

Mr. President, in my judgment there is a clear need for the establishment and implementation of a uniform Government-wide policy for the management and utilization of the results of federally funded research and development. The bill we are offering today would provide the framework for such a policy and is designed to achieve the following objectives:

First, the policy, as well as the implementing regulations, should be uniform in the sense that all agencies and Federal contractors operate under the same general rules and procedures;

The policy should permit some flexibility in policy implementation in recognition of the differing missions and statutory responsibilities of the various agencies engaged in research and development activities;

The policy should be as simple as possible and avoid the heavy administrative burden and delay experienced by both the contractor and the Government under current Federal policies;

The policy should provide the necessary incentives for private sector participation in Government contracts and for the rapid development of new technology in order to maximize the benefits to the public from its R. & D. investment;

The policy should foster competition and prevent undue market concentration and;

Finally, the policy should protect the legitimate rights of the Government to any inventions developed under a Federal contract where the specific nature of the research being performed demands full public access to the resulting inventions or preclude the granting of exclusive rights of ownership to the private contractor.

The approach suggested in this bill represents a truly middle-ground position between the traditional "title in the Government" policy and a full blown "license" policy that would unequivocally assign title to the contractor. Essentially, this bill would establish a presumption of title in the Government in those specific situations where it is necessary to assure full public access to resulting inventions.

The specific situations in which the Government would retain title are narrowly drawn, but I believe adequate to protect the public interest. The determination as to the Government's rights would be made at the time of contracting so the contractor will have a clear indication of the scope of his rights to any inventions developed under the contract.

In all other situations, and when the Government fails to make an adequate showing of the need for retaining principal rights to any inventions likely to be developed under the contract, it would be presumed that the contractor could elect to retain title to any such inventions.

To assure flexibility in the implementation of the policy, the Government would have the authority to waive its rights to title when found to be in the public interest. In addition, the Government is given limited "march-in" rights if the contractor fails to take reasonable steps to develop the invention.

The bill would also address the problem of effectively utilizing those inventions in which title is held by the Government. Clearly, there is a need for better coordination and direction of Fedral efforts to facilitate the expeditious transfer of technology to the private sector. Title II would direct the Secretary of Commerce to establish a Federal technology utilization program under which necessary action would be taken to promote the utilization and protection of rights in Government owned inventions. This Government-wide program would be patterned after the highly successful National Aeronautics and Space Administration technology utilization programs. In addition, each Federal agency would be required to develop and implement a separate technology utilization program. The purpose of such programs would be to expedite the technology transfer process, including the secondary uses of technology for societal needs.

Mr. President, I am firmly convinced that Americans have lost neither their willingness nor their ability to innovate. Rather it is the system within which the innovation process functions that must be restructured to provide a more favorable climate for our traditional innovative spirit. The legislation we are offering today represents a significant step in the direction of reforming our existing Federal policies which impact adversely upon the innovation process, and we welcome the support of our colleagues in this endeavor.

Mr. President, I ask unanimous consent that the text of this bill be printed at this point in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1215

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

TITLE I—POLICY

SEC. 101. FINDINGS.

The Congress, recognizing the profound impact of science, engineering, and technology policy on the economic, social, political, technological well-being, and the health and safety of the Nation as a whole, hereby finds and declares that:

(1) The United States has recently experienced a decline in the process of industrial innovation and productivity which is integrally related to, and adversely impacts upon, domestic productivity, the rate of economic growth, the level of employment, the balance

of trade, and the attainment of other national goals.

(2) The national support of scientific and technological research and development is indispensable to sustained growth and economic stability, and it is in the national interest to maximize the benefits to the general public from such investment.

(3) Scientific and technological developments and discoveries resulting from work performed with Government contracts constitute a valuable national resource which should be developed in a manner consistent with the public interest and the equities of the respective parties.

(4) Current Federal policy with respect to the allocation of rights to the results of federally sponsored research and development deters contractor participation in Government contracts, delays technological progress, and stifles the innovative process.

(5) The present United States system for the acquisition of intellectual property rights resulting from privately funded research and development, while fundamentally sound, is in need of modifications to diminish the existing uncertainty and the high costs incurred in enforcing proprietary rights.

