DoE proposal

A BILL

To enhance U.S. industrial competitiveness by expanding private sector rights to technical data in certain Department of Energy research and development projects, and for other purposes.

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

SECTION 1. SHORT TITLE.

This Act may be cited as "The Department of Energy Technical Data Commercialization Act of 1987".

SEC. 2. DEFINITIONS.

As used in this Act:

(1) "Technical data" means recorded information of a scientific or technical nature, regardless of form or the media on which it may be recorded. The term includes but is not limited to computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

(2) "Contractor" means a party (including a consortium or partnership) to a contract or other agreement (not including a grant for university research) with the Department of Energy.

(3) "Unlimited rights" means the right of the Government to use, disclose, reproduce, prepare derivative

works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(4) "Secretary" means the Secretary of Energy.

SEC. 3. COST-SHARED CONTRACTS AND OTHER AGREEMENTS.

(a) Notwithstanding any other law, the Secretary may permit a contractor to establish claim to statutory copyright, subject to section 4 of this Act, in technical data first produced under a contract or other agreement (not including a grant for university research) of the Department of Energy for the performance of applied research, development, or demonstration in which --

(1) the contractor furnishes an amount equal to at least twenty percent (20%) of the cost of the work performed under the agreement or such greater amount as the Secretary may designate;

(2) the work under the agreement is performed in the United States; and

(3) the work under the agreement is not in support of the weapons related or naval nuclear propulsion programs of the Department of Energy and is not the subject of an exceptional circumstances determination of the Department of Energy under 35 U.S.C. 202(a).

SEC. 4. TERMS AND CONDITIONS OF CONTRACTOR CLAIM TO COPYRIGHT.

(a) The Government and others acting on its behalf shall have a paid-up, nonexclusive, irrevocable, worldwide license to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government technical data to which the contractor establishes claim to copyright under section 3.

(b) After a period of time determined by the Secretary, the Government shall have unlimited rights in the technical data in which the contractor establishes claim to copyright. In determining the period of time after which the Government has unlimited rights, the Secretary shall take into account, among other factors, the percentage of cost-sharing by the contractor and the length of time needed to provide a reasonable incentive for utilization.

(c) The Secretary may require the contractor, assignee, or exclusive licensee of the copyrighted data to grant a. nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant upon terms that are reasonable under the circumstances. If the contractor, assignee, or exclusive licensee fails to grant such a license, the Secretary may grant the license, if the Secretary determines that action is necessary--

(1) because the contractor assignee or exclusive

licensee has not taken, or is not expected to take within the period of time the Secretary determines under section 4(b), effective steps to achieve practical application, in the field of use of an item, component, or process developed in whole or in part under the contract and to which the copyrighted technical data pertain;

(2) to alleviate health, safety, or energy needs that are not reasonably satisfied by the contractor, assignee, or exclusive licensee;

(3) to meet requirements for public use specified by Federal regulations and the requirements are not reasonably satisfied by the contractor, assignee, or exclusive licensee;

(4) because the contractor, assignees, or exclusive licensee are in violation of the requirements of section 4(d) of this Act.

(d) Any product embodying an item or component or produced through the use of an item, component, or process developed in whole or in part under the contract, to which the copyrighted technical data pertain, and which is used or sold in the United States by the contractor, assignee, or their exclusive licensees shall be manufactured substantially in the United States unless, in individual cases, the Secretary waives this requirement upon a showing that reasonable but unsuccessful efforts have been made to manufacture in the United States or that under the circumstances domestic manufacture in the United States is not commercially feasible.

SEC. 5. WITHHOLDING UNDER FREEDOM OF INFORMATION ACT.

The Secretary may withhold from disclosure to third parties making requests under 5 U.S.C. §552, technical data in which the contractor establishes claim to copyright under section 3 of this Act for such reasonable time as the Secretary prescribes under section 4(b) of this Act.

SEC. 6. REGULATIONS.

The Secretary shall promulgate regulations to implement this Act. At a minimum, these regulations shall set forth the cost sharing requirements of section 3(a)(1), the time during which the Government's right to distribute copies to the public is restricted under section 4(b), and the licensing requirements of section 4(c). These regulations also may include limitations on the use of the authority of section 3 to situations where the contractor has a commercial position in the technology of the contract or agreement or where unlimited rights in technical data are not needed by the Government for competitive procurement, publications, or other public dissemination. Limitations also may be imposed to comply with international agreements.

SEC. 7. UNLIMITED RIGHTS.

Except as otherwise provided in section 4, the Government shall have unlimited rights in all technical data first produced in the performance of any contract, grant, agreement, understanding, or other arrangement with or for the benefit of the Department of Energy.

SEC. 8. PRECEDENCE.

This Act shall take precedence over any other law which would require a different disposition of rights in technical data and over any future law unless that law specifically provides that it shall take precedence over this Act.

Department of Energy
Washington, DC 20585

APR 16 1986

Mr. Lawrence Rizzi, Chairman
Civilian Agency Acquisition Council
General Services Administration
18th & F Street, N. W.
Washington, DC 20405

Dear Mr. Rizzi:

As requested at the Civilian Agency Acquisition Council (CAAC) meeting of April 9, 1986, enclosed is the position of the Subcommittee on Patents, Data and Copyrights concerning the issues raised by the Department of Commerce at that meeting.

The Subcommittee believes that the proposed regulation, as written, correctly delineates the policies that the civilian agencies and NASA desire to follow concerning rights in data.

Sincerely,

Stephen D. Mournighan, Chairman
Subcommittee on Patents
Data and Copyrights

Enclosure

Committee Report

Proposed Regulation

Based on numerous comments from universities and the needs and mechanisms for information dissemination traditionally existing in the academic community, the draft regulation allows universities to establish claim to copyright automatically in data produced under most contracts for basic or applied research. The basic data rights clause provides that other contractors shall have the copyright for scientific and technical journal articles and may obtain this right for all other works if approved by the Contracting Officer on a case-by-case basis upon request. However, agencies may adopt an alternate giving all contractors this right automatically. The regulation also allows agencies with established distribution programs to eliminate this right for computer software where it would interfere with established agency distribution programs or other particular needs for the software.

When the contractor establishes claim to copyright, the regulation provides that the Government retains a copyright license. Others, however, would be required to obtain permission of the contractor in order to reproduce, prepare derivative works, distribute to the public, perform publicly or display publicly the copyrighted works, unless by or on behalf of the Government. In the case of computer software, the Government's copyright license does not include the right to distribute to the public.

Basis for Proposed Regulation

The considerations supporting the proposed regulation are basically as follows:

(1) The regulation already incorporates many suggestions by the Department of Commerce favoring private incentives in the treatment of data rights and responds to comments on the proposed regulation by the university community, while allowing agencies to continue to operate established computer software dissemination programs. In addition to the policy prescribing copyright automatically for contracts with universities for basic and applied research, and the option for agencies to allow all contractors to establish claim to copyright in all data, the regulation provides (p. 12) that agencies not choosing this option to grant automatic copyright to all will normally grant a contractor's request for permission to establish claim to copyright unless-- (A) the data consist of a report that represents the official views of the agency or that the agency is required by statute to prepare; (B) the data are intended primarily for internal use by the Government; (C) the data are of the type that the agency itself distributes to the public under an agency program; (D) the Government determines that limitation on distribution of the data is in the national interest; (E) the Government determines that the data should be disseminated without restriction.

(2) The regulation recognizes the various requirements for information dissemination which are set out in various statutes, either applicable to

individual agencies or to all agencies in general. There are a number of such statutory requirements affecting particular agencies and specific programs which govern the treatment of data or information. One example of these is Section 107(e) of the Energy Reorganization Act of 1974 (P. L. 93-438) which provides:

> (e) Subject to the provisions of chapter 12 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2161-2166), and other applicable law, the Administrator shall disseminate scientific, technical, and practical information acquired pursuant to this title through information programs and other appropriate means, and shall encourage the dissemination of scientific technical, and practical information relating to energy so as to enlarge the fund of such information and to provide that free interchange of ideas and criticism which is essential to scientific and industrial progress and public understanding.

An example of statutory requirements for a specific program is the Solar Heating and Cooling Demonstration Act of 1974 (P.L. 93-409), which contains the following provisions:

DISSEMINATION OF INFORMATION AND OTHER ACTIONS TO PROMOTE PRACTICAL USE OF SOLAR HEATING AND COOLING TECHNOLOGIES

Sec. 12.(a) The Secretary shall take all possible steps to assure that full and complete information with respect to the demonstrations and other activities conducted under this Act is made available to Federal, State, and local authorities, the building industry and related segments of the economy, the scientific and technical community, and the public at large, both during and after the close of the programs under this Act, with the objective of promoting and facilitating to the maximum extent feasible the early and widespread practical use of solar energy for the heating and cooling of buildings throughout the United States. In accordance with regulations prescribed under section 16 such information shall be disseminated on a coordinated basis by the Secretary, the Administrator, the Director of the National Bureau of Standards, the Director, the Commissioner of the Patent Office, and othe appropriate Federal offices and agencies.

(c)(1) In carrying out his functions under subsections (a) and (b) the Secretary, utilizing the capabilities of the National Aeronautics and Space Administration, the Department of Commerce, and the National Science Foundation to the maximum extent possible, shall establish and operate a Solar Heating and Cooling Information Data Bank (hereinafter in

this subsection referred to as the "bank") for the purpose of collecting, reviewing, processing, and disseminating solar heating and cooling information and data in a timely and accurate manner in support of the objectives of this Act.

Many civilian agencies have similar statutory requirements.

Commerce Department Objection

At the April 9, 1986 CAAC meeting, DOC argued that all agencies should be required to use a data rights clause allowing all contractors automatically to establish claim to copyright in all data (including computer software) and that agencies should not be permitted to restrict this right for purposes of agency distribution programs.

When a contractor does establish claim to copyright, distributees (other than the Government and its contractors) of the copyrighted work may not reproduce, prepare derivative works, distribute copies to the public, perform publicly, or display publicly the work without permission of the copyright owner (sec. 17 U.S.C. 106). This restriction, in many cases, limits the usefulness of data developed under civilian agency contracts, and inhibits, to some extent the further expansion by distributees of the technology, in that they must secure permission of the contractor who copyrighted the data before distributing it for further scientific purposes; such permission may or may not be given, and may not be free.

Congress has clearly mandated in various laws a policy of wide dissemination of data resulting from many civilian agency contracts. The proposed regulation reflects that policy. There is no such legal basis,

however, for placing any limits on the use of data by granting of copyright to all contractors, and thus leaving the decision concerning availability of data up to the contractor. Thus, the choice was made by the Subcommittee to allow as open public dissemination as possible.

By allowing agencies to either grant copyright on a case-by-case basis, or to use Alternate IV granting automatic copyright for all contracts, each agency is allowed to ascertain its legal requirements, and act accordingly. In such cases, either the agency, or the individual contracting officer, will make a positive decision, the result of which will be to limit the availability of computer software, and the ability of the public to use technical data. To make the decision for the agency in the proposed regulation could institutionalize such restrictions regardless of the individual statutory provisions governing such agencies.

Contracting Officer approval of contractor requests for permission to establish claim to copyright helps to clarify the rights of the parties and of the public with respect to data. Prior to the 1976 Copyright Act, Federal copyright law was limited to published works and generally required a copyright notice which served as an indication to the Government and the public that a claim of copyright had been asserted by the contractor. Under the new copyright law, copyright protection subsists upon fixation of the work, applies to both unpublished and published works, and a notice is not necessarily required in order to maintain copyright protection in a published work. Hence, under the new law it is difficult for the Government and the public to be aware of the

contractor's intent to copyright works developed under Government contracts and thus the extent of their rights in the works. While these regulations can require a copyright notice to be placed on copyrighted works, the effect of not complying with such a regulation is not clear and may vary depending on whether the work is required to be or in fact is delivered to the Government. In addition, Contracting Officer approval serves as a checkpoint in those instances where the automatic grant of copyright may not be appropriate, as, for example, where the agency is to disseminate the works itself. This further clouds the public's rights to taxpayer developed data should automatic copyright for all be granted.