(6) There is a need for the establishment and implementation of a flexible Government-wide policy for the management and utilization of the results of federally funded research and development. This policy should promote the progress of science and the useful arts, encourage the efficient commercial utilization of technological developments and discoveries, guarantee the protection of the public interest, and recognize the equities of the contracting parties.

SEC. 102. PURPOSE.

It is the purpose of this Act to—

(1) establish and maintain a Federal policy for the management and use of the results of federally sponsored science and technology research and development; and

(2) insure the effective implementation of the provisions of this Act, and to monitor on a continuing basis the impact of Federal science and technology policies on innovation and technology development.

SEC. 103. DEFINITIONS.

As used in this Act the term—

(1) "contract" means any contract, grant, agreement, commitment, understanding, or other arrangement entered into between any Federal gaency and any person where a purpose of the contract is the conduct of experimental, developmental, or resarch work. Such terms includes any assignment, substitution of parties, or subcontract of any type entered into or executed for the conduct of experimental, developmental, or research work in connection with the performance of that contract;

(2) "contractor" means any person or other entity that is a party to the contract;

(3) "disclosure" means a written statement sufficiently complete as to technical detail to convey to one skilled in the art to which the invention pertains a clear understanding of the nature, purpose, operation, and as the case may be, physical, chemical, or electrical characteristics of the invention;

(4) "Federal agency" means an "executive agency" as defined by section 105 of title 5, United States Code, and the military departments as defined by section 102 of title 5, United States Code;

(5) "Federal employees" means all employees as defined in section 2105 of title 5, United States Code, and members of the uniformed services;

(6) "Government" means the Government of the United States of America;

(7) "invention" means any invention, discovery, innovation, or improvement which is or may reasonably be patentable subject matter as defined in title 35, United States Code;

(8) "inventor" means any person, other than a contractor, who has made an invention under a contract but who has not agreed to assign his rights in such invention to the contractor;

(9) "made under the contract" or "made under a contract" when used in relation to any invention means the conception or first actual reduction to practice or such invention in the course of any work under the contract or under a contract, respectively;

(10) "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));

(11) "person" means any individual, partnership, corporation, association, institution, or other entity;

(12) "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 worked and that its benefits are available to the public either on reasonable terms or through reasonable licensing arrangements; and

(13) "qualified technology transfer program", when used in relation to a nonprofit organization, means a program which includes—

(i) an established patent policy which is consistent with the policy set forth in this Act and is administered on a continuous basis by an officer or entity responsible to the nonprofit organization;

(ii) agreements with employees requiring them to assign either to the organization, its designee, or the Government any invention conceived or first actually reduced to practice in the course of or under Government contracts or assurance that such agreements are obtained prior to the assignment of personnel to Government-supported research and development projects;

(iii) procedures for prompt invention identification and timely disclosure to the officer or entity administering the patent policy of the non-profit organization;

(iv) procedures for invention evaluation; and

(v) an active and effective promotional program for the licensing and marketing of inventions.

TITLE II—IMPLEMENTATION

SEC. 201. RESPONSIBILITIES.

(a) The Secretary of Commerce, hereinafter referred to as the Secretary, shall coordinate, direct, and review the implementation and administration of the Federal policy set forth in this Act with respect to the ownership of inventions resulting from federally sponsored research and development, and promote the efficient and effective utilization of the results of federally sponsored research and development.

(b) With a view to obtaining consistent application of the policies of this Act, the Secretary is authorized and directed—

(1) to consult and advise with Federal agencies concerning the effective implementation and operation of the policies, purposes, and objectives of this Act;

(2) subject to the authority of the Office of Federal Procurement Policy, to formulate and recommend to the President such proposed rules, regulations, and procedures necessary and desirable to assure the consistent application of the provisions of this Act;

(3) to accumulate, analyze, and disseminate data necessary to evaluate the administration and effectiveness of the policies set forth in this Act;

(4) to determine with administrative finality any dispute between a Federal agency and an aggrieved party arising under title III or title IV of this Act.

(5) monitor, on a continuing basis, the rights of the Government under section 304 of this Act in any invention made under a contract of a Federal agency, and take all suitable and necessary steps to protect and enforce the rights of the Government in any such invention; and

(6) to perform such other duties as may be prescribed by the President or by statute.