DOC cited the DOD treatment of copyright policy as more traditional. The DOD data regulations reserve a license for the Government to reproduce, use, etc. all copyrighted data and to authorize others to do so. This license enables the Government to destroy any exclusivity created by the copyright. While the DOD policy obviates most problems associated with copyright of data, it renders the question largely moot by destroying the value of the copyright. The DOD approach would not likely be favored by any contractor interested in establishing claim to copyright, and would take back something which we are about to give universities and colleges.

DOC raised the question why other contractors are not treated the same as educational institutions and small businesses engaged in the Small Business Innovative Research (SBIR) program. The policy for universities performing basic and applied research on their campuses is mainly

supported by the traditional mechanisms and practices favoring publication and dissemination of information for which the academic community is known, as well as the fact that many comments were received from the university community supporting this policy. The policy for the SBIR program is based on special statutory authority for a unique program to provide limited support to selected small businesses pursuing high technology projects. It is a small program separate from agency mission R&D and is subject to particular data rights provisions in its authorizing law. Few, if any, small businesses requested that the regulation's copyright policy be changed. The only strong views on changing the copyright policy for other contractors were expressed by an individual from the Commerce Department who took issue with the proposed regulation at the April 9, 1986 CAC meeting.

Applicability of A-130

Contrary to the Department of Commerce assertions that OMB Circular A-130 encourages government agencies to contract out information and dissemination activities, the following references indicate quite the opposite.

Para. 7C: "The free flow of information from the government to its citizens is essential."

Para. 7G: " . . .The public's right to access to government information must be protected in the management of federal information resources."

Para. 7I: "The open and efficient exchange of government S&T information . . . fosters excellence. . . ."

A-130 is a comprehensive rewriting of four previous OMB circulars, which have been combined into this one circular. The policy of A-130 concerns management of information and states that such management of information should be done in the most efficient manner. But clearly, A-130 does not forbid agency distribution of data; it provides guidance on how such data should be distributed, leaving the decision to the agency. It also very clearly describes a policy of making information openly available to the public. Therefore, activities such as NTIS certainly fall within the policy guidance of A-130, and provide a valid method for agency dissemination of data. A-130 has nothing to do with copyright and the rights of the Government and contractors to data; this Regulation therefore does not contravene A-130 in any way, and does not prescribe any policy concerning dissemination of data.

Cabinet Council Minutes

The confidential minutes of an Economic Policy Council meeting were cited by DOC as a reason for opposing the proposed regulation on the basis that the Council agreed in concept to having OMB develop a uniform policy allowing all contractors ownership of software, engineering drawings, and other technical data in exchange for royalty-free use by the Government.

While this paper refers to ownership in the context of the February 1983 Presidential Memorandum on patent policy, and does not mention copyrights, if and when OMB develops such a policy, the FAR can be amended to implement it, if necessary. At present, no such activity is being undertaken, and no agreement on a policy has been made by anyone. A Government-wide data regulation is needed now, however, to implement P. L. 98-577.

OMB DRAFT

Edit's by KTL

GOVERNMENT POLICY ON THE OWNERSHIP OF TECHNICAL INFORMATION

Unless prohibited

~~To the extent permitted~~ by law, agency policy with respect to the ownership of technical information that has been developed wholly or partially at government expense shall provide for contractor, sub-contractor, or grantee ownership, including copyright. Such ownership of technical information shall be subject to the government's right to use it on a non-exclusive, royalty-free basis. For purposes of this policy, technical information means engineering drawings or other data relating to products or processes, semi-conductor mask works, computer software, and software documentation.

An agency shall expand its ~~rights~~ license to use technical information beyond the specific application for which the information was developed only to the extent required to perform agency missions. In such cases, the agency shall specify these additional license rights narrowly and require separate pricing for their acquisition. ~~For~~ Further, if example, a purchasing agency may need to acquire the additional license rights to disseminate technical information for the purpose of promoting competition in related follow-on procurements.

If developed substantially at government expense through a public technology dissemination program it shall not require separate pricing for such

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GOVERNMENT POLICY ON THE OWNERSHIP OF TECHNICAL INFORMATION

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Nothing in this policy is intended to preclude placing limitations on the access to, or on the use of, technical information classified for reasons of national security or under other authorities.

GOVERNMENT POLICY ON THE OWNERSHIP OF TECHNICAL INFORMATION

Background Paper

In January 1986 the Economic Policy Council (EPC) asked OMB to develop a uniform policy allowing all contractors ownership of technical information in exchange for royalty-free use by the government. The EPC meeting was devoted to improving protection for intellectual property rights and increasing U.S. international competitiveness. The attached draft policy statement answers the EPC request. It is expressly designed to stimulate discussion and comment, and to encourage the submission of hard evidence that substantiates the alleged budgetary and economic impacts of various policy alternatives. Following EPC agreement on a final policy, the Federal Acquisition Regulation will require revision to implement the policy.

Technical information or technical data includes engineering drawings or other data related to products or processes, semiconductor mask works, computer software and software documentation. Ownership of technical information can affect procurement costs, participation in bids for sales, the ability to protect sensitive technology, the commercial exploitation of new technology, and the climate for scientific innovation. While many issues in technical data policy are similar to those faced in making government patent policy, there are two significant differences. First, timely access to previously unreleased proprietary technical information can be much more valuable in the short run than a patent or patent license. Second, government rights in technical data are essential to promote competition in procurements.

Policy History

Existing policy has evolved piecemeal. Since at least 1972, the Executive Branch has attempted without success to develop a uniform data rights policy. Meanwhile, Congress has enacted several policy-creating statutes. Public Law 98-577 (41 U.S.C. 418a), the Small Business and Federal Competition Enhancement Act of 1984, and, most recently, Public Law 99-661 (10 U.S.C. 2320), the National Defense Authorization Act for FY 1987, define policies to be followed in the government-wide Federal Acquisition Regulation (FAR). Although the FAR contains a brief statement of policy (48 CFR 27.401), current practice is defined in a multiplicity of agency regulations which reflect years of agency procurement and grant-making experience. Civilian agency regulations generally favor contractor ownership of technical information in exchange for a license for use within the

government. At the time they were written, however, ownership of information was not the issue that rapid advances in computers and biotechnology have made of it.

In late 1983, because of concerns about patents, proposed FAR patent and data rights rules were withdrawn at the request of the Vice President. The action reflected OMB's urging and Congressional concern that the rules were inconsistent with the February 1983 Presidential Memorandum on Government Patent Policy. Proposed revisions to civilian agency (FAR) and Defense FAR Supplement (DFARS) technical data rules were again published in the fall of 1985. Private sector critics charged that, while procurement reform statutes were written to encourage the use of technical data to enhance competition in government procurements, the 1985 proposed implementing rules went beyond Congressional intent in acquiring rights for the government. Echoing this criticism, the FY 1987 Defense authorization provisions attempt to restore "the delicate balancing of interests between the government's need to acquire the right to release technical data to ensure competition and the contractor's interest in preserving valuable property rights in data on products that they develop at their own expense."

The final report of the President's Blue Ribbon Commission on Defense Management (Packard Commission) suggests, and the 1987 Defense authorization requires special provisions for ownership and use based on the source of funding. These provisions:

- permit the government to exercise unlimited rights in data developed entirely at government expense, suggest cases where more limited rights are appropriate, and, in the statute, allow the Secretary of Defense discretion to define the extent of the government's license;

- permit a contractor to limit the government's rights in data developed exclusively at private expense; and

- require that rights be negotiated in data developed with mixed funding.

Extensively revised versions of last fall's technical data provisions are nearing completion in the Civilian and Defense Acquisition Councils. The Defense provisions will incorporate these distinctions.

Draft Policy Statement

Vigorous scientific research and technology development are fundamental to U.S. economic and military security. In addition to providing almost half of the money spent annually on U.S. research and development, the Federal Government has supported innovation in the recent past by guaranteeing to inventing organizations the titles to inventions made with Federal support,

subject to license rights in the government.

The statement extends policies contained in the Presidential Memorandum on Government Patent Policy of February 18, 1983, to software and other technical information. At the same time it recognizes the legitimate requirements of agencies to obtain the rights to the taxpayer-funded technical information they need to perform their missions and to lower procurement costs.

The statement is consistent with OMB Circular No. A-130, "Management of Federal Information Resources." It recognizes that government information is a valuable national resource, and cautions agencies to limit their collection and dissemination of information to that necessary for proper performance of agency functions.

Finally, the policy statement requires that encouraging contractor ownership of technical information be done in a way that is consistent with the proper and appropriate administration of existing national security classification systems, and with other authorities for restricting access to technical information for reasons of national security.

Issues

The draft policy statement allows private ownership of technical information developed wholly or partially at government expense, subject to royalty free use by the government. This section of the background paper addresses several issues regarding the extent of the government's rights in technical data. We expect that agency staffs will raise additional issues to the Working Group and that these comments will be discussed and forwarded to OMB to be worked into a final policy.

1. Extent of the government's royalty-free license.

The conditions under which the government may use, modify, or disseminate technical information for public purposes beyond the specific application for which the information was developed is the key issue in formulating a technical data policy. There are five main consequences to retaining in the government broad rights in technical data. Broad government rights:

- enhance the government's ability to obtain competitive procurements;
- may cost more to acquire initially, but save the government money downstream;
- encourage the free flow of scientific information;
- decrease private incentives to fund innovation;

o decrease private incentives to fund commercial development.

Formulation of a uniform, government-wide policy that balances increased incentives for innovation with efficient procurement practice is further complicated by differing civilian and defense-related data environments. Civilian agency-sponsored R&D often results in products or processes for which there is a substantial potential commercial market (e.g., biotechnology), and for which the government has little interest in large-scale later procurements. Defense R&D also produces commercial spin-offs, but Defense data requirements grow out of the need to obtain competitive procurements of products initially developed with substantial government sponsorship.

As drafted, the policy statement reflects OMB's position that the most cost-effective way to manage the government's use of technical data is to favor the automatic acquisition of only the most limited rights. Additional rights, and their costs, are to be specified separately as required. At present the government routinely and automatically acquires rights to modify technical data and to disseminate them outside the government. Thus the price the government pays for technical data reflects contractor hedging against the risk that the government will modify for its own use, and/or disseminate, the data to its competitors. Such modification or dissemination will reduce the contractor's return on the data to less than that possible had it retained exclusive ability to develop and market the data.

On the other hand, the government has a limited ability to make full use of the broad rights it routinely requires. The government's inability even to catalog, much less exploit, the vast amount of technical data in its possession is probably reflected in discounted prices for data rights. The highly competitive nature of R&D contracting serves further to lower the price of retaining broad rights in the government. Furthermore, proponents of retaining broad rights to disseminate technical data for the purpose of promoting competition in government procurement argue that contracting officers will rarely be able to predict all the rights the government may need in the future.

The draft policy statement reflects OMB's preliminary position that automatic retention of rights in the government creates disincentives both to the efficient management of the government's technical data and to energetic innovation from and commercialization of the results of efforts funded in whole or in part with public funds.

2. "wholly or partially at Government expense" - line 3

As noted above, the Packard Commission and recent Defense-related legislation contain provisions permitting the government unlimited rights in data developed wholly at government expense.

OMB recognizes that its identical treatment of wholly and partially funded data in the draft policy is potentially a contentious issue. The draft is expressly designed to generate comments, and hard evidence to support those comments, on the budgetary and economic effect of limits on the government's rights in data. The market mechanisms outlined in the previous discussion will operate however the government participates in funding the data's development. In addition, the paperwork burden on contractors resulting from the reporting and recordkeeping required to substantiate the data's funding history can be reduced by uniform treatment. Finally, as noted above, the draft policy allows agencies to specify and acquire the rights they actually need to perform their missions.