(c) For the purpose of assuring the effective management of Government-owned inventions, the Secretary is authorized and directed to—

(1) assist and coordinate agency efforts to promote the licensing and utilization of Government-owned inventions;

(2) accept custody and administration, in whole or in part, of Government rights in any invention for the purpose of protecting the United States interest therein and promoting the effective utilization of any such invention;

(3) develop and manage a Government-wide program designed to stimulate the transfer of Government-owned technology to the private sector through the development, demonstration, and dissemination of information regarding potential applications and evaluate and assist where appropriate the participation of the private sector in the technology transfer process;

(4) evaluate, with the assistance of the originating agency, Government-owned inventions in order to identify those inventions with the greatest commercial potential and to promote the development of inventions so identified;

(5) assist the Federal agencies in seeking protection and maintaining inventions in foreign countries, including the payment of fees and costs connected therewith;

(6) make market surveys and other investigations for determining the potential of inventions for domestic and foreign licensing and other utilization;

(7) acquire technical information and engage in negotiations and other activities for promoting the licensing and other utilization of Government-owned inventions and to demonstrate the practicability of the inventions for the purpose of enhancing their marketability;

(8) consult and advise Federal agencies as to areas of science and technology research and development with potential for commercial utilization; and

(9) receive funds from fees, royalties, sales, or other management of Government-owned inventions authorized under this Act: *Provided, however,* That such funds will be used only for the purpose of this Act.

(d) The Secretary shall submit an annual report of its activities to Congress, including therein (1) relevant statistical data regarding the disposition of invention disclosures resulting from federally funded research and development; (2) any recommendation as to legislative or administrative changes necessary to better achieve the policy and purposes of this Act; and (3) an anlysis of the impact of Federal policies on the purposes of this Act.

(e) The Secretary shall establish such interagency committees as are necessary to assist in the review and formulation of rules, regulations, and procedures implementing the provisions of this Act.

(f) There are authorized to be appropriated to the Secretary of Commerce to carry out the provisions of this title, the sum of $3,000,000 for fiscal year 1980.

SEC. 202. AGENCY TECHNOLOGY UTILIZATION PROGRAM.

To assist in the transfer of Government-owned innovative technology resulting from Federal research and development for application and use in industry, agriculture, medi-

cine, transportation, and other critical sectors of the economy, each Federal agency supporting research and development activities shall develop and implement a technology utilization program. Specific program objectives shall include, but not be limited to—

(1) expedite and facilitate the application and use of technology by shortening the time between generation of advanced technologies and their use in the economy and provide greater incentives for use of socially beneficial innovations;

(2) encourage multiple secondary uses of technology in industry, education, and government where there is a wide spectrum of technological problems and needs; and

(3) understand more fully the technology transfer process and its impact on the economy, and to manage and optimize the process in a systematic way.

SEC. 203. EXPIRATION.

The authorities conferred upon the Secretary under this title shall expire and terminate 7 years following the effective date of this Act unless renewed by action of Congress.

TITLE III—ALLOCATION OF RIGHTS—GOVERNMENT CONTRACTORS

SEC. 301. RIGHTS OF THE GOVERNMENT.

(a) Each Federal agency shall acquire on behalf of the United States, at the time of entering into a contract title to any invention made under the contract of a Federal agency if the agency determines—

(1) the services of the contractor are for the operation of a Government-owned research or production facility;

(2) acquisition of title is necessary because of the classified nature of the work being performed under the contract;

(3) because of the exceptional circumstances, acquisition of title by the Government is necessary to assure the adequate protection of the public health, safety, or welfare;

(4) in the case of a nonprofit organization, that such institution does not have a qualified technology transfer program as defined in section 103 of this Act; or

(5) the principal purpose of the contract is to develop or improve products, processes, or methods which will be required for use by Government regulations:

*Provided, however,* That the Federal agency may subsequently waive all or any part of the rights of the United States under this section to such invention in conformity with the provisions of section 303.

(b) The rights of the Government under subsection (a) shall not be exercised by the Federal agency unless it determines that one of the enumerated criteria exist and it files a determination statement with the Secretary.

SEC. 302. RIGHTS OF THE CONTRACTOR.

(a) In all other situations not specified in section 301, the contractor or inventor shall have the option of retaining title to any invention made under the contract. Such rights shall be subject to the limitations set forth in section 304 and the provisions of section 305. Said option shall be exercised by notifying the Government at the time of disclosure of the invention or within such time thereafter as may be provided in the contract. The Government shall obtain title to any invention for which this option is not exercised.