3. "computer software" - line 10

Software is different from much of the other technical information the government acquires to support its maintenance, quality assurance, and competition requirements. While most data are incidental to or supportive of the use of an end item, software is itself a tool, an end item that is procured for its value to do work. Furthermore, it is readily copyable, and a copy has the potential to serve as an equally effective tool for someone else.

Under existing practice the government typically acquires unlimited rights to copy and modify computer software that is developed wholly or partially at government expense. (Commercial products developed wholly at private expense, such as Lotus 1-2-3, are outside the scope of the draft policy.) While the National Technical Information Service (NTIS) operates a software exchange program to facilitate inter-agency sharing, agencies only occasionally use this program, often because the software available has been custom designed for a very specific application. NTIS makes federally-funded software available to the public as well. As drafted, the policy would allow routine sharing of such software within the government and routine public distribution only if the software development contract specifically provides for it.

Even more than with other types of data, the present policy of acquiring the rights to copy and use software within the government may increase the cost of software developed for a single application. This increase will depend on the contractor's perception of the software's commercial potential. At a minimum, the contractor will be more likely to invest the private funds necessary to turn an agency-funded software design into a generic package with wider usefulness if the software has not already been disseminated throughout the government.

4. Should the policy specifically address the rights of foreign contractors to data produced under U.S. government grants or contracts?

The policy statement was one of several initiatives taken by the EPC at a meeting dedicated to improving U.S. international competitiveness. For example, in another initiative the EPC recommended legislation to streamline procedures for companies to obtain relief from violations of U.S. intellectual property rights by U.S. trading partners.

Allowing foreign ownership in this policy statement may suggest that the government is taxing citizens only to leave to its international competitors the rights to wholly or partially tax-funded R&D. On the other hand if foreign ownership is not included, the policy may undercut free trade initiatives like the recently signed semi-conductor agreement with Japan, which allows U.S.-owned firms in Japan to participate in Japanese R&D contracts on an equal footing with Japanese firms.

Foreign contractors are covered in the current draft. As an option, the policy could be limited either by stating that it applies only to domestic firms, or, by separate action.

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GOVERNMENT POLICY STATEMENT ON TECHNICAL DATA AND COMPUTER SOFTWARE

The following statement of Government policy is provided for use by the acquisition agencies in developing uniform coverage for rights in technical data and computer software for the Federal Acquisition Regulations System.

1. General.

It is necessary for Government departments and agencies, in order to carry out their diverse missions and programs, to acquire or obtain access to many kinds of technical data developed under or used in performing their contracts and grants. Such technical data may be needed in order to obtain competition among suppliers; to meet acquisition needs; to ensure logistical support; to fulfill certain responsibilities for disseminating and publishing the results of research, development, and demonstration activities; and to meet other programmatic and statutory requirements. The Government also frequently needs to ensure ready access to the best available technologies and to encourage its contractors to use private initiative and resources to satisfy Government needs. The specific needs of the Government for technical data and the right to use the data or authorize others to use the data on the Government's behalf are dependent upon and must be tailored to each department's or agency's missions and programs.

At the same time, it is recognized that contractors have a valid economic interest and a property right in technical data resulting from private development. The protection from unauthorized use, duplication, or disclosure of such data is required in order to preclude the compromise of such economic interests and property rights which could jeopardize the contractor's commercial position, and impair the Government's future ability to obtain access to, or use of, such data.

Protecting such data is necessary to encourage qualified contractors to participate in Government programs.

An important purpose of federal support for research and development is to develop the science and technology base needed for a strong national defense, for the international competitiveness of domestic industry, for the health and well-being of U.S. citizens, and for a healthy U.S. economy. To this end, commercial use of technologies developed under Government contracts should be encouraged. Departments or agencies, may grant developing contractors, where appropriate, some form of exclusivity to use technical data for commercial market purposes.

Thus the regulations regarding the acquisition of technical data and rights in technical data should strike a balance between agency programmatic mission needs, statutory requirements, full and open competition in Government procurement, a contractor's legitimate proprietary interests in protecting investment, and the enhancement of commercial use of Federally supported research and development. In summary, the Federal Government's policy regarding technical data is to ensure that national interests are fully served by:

(i) Assuring that agencies acquire only such technical data and rights in the data as are needed to fulfill their missions.

(ii) Encouraging private development and the use of the best available technologies to satisfy the Government's needs by protecting technology developed at private expense.

(iii) Encouraging broad participation by qualified commercial concerns in Government programs.

(iv) Encouraging Government contractors to commercialize technologies developed under their contracts.

(v) Enabling agencies to provide for the appropriate dissemination and beneficial use of the technology resulting from Government funding.

The specific factors set forth in paragraphs 2 and 3 below are to be used as a guide.

2. Rights in Technical Data.

a. As to data resulting exclusively from private investment, a contractor's legitimate proprietary interest will be protected consistent with statutory requirements. The delivery of such data should be under agreement (reflected in express contract provisions) limiting or restricting its disclosure outside the Government *except where permitted by statute* so as not to compromise a contractor's property rights or economic interest in the data. A contractor may not be required to provide such data with unlimited rights, *or to sell or otherwise relinquish any rights in data provided by statute* ~~or license rights~~ as a condition for award of a contract.

b. As to data resulting partially from private expense and partially from Federal funding, particular care must be given to the contractor's property rights and economic interests therein. If the contractor has or will contribute substantially to the development of an item, component or process, or if the contract involves co-sponsored research and development and the contractor is required to make substantial contributions , the agency may, consistent with statutory requirements, agree to restrict disclosure commercially valuable technical data resulting from such development provided the agency obtains a royalty-free license to *use or to* release the data outside the Government for Government purposes (including competitive reprocurement). In deciding the rights to be obtained in such data, the purpose of the contract, agency needs and statutory requirements, and the relative contributions of the contractor and the agency shall be considered.

c. As to technical data resulting wholly from Government funding, an agency may either obtain such data with unlimited rights ~~(i.e., without limitation on its disclosure and use by the Government)~~; or may agree to restrict *distribution or* disclosure *(as appropriate)* of commercially valuable technical data resulting from such development provided the agency obtains royalty-free license to release the data outside the Government for Government purposes

(including competitive reprocurement rights). In determining which approach to take, consideration must be given to an agency's programmatic and missions needs, competition, ~~as well as an agency's~~ *and applicable* statutory requirements *(such as those* regarding the availability of the results of its activities). ~~Normally, i~~ *If* an agency has established a program for the dissemination of information concerning its activities and the results thereof, or has statutory requirements to do so, the agency may ~~*be required to*~~ obtain unlimited rights to technical data resulting wholly from Government funding. When an agency acquires unlimited rights, limitations and restrictions should not be imposed on the contractor's right to also use and disclose the data for its own purposes unless required by Federal export control laws, regulations, and policies, or for national security reasons.

If an agency has no established programs or statutory requirements regarding the dissemination of the results of its activities, in appropriate cases, it may enable a contractor to retain some exclusive commercial rights in technical data for the purpose of commercialization. This may be accomplished by permitting contractors to establish exclusive commercial copyright to the data, with limitations on the Government's own publication and public distribution of the data, but otherwise subject to a royalty-free license by or on behalf of the Government for Government purposes (including competitive reprocurement purposes). Alternatively, such exclusive commercial rights may be granted by the agency agreeing to limit its disclosure and use of the data to a royalty-free license ~~for~~ *to* Government purposes (including competitive reprocurement of the item, component or process to which the data pertains). When so limited, the data may be released outside the Government only under agreement obligating the recipient to maintain the data in confidence and restricting its use ~~for~~ *to* Government purposes. In addition, any such exclusive commercial rights may be made subject to time limitations or termination rights in the Government, consistent with

the Government's need and the contractor's commercial objectives, in order to assure that the data is not suppressed or abandoned. Agencies may also obtain royalty payments based on commercial sales of the item, component, or process to which the data pertains when considered appropriate.

3. Computer Software.

In many cases, the same basic principles set forth in paragraphs 1 and 2 with respect to technical and other data also apply to computer software. However, since computer software is also an end item deliverable in itself, particular care should be taken in specifying agency needs for computer software and assuring that it is to be furnished, with attendant rights regarding its use and disclosure, to enable the purposes for which the software is being acquired to be carried out. This includes identification prior to contract, to the extent feasible, of computer software developed at private expense which may be needed to fulfill contractual requirements so that delivery of the software with adequate rights can be assured. In addition, in recognition of standard commercial practices regarding the vending of computer software, agencies should restrict the use and disclosure of privately developed software to specified sites, locations, or designated computers within the Government or of those acting on behalf of the Government, consistent with the purposes for which the software is being acquired. Rights to computer software partially or fully funded by the Government should be treated in a manner consistent with paragraph 2, except that where there has been substantial private funding in addition to Government funding, the Government's license rights may be limited to specific sites, locations or designated computers.

June 12, 1987

TO: AIPLA --
Government Intellectual Property Policy Comm.

HUGHES
AIRCRAFT COMPANY
Subsidiary of GM Hughes Electronics

The Procurement Round Table has issued a Report dated March 5, 1987; Proprietary Rights in the Competitive Era. The PRT Report was authored by Prof. Ralph Nash, Jr. of George Washington University. It recommends a dramatic simplification of the technical data rights regulations of the Government, and it may receive wide attention.

The Procurement Round Table is a Washington, D.C. non-profit group whose Board is largely composed of prestigious names in Government procurement, most of whom formerly held high Government positions in the field of procurement.

The Report sets up the following three policy goals:

1) Provides the benefits of Competition,
2) Protects proprietary rights, and
3) Simplicity;

but it omits as a policy goal the adequate protection of the property interests of contractors in their data for privately developed technology in the Government market (by defining proprietary rights as commercial, non-Government market rights). It adopts mandatory licensing of privately developed technology for the Government market. Such mandatory licensing will discourage IR&D funding of projects for the Government market and will further dry up the supplier base on which we all depend for the defense of our country.

The quid pro quo for such mandatory licensing is the licensing for royalties of all technology developed under Government contracts. It is highly doubtful if Congress and "public interest groups" would allow this because it includes licensing technology developed wholly at Government expense. Also, the Report recommends setting royalties based on performance under the development contract. That seems an appropriate basis for computing royalties for licensed use of privately developed technology, although it may do very well for other licensed technology (Government or mixed funding).

The report has many very good features: the preference for Direct Licensing; a single, Government-wide data regulation; improved guidance in the FAR for techniques of obtaining competition; and the need for a separate regulation on computer software.

Charles S. Haughey

Charles S. Haughey

csh/bs
Enclosures: 1. PRT Report
2. Analysis by C. S. Haughey

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ANALYSIS OF THE PRT REPORT, MARCH 5, 1987
PROPRIETARY RIGHTS IN THE COMPETITIVE ERA

SUMMARY

The PRT Report cites several policy goals, but does not include as a goal the adequate protection of privately developed technology in the Government market. It proposes mandatory licensing for all Government procurement, reserving commercial rights to contractors, regardless whether the items and processes so licensed have been developed at private expense, Government expense or with mixed funding.

This is a dangerous policy because it does not allow sales to the Government without licensing privately developed technology to others for use in Government contract work. It thus promotes technical leveling, and removes much incentive to develop items and processes for Government application, or to sell to the Government commercially valuable technology. It is doubtful if Congress and public interest groups would allow the policy for much Government funded development, thus removing the incentive for private developers to accept the policy.

Many other features of the Report are very good: the historical review, and the recommendations for Direct Licensing, a single Government-wide regulation, guidance in the FAR for techniques for obtaining competition, and the need for a separate regulation on computer software.