(b) When the Government obtains title to an invention under section 301, the contractor shall retain a nonexclusive, royalty-free license which shall be revocable only to the extent necessary for the Government to grant an exclusive license.

SEC. 303. WAIVER.

A Federal agency may at any time waive all or any part of the rights of the United States under this title to any invention or class of inventions made or which may be made by any person or class of persons under the contract of the agency if the agency determines that the condition justifying acquisition of title by the Government under section 301 no longer exists or the interests of the United States and the general public will be best served thereby. The agency shall maintain a record, which shall be made public and periodically updated, of determinations made under this section. In making such determinations, the agency shall consider the following objectives:

(1) encouraging the wide availability to the public of the benefits of the experimental, developmental, or research programs in the shortest practicable time;

(2) promoting the commercial utilization of such inventions;

(3) encouraging participation by private persons in the Government-sponsored experimental, developmental, or research programs; and

(4) fostering competition and preventing undue market concentration or the creation or maintenance of other situations inconsistent with the antitrust laws.

SEC. 304. MARCH-IN-RIGHTS.

(a) Where a contractor has retained title to an invention under section 302 or 303, the Federal agency shall have the right, pursuant to regulations and subject to the provisions of subsection (b), to—

(1) require the contractor to grant a nonexclusive, partially exclusive, or exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, or to require an assignment of title to the Government if the agency determines such action is necessary because the contractor has not filed a patent application on the invention within a reasonable period of time or has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the invention; or

(2) require the contractor to grant a nonexclusive, partially exclusive, or exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, if the agency determines such action is necessary—

(i) to alleviate a serious threat to the public health, safety, or welfare needs which is not reasonably satisfied by the contractor or its licensees or otherwise required for the protection of national security.

(ii) to meet requirements for public use by Federal regulation which are not satisfied by the contractor or its licensees; or

(iii) because the actions of the contractor beyond the exercise of the exclusive rights in the invention have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates, or to create and maintain other situations inconsistent with the antitrust laws.

(b) The rights of the Federal agency under subsection (a) shall be subject to the prior approval of the Secretary who shall make a determination after a formal hearing with affected parties present and conducted in accordance with the rules, regulations, and procedures adopted by the Secretary.

SEC. 305. GENERAL PROVISIONS.

(a) Each contract entered into by the Government shall contain such terms and conditions as the agency deems appropriate for the protection of the interests of the United States and the general public, including appropriate provisions to—

(1) require periodic written reports at reasonable intervals in the commercial utilization or efforts at obtaining commercial utilization that are being made by the inventor or contractor or their licensees or assignees; *Provided,* That any such information shall be treated by the Federal agency as commercial or financial information obtained from a person and privileged or confidential and not subject to disclosure under the Freedom of Information Act;

(2) reserve to the United States at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the United States and States and domestic municipal governments, unless the agency determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments;

(3) require the prompt disclosure by the contractor or inventor to that agency of any invention made under the contract: *Provided,* That Federal agencies are authorized to withhold from disclosure to the public, information disclosing any invention made under the contract of an agency for a reasonable time in order for a United States or foreign patent application to be filed;

(4) require an election by the contractor within a reasonable time after disclosure as to whether the contractor intends to file a patent application on any invention made under the contract;

(5) require a declaration by the contractor within a reasonable time after disclosure of the contractors intent to commercialize or otherwise achieve the widespread utilization of the invention by the public; and

(6) reserve to the United States and the contractor or inventor rights in each such invention in conformity with the provisions of this title.

(b) Agency determinations as to the rights to inventions under this title shall be made in an expeditious manner without nnecessary delay.

SEC. 306. BACKGROUND RIGHTS.

Nothing contained in this Act shall be construed to deprive the owner of any background patent or to such rights as the owner may have thereunder.

SEC. 307. GOVERNMENT LICENSING AUTHORITY.

(a) A Federal agency may grant exclusive or partially exclusive licenses in any invention to which the Government has acquired title if the agency determines that—

(1) the desired practical application has not been achieved, or is not likely to be achieved within a reasonable period of time by the granting of a nonexclusive license;

(2) exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment of risk capital to bring the invention to practical application; and

(3) the proposed terms and scope of exclusivity are not greater than reasonably necessary to provide the incentive for bringing the invention to practical application.

TITLE IV—ALLOCATION OF RIGHTS—FEDERAL EMPLOYEES

SEC. 401. ALLOCATION OF RIGHTS.

(a) Except as otherwise provided in subsections (b) and (c), the Government shall obtain the entire right, title, and interest in and to all inventions made by any Federal employee if the agency determines that—

(1) the invention was made during working hours;

(2) the invention was made with a contribution by the Government of facilities, equipment, materials, funds, or information, or of time or services of other Government employees on official duty; or

(3) the invention bears a direct relation to the duties of the Federal employee-inventor, or are made in consequence of his employment.

(b) Where the interest of the Government is insufficient to require acquisition of title by the Government but the invention bears an indirect relation to the duties of the Federal employee-inventor, the employee shall have the option of acquiring title to such in-

vention, subject, however, to the reservation by the Government of a nonexclusive, irrevocable, royalty-free license in the invention with the power to grant licenses for all governmental purposes. The Government shall obtain title to any invention for which this option is not exercised.

(c) In all situations not falling within subsections (a) and (b), a Federal employee shall be entitled to retain the entire right, title, and interest in and to any invention made by the employee.

SEC. 402. PRESUMPTION OF OWNERSHIP.

(a) In applying the criteria of section 401 to the facts and circumstances relating to the making of any particular invention, it shall be presumed that an invention falls within the criteria of section 401(a) when made by a Federal employee who is employed or assigned to—

(1) invent, improve, or perfect any article, machine, manufacture process, or composition of matter;

(2) conduct or perform research or development work, or both;

(3) supervise, direct, coordinate, or review federally financed or conducted research or development work, or both; or

(4) act in a liaison capacity among Federal or non-Federal agencies or individuals engaged in such work.

(b) The presumption established by subsection (a) may be rebutted by the facts or circumstances of the conditions under which any particular invention is made.

SEC. 403. REVIEW.

Federal agency determinations regarding the respective rights of the Government and the Federal employee-inventor are to be reviewed by the Secretary in accordance with rules, regulations, and procedures adopted by the Secretary whenever—

(1) the Federal agency fails to obtain title under the provisions of section 401(a); or

(2) the Federal employee-inventor who claims to be aggrieved by the determination requests such a review.

SEC. 404. INCENTIVES AWARDS PROGRAM.

(a) Subject to the provisions of this section, the agency is authorized, upon its own initiative or upon application of any person, to make a monetary award or otherwise offer recognition, in such amount and upon such terms as it shall deem appropriate, to any Federal employee-inventor for any scientific or technical invention determined by the agency to have significant value.

(b) Awards shall be granted pursuant to the provisions of chapter 45 of title 5 and chapter 57 of title 1 of the United States Code, and in accordance with regulations issued thereunder except as modified by this Act.

(c) In granting awards under this section, due consideration shall be given to—

(1) the extent to which the invention advances the state of the art;

(2) the amount expended by the employee-inventor for development of such invention;

(3) the importance of the invention in terms of its value and benefits to the Government and the United States;

(4) the extent to which the invention has achieved utilization by the public; and

(5) the amount of any compensation previously received by the employee-inventor for or on account of the use of such invention by the United States.

(d) If more than one applicant under subsection (a) claims an interest in the same contribution, the agency shall ascertain the respective interest of such applicants, and shall apportion any award to be made with respect to such invention among such applicants in such proportions as it shall determine to be equitable.

(e) No award may be made under subsection (a) with respect to any invention unless the applicant surrenders, by such means as the agency shall determine to be effective, all claims which such applicant may have to receive any compensation (other than the award made under this sectiton) for the use of such invention or any element thereof at any time by or on behalf of the United States or by or on behalf of any foreign government pursuant to any treaty or agreement with the United States, within the United States or at any other place.

(f) No award may be made under subsection (a) in any amount exceeding $100,000, unless the agency has transmitted to the appropriate committees of the Congress a full and complete report concerning the amount and terms of, and the basis for, such proposed award, and 30 calendar days of regular session of the Congress have expired after receipt of such report by such committees.