HISTORY

The PRT Report reviews technical data rights policy history, and notes the success of the balanced policy from 1964 to the early 1980's, when the delicate balance of technical data rights collapsed under the pressure for competition and the adverse publicity in spares procurement. The Competition in Contracting Act of 1984 and many objectionable special data rights clauses resulted. Industry turned to Congress for relief, and the FY 85 and FY 87 Defense Authorization Acts mandated changes, primarily in 10 U.S.C. 2320 and 2321. The result was the new Technical Data Rights provisions in the Defense FAR Supplement, noted in the Report, but not yet in final form when this Report was released.

BASIC POLICY GOALS

The PRT Report states three policy goals for a new policy:

1. Provide the benefits of competition.

   Six ways are suggested to provide competition in manufacture, with the objective of precluding sole source in long-term manufacture: competitive copying, use of form, fit and function specifica tions, licensing, leader-follower, specific acquisition (of data rights), and reverse engineering.

   The benefits of competition in ideas, and in private development, seem to have been overlooked in assuring competition in manufacture.

2. Protect proprietary rights.

   The goal of protecting proprietary rights of contractors is stated to be equally important to the goal of competition. Proprietary rights as used here means only the commercial, non-Government market.

   The PRT Report assumes that protection of the commercial (non-Government) market of the developer is all that is needed to protect the proprietary rights of the developer. The Government market is not included as an area for protection of privately developed technology.

   It is also assumed that an agreement to protect the data from unauthorized use or disclosure is adequate protection. The Report recommends Direct Licensing, but overlooks the lack of effective procedures to enforce these agreements where the Government makes the agreement directly with the supplier and will not take responsibility for compliance with the agreement.

   The Packard Commission Report is quoted to warn against demands for unlimited rights as a condition of Government contract, suggesting that the Government accept lessor rights such as directed licensing, and to encourage mixed funding of development to support the idea of Government Purpose License Rights (GPLR), reserving the commercial market to the contractor who contributes to the development. The Packard Commission Report would allow private developers the right to not license the Government or competitors, and also the right to not deliver detailed technical data, thus retaining the ability to negotiate reasonable

compensation for use of proprietary technology by others. This the PRT Report does not do.

In 10 U.S.C. 2320, Congress also preserves to the private developer the right to not deliver detailed technical data useful for reprocurement from others, and retains for such contractors the right to not license while advising the DoD that it has many ways to seek competition without destroying a developer's intellectual property rights.

There is no intent in this policy goal to protect privately developed technology from delivery to the Government or from competitive use in Government procurement. This goal needs restatement, or a new goal is needed, to balance the interests of innovative contractors with those of the Government.

3. Simplicity.

Simplicity of regulations and contract clauses is given equal importance to the goals of competitive procurement and protection (?) of proprietary rights. To attain simplicity, the PRT Report would eliminate:

a) flexibility,

b) protection of the Government market for privately developed items, and

c) authority to compromise by withholding manufacturing capability from competitors or the right of the Government to have others use the developer's data for manufacture.

The Basic Policy Goals are those of the Government in providing for its objective of competitive procurement. There is a lack of balance of attention to the need for incentives for the innovative companies to develop technology for, and to do business with, the Government.

THE PROPOSED NEW POLICY

1. Issue a single regulation.

Agree. We much need consistent definitions uniformly used by all services, and a selection of standard clauses to accomplish approved purposes. Also recommended is guidance in the FAR on ways to obtain competition without violating proprietary rights, but the Report defines proprietary rights too restrictively (see comments on policy goal, Protect Proprietary Rights).

2. Separating Technical Data From Computer Software.

Agree. There are differences on the detailed implementation of this recommendation, even between this PRT Report and that of the Packard Commission. The Defense FAR Council is now working on that project, promising to complete it by summer's end, and we plan detailed comments through CODSIA (Council of Space and Defense Industries Associations) at that time.

3. Protecting Commercial Rights in Technical Data.

The PRT Report recognizes that technical data generated under a contract may contain valuable trade secrets, and the requirement to deliver such data with unlimited rights destroys trade secrets which may be valuable in the market place. For this category, Government Purpose License Rights (GPLR) is recommended as a new category of rights to preserve the trade secret for commercial purposes while giving the Government a license for competitive procurement.

This report requires such GPLR for data generated under a Government contract without regard to whether it discloses a privately developed item or process. The category of "limited rights" is to be eliminated, and the category of "unlimited rights" is to be used in "march-in" situations like those in the present patent policy and also where necessary to achieve competition in Government contracting.

It is doubtful if Congress and public interest groups would allow technology developed under Government contracts, especially in non-military areas, to remain trade secrets of the developer to give it control of the commercial market, in which case the quid pro quo for the release of control of the Government market for private developments would be mostly lost.

If only the limited rights status of privately developed technology were retained, these recommendations would have considerable merit. Sacrifice of limited rights to the Government's desires for competition in every case will discourage some budgets for IR&D in areas of special interest to the Government, and may also discourage sales of privately developed technology and products to the Government.

The PRT Report notes the new DFARS technical data regulations in this area, objecting to applying the GPLR policy only where over 50% of the development is funded by the contractor.

We heartily agree, and CODSIA has so noted.

The Report also notes that the DFARS adopts the most difficult technique of licensing (the Government sublicense) as the standard technique, relegating the preferable technique, Direct Licensing, to a subsidiary role.

Again, we and CODSIA agree heartily.

4. Compensation for Licensing of Competitors.

The Report cites difficulties in setting compensation rates for licensing, and recommends licensing for successful completion of a development effort without regard to the source of funding of the development.

This could very well be a wise suggestion for mixed funding developments and those funded by the Government, avoiding much controversy and providing needed incentive for accepting Government development contracts. Rates between 1% and 5% are recommended, which may be too low at the high end. It would be an inappropriate basis for licensing privately developed technology.

5. Controlling the Techniques Used to Obtain Competition.

Guidance is recommended on use of techniques to plan for competitive procurement, and the statement is made that two techniques should be banned:

a) Placing a time limit on limited rights and

b) Requiring a contractor to sell unlimited rights in data delivered under a contract.