(g) A cash award and expense for honorary recognition of a Federal employee-inventor shall be paid from the funds appropriated for the sponsoring Federal agency.

## TITLE V—MISCELLANEOUS

SEC. 501. REPEAL OF EXISTING STATUTORY RESEARCH AND DEVELOPMENT AUTHORIZATIONS.

The following Acts are hereby amended as follows:

(a) Section 10(a) of the Act of June 29, 1935, as added by title I of the Act of August 14, 1946 (7 U.S.C. 427(a); 60 Stat. 1085) is amended by striking out the following: "Any contracts made pursuant to this authority shall contain requirements making the results of research and investigations available to the public through dedication, assignment to the Government, or such other means as the Secretary shall determine.".

(b) Section 205(a) of the Act of August 14, 1946 (7 U.S.C. 1624(a); 60 Stat. 1090) is amended by striking out the following: "Any contract made pursuant to this section shall contain requirements making the result of such research and investigations available to the public by such means as the Secretary of Agriculture shall determine.".

(c) Section 501(e) of the Federal Coal Mine Health and Safety Act of 1969 (30 U.S.C. 954(c); 83 Stat. 742) is amended by striking out the following: "No research, demonstrations, or experiments shall be carried out, contracted for, sponsored, cosponsored, or authorized under authority of this Act, unless all information, uses, products, processes, patents, and other developments resulting from such research, demonstration, or experiments will (with such exception and limitation, if any, as the Secretary or the Secretary of Health, Education, and Welfare may find to be necessary in the public interest) be available to the general public.".

(d) Section 106(c) of the National Traffic and Motor Vehicle Safety Act of 1966 (15 U.S.C. 1395(c); 80 Stat. 721) is repealed.

(e) Section 12 of the National Science Foundation Act of 1950 (42 U.S.C. 1871(a); 82 Stat. 360) is repealed.

(f) Section 152 of the Atomic Energy Act of 1954 (42 U.S.S. 2182; 68 Stat. 943) is repealed.

(g) The National Aeronautics and Space Act of 1958 (72 Stat. 426) is amended—

(1) by repealing section 305 thereof (42 U.S.C. 2457): *Provided, however*, That subsections (c), (d), and (e) of such section shall continue to be effective with respect to any application for patents in which the written statement referred to in subsection (c) of such section has been filed or requested to be filed by the Commissioner of Patents and Trademarks prior to the effective date of this Act;

(2) by inserting the following new section 305:

"SEC. 305. INVENTIONS AND CONTRIBUTIONS BOARD.—Each proposed for any waiver of patent rights held by the Administrator shall be referred to an Inventions and Contributions Board which shall be established by the Administrator within the Administration. Such Board shall accord to each interested party an opportunity for hearing, and shall transmit to the Administrator its findings of fact with respect to such proposal and its recommendations for action to be taken with respect thereto.";

(3) by striking out section 306 thereof (42 U.S.C. 2458(a));

(4) by inserting at the end of section 203(b) thereof (42 U.S.C. 2478(a)); the following new paragraph:

"(14) to provide effective contractual provisions for reporting of the results of the activities of the Administration, including full and complete technical reporting of any innovation made in the course of or under any contract of the Administration.";

(5) by inserting at the end of section 203 thereof (42 U.S.C. 2473) the following new subsection:

"(e) For the purpose of chapter 17 of title 35 of the United States Code the Administration shall be considered a defense agency of the United States."; and

(6) by striking out the following in such section: "(including patents and rights thereunder).".

(h) Section 6 of the Coal Research and Development Act of 1960 (30 U.S.C. 666; 74 Stat. 337) is repealed.

(i) Section 4 of the Helium Act Amendments of 1960 (50 U.S.C. 167b; 74 Stat. 920) is amended by striking out the following: *"Provided, however,* That all research contracted for, sponsored, cosponsored, or authorized under authority of this Act shall be provided for in such a manner that all information, uses, processes, patents, and other developments resulting from such research developed by Government expenditure will (with exceptions and limitations, if any, as the Secretary may find to be necessary in the interest of national defense) be available to the general public: *And provided further,* That nothing contained herein shall be construed as to deprive the owner of any background patent relating thereto to such rights as he may have thereunder." and by inserting in lieu thereof a period.

(j) Section 32 of the Arms Control and Disarmament Act of 1961 (22 U.S.C. 2572; 75 Stat. 634) is repealed.

(k) Subsection (e) of section 302 of the Appalachian Regional Development Act of 1965 (40 U.S.C. App. 302(c); 79 Stat. 5) is repealed.

(l) Subsection (e) of section 203 of the Solid Waste Disposal Act (42 U.S.C. 3253(c); 70 Stat. 997) is repealed.

(m) Section 216 of title 38, United States Code, is amended by striking out subsection (a)(2) thereof and by redesignating subsection (a)(3) thereof as (a)(2).

(n) Except for paragraph (1) of section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901; 88 Stat. 1978) is repealed.

(o) Section 3 of the Act of June 22, 1976 (42 U.S.C. 1959d, note; 90 Stat. 694), is repealed.

(p) Section 5(l) of the Tennessee Valley Authority Act of 1933 (16 U.S.C. 831d(l); 48 Stat. 61), is amended by striking both proviso clauses at the end thereof.

(q) Section 5(d) of the Consumer Product Safety Act (15 U.S.C. 2054(d); 88 Stat. 1211) is repealed.

(r) Section 3 of the Act of April 5, 1954 (30 U.S.C. 323; 68 Stat. 191), is repealed.

(s) Section 8001 of the Solid Waste Disposal Act (42 U.S.C. 6981; 90 Stat. 2892) is repealed.

(t) Section 5 of the Act of July 3, 1952 (42 U.S.C. 1954(b)) is repealed.

(u) Section 303 of the Act of July 17, 1964 (42 U.S.C. 1961c-3) is repealed.

SEC. 502. EFFECTIVE DATE.

This Act shall take effect 6 months after the date of enactment of this Act.

SEC. 503. AUTHORIZATION FOR APPROPRIATIONS.

There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

Mr. SCHMITT. Mr. President, if I may have the attention of the distinguished majority leader and the distinguished minority leader, I have consulted on this bill with the Parliamentarian, and he informs me that its referral would be to the Governmental Affairs Committee.

I have talked with Senator RIBICOFF, Senator PERCY, Senator CANNON, and Senator PACKWOOD, and we have all agreed, as have, I believe, Senator ROBERT C. BYRD and Senator BAKER, that the following unanimous-consent agreement would be in order for joint referral:

I ask unanimous consent at this point that the Science and Technology Research and Development Utilization Policy Act just introduced be jointly referred to the Committee on Commerce and the Committee on Governmental Affairs, with the stipulation that once the bill is reported by either committee, the other committee has 60 days in which to act before it is automatically discharged from further consideration of the bill. This agreement is agreeable to the Senators I have mentioned.

Mr. ROBERT C. BYRD. Mr. President, the distinguished Senator from New Mexico has cleared the matter on this side of the aisle, as he stated. I have no objection.

Mr. BAKER. There is no objection on this side.

The PRESIDING OFFICER. Without objection, it is so ordered, with the correction that when it is ordered reported, the other committee may have 60 days.

Mr. SCHMITT. Mr. President, I accept that correction.

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By Mr. DURKIN:

S. 1216. A bill to amend title IV of the Higher Education Act of 1965 to establish a system of student tuition advances to be repaid as an income tax imposed by the Internal Revenue Code of 1954, and for other purposes; to the Committee on Finance and the Committee on Labor and Human Resources, jointly, by unanimous consent.

TUITION ADVANCE FUND ACT

Mr. DURKIN. Mr. President, I am today introducing legislation to enable students to meet the rising costs of higher education, the Tuition Advance Fund Act of 1979. My bill, similar to legislation I introduced in the last Congress, would remove the burden of college tuition placed on parents by creating a Government trust fund to make direct loans to students. Students are eligible whatever the income of their families. The loans, up to a maximum of $5,000 a year for 3 years, would be repaid by the student through the Internal Revenue Service in small yearly deductions, as a tax on earned income during the working lifetime of the student borrower. The student, and only the student, will be responsible for repaying the loan.

It is important that family income not be a bar to student borrowing, for in these days of high education costs, even a seemingly high family income may not be enough to allow a student to get a proper education. Students should be able to borrow, as long as it is clear, as it is under this plan, that they are directly responsible for repaying the loans.

During the last session, Senators KENNEDY and MCGOVERN joined me in cosponsoring the Tuition Advance Fund Act of 1978 as a floor amendment to the tuition tax credit bill. By so doing, we were able to bring the merits and mechanics of my proposal before the full Senate. However, the measure did not enjoy the benefit of Education Subcommittee consideration. Therefore, we agreed to withdraw the Tuition Advance Fund as a floor amendment in hopes of assuring its enactment as a viable, more encompassing college finance alternative during the 96th Congress.

With the exception of a 10-year sunset provision which I have added, my Tuition Advance Fund bill strictly adheres to the principles put forward by Boston University President John Silber, who deserves credit for his thought and development of the plan. It authorizes the Commissioner of Education to make advances of funds to students to cover the costs of tuition and certain other related expenses up to a limit of $5,000 annually to undergraduates in their sophomore, junior, and senior years. In other words, to students who have made a commitment to their education. Also the student would have to attend an eligible institution, one which has allowed only reasonable increases in its charges to students.

In addition to being a financially and educationally responsible approach, the tuition advance fund repayment method is simple. Just as importantly, it avoids the problem of frequent default found with current student loan programs. Recipients will repay the money advanced to them during their working lifetime through the Federal income tax system. The student will begin payments once he or she ceases to be in school on at least a half-time basis and will continue until the amount borrowed plus a 50-percent surcharge has been repaid or until the recipient reaches age 65. The students, and not their parents, are the only ones responsible for the loans.

The funds will be withheld from the advance recipient's salary as a tax, and, as such, are not avoidable by declaring bankruptcy. The abuses which exist under the present student loan programs would not be possible. During the first few years, we would have to spend more money on the educational loans than we now do, but eventually, the program would be self-sustaining.

Two other aspects of the proposed repayment plan are important to note. First, students with an annual income of less than $5,000 during their repayment period will not be taxed during the years their income is below that level. Second, married individuals with a tuition advance obligation will repay 2 percent annually on the greater of (A) his or her individual earnings or (B) half of the combined income of both spouses.

Even though I supported the College Opportunity Act of 1978, I believe the existing Federal loan and grant programs only partly address the problem of rising education expenses for students. The same holds true for a proposed $250 tuition tax credit, a proposal I have persistently cosponsored and hope to see this Congress finally approve. However, by their very nature, both efforts can offer no more than partial solutions. In my mind, there is no question that a comprehensive program is needed now if a college education is to be a realistic goal for every American who wants to pursue one. Toward this end, the Tuition Advance Fund Act of 1979 promises financial relief that will help parents, students, and institutions of higher learning alike. I welcome public and congressional comment on this legislation, for a concerted effort is what we need to insure enactment.

Mr. President, I ask unanimous consent that the text of this bill be printed in the RECORD at this point.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 1216

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Tuition Advance Fund Act."

SEC. 2. Title IV of the Higher Education Act of 1965 is amended by adding immediately after part C thereof the following new part:

"PART D—TAX COLLECTABLE TUITION ADVANCES TO STUDENTS IN INSTITUTIONS OF HIGHER EDUCATION

"STATEMENT OF PURPOSE AND AUTHORIZATION OF APPROPRIATIONS

"SEC. 451. (a) It is the purpose of this part to authorize the Commissioner to establish a program for the making of advances to cover costs of tuition and other education-related expenses to students at institutions of higher education and to provide for the referral to the Secretary of the Treasury for collection under the Internal Revenue Code of 1954 of those obligations which are in repayment status.

"(b) (1) There is hereby established in the Treasury a trust fund which shall be available, without fiscal year limitation, to the Commissioner for purposes of this part. There shall be deposited in such fund amounts appropriated pursuant to paragraph (2) and all amounts collected pursuant to section 5 of the Internal Revenue Code of 1954.

"(2) There is authorized to be appropriated, for each fiscal year beginning on or after the effective date of this part, to the fund established by paragraph (1) an amount sufficient to fulfill the purposes of section 452 of this Act, not to exceed $4,500,000,000 adjusted by the inflation adjustment factors established by the Commissioner under section 454(b)(2). Such authorization shall not apply to any fiscal year which is more than two fiscal years after the fiscal year (hereinafter referred to as the 'break-even year') in which the income from the unused portion of such fund plus the amount collected pursuant to section 5 of such Code for such break-even year ex-