Agree.

PARALLEL TO PATENT POLICY

The essential proposal of the Report is said to be based on adopting the philosophy of the Government's patent policy, retention of commercial rights in data for technology developed under contract in exchange for a license to the Government. It also adds:

1. A mandatory license to privately developed technology, and
2. Royalty compensation to the developer based on contract performance rather than on source of funding.

The Government's patent policy does not apply to inventions made at private expense, and the ideas of the covered patents are published for others to see and build upon. The policy of the PRT Report does cover privately developed technology, and it keeps the technology secret outside of Government contract work.

SUMMARY OF REQUIRED ACTIONS

1. Have Congress adopt statute for a single Data regulation in the FAR, not split with the DFARS.

   Agree, with the reservation that some clauses would be required for (the DoD and others) developing for Government procurement or to satisfy product needs, and other clauses would be required where extending public knowledge was the main objective.

2. Write the FAR with separate guidance for technical data (including computer data bases) and for computer programs and documentation of the programs.

   Agree, with some reservations on the problem of data bases and the need to protect private collections of otherwise publicly available data.

3. Give the Government a right to direct a contractor to license privately owned technical data for competitive Government procurement.

   Disagree. Industry must have the right to say no in order to negotiate reasonable compensation, and in key technology, the right to refuse to license until ready. It is doubtful that there will be many refusals -- so far there have been none at Hughes when we are allowed to select the licensee and to negotiate the terms of the license (subject, in both cases, to the reasonable approval of the Government).

4. Include in the FAR guidance on computation of royalties (for licensed use of GPLR data).

   Agree, and include also guidance on reasonable approvals in Direct Licensing.

5. Include in the FAR guidance on techniques for obtaining competition without violating proprietary rights, and ban arbitrary time limits on proprietary rights and also ban solicitation of prices for giving up all proprietary rights.

   Agree, with the understanding that proprietary rights include the Government market.

Charles S. Haughey
June 12, 1987

A P R T R E P O R T

PROPRIETARY RIGHTS IN THE COMPETITIVE ERA

*****

An Educational Analysis and Recommendations

March 5, 1987

This is a report of the Procurement Round Table approved by two-thirds or more of its Directors. It was initially prepared by Ralph C. Nash, Jr. who is a member of the PRT Board.

The PRT is a non-profit corporation whose purpose is to inform the public and the Congress about the Federal procurement process, to study and report on procurement issues, and to make recommendations for improvement to the Federal procurement system. The members of the PRT Board, who serve pro bono and as private citizens have extensive experience and background in a wide range of Federal Government procurement areas.

HISTORICAL BACKGROUND

In the 1950s the Department of Defense was the first agency to recognize the need for a contractual policy on proprietary rights. Initially, it promulgated a policy permitting contractors to protect such rights by not delivering proprietary data relating to Government products. While this policy has been successfully used by NASA and some other civilian agencies since that time, DoD quickly concluded that it was unacceptable because such data was needed to maintain and operate military hardware. As a result, in 1964 the Department of Defense adopted a new proprietary rights policy that struck a delicate balance between the needs of the military services and the desire of their contractors for protection of proprietary rights.

This 1964 policy promised that the procuring agencies would honor rights to technical data pertaining to items, components or processes "developed at private expense" if contractors would deliver such data to the Government for use in operating, maintaining and repairing military hardware. In addition, contractors agreed they would not claim proprietary rights to technical data pertaining to items, components or processes developed as a part of the performance of Government contracts (excluding items, components or processes developed during IR&D/B&P efforts) and to certain categories of data such as form, fit and function data, and operation and maintenance manuals. The Government also implicitly agreed to pay a fair price for proprietary data it agreed to honor in those cases where it was necessary to buy proprietary rights to carry out its procurement mission (by specifically acquiring rights in data only under narrowly circumscribed conditions). The delicate nature of this balance was demonstrated by the fact that the policy contained a unique deviation provision prohibiting approval of deviations by the military services and requiring all deviations to be granted by the ASPR Committee.

This policy was honored, in the main, by the military services and industry for a decade and a half in spite of continual tensions. The major complaints were that industry was claiming proprietary rights in far more data than called for by the contract clauses and that the services were obtaining rights to proprietary data through mandatory "predeterminations" of rights not permitted by the policy. To deal with these problems, the contractual Rights in Technical Data clause grew longer and more complex but the fundamental policy remained essentially as it had been devised in 1964. In the late 1970s essentially the same policy was applied to computer software as it was added to the standard contract clause. It is interesting to note that one of the factors underlying the long adherence to this policy was the fact that the crucial term "developed at private expense" was never defined -- with the result that there was always uncertainty as to the precise scope of the protection being afforded to contractors.

The delicate balance collapsed in the early 1980s. One of the major factors in this collapse was the growing pressure, culminating in the adoption of the Competition in Contracting Act in 1984, for increased competition in defense procurement. Another factor was the adverse publicity from the procurement of spare parts at arguably excessive prices. A third factor has been the increased unwillingness of contractors selling commercial products and computer software to agree to the policy of giving the Government unlimited (i.e., commercial as well as Governmental) rights to technical data and computer software developed in the performance of Government contracts. As a result of these forces, the Secretary of Defense rescinded the strict deviation policy in August 1983 -- permitting the services to formulate new policies. The result has been that the full pressures of the competitive procurement process have been exerted more and more frequently by the Government to obtain greater rights in proprietary technical data and computer software.

At the same time, the agencies failed to devise a single proprietary data policy for inclusion in the Federal Acquisition Regulation. Since DoD and the civilian agencies could not agree on the basic premises supporting a unified policy, it was agreed that separate regulations would be issued. This has led to the creation of a FAR proprietary rights policy for the civilian agencies and a DoD FAR Supplement (DFARS) for the military services. At the time this paper was written, the FAR provisions were awaiting issuance and a revised DFARS has been published for comment.

Industry responded to this chaotic situation by turning to Congress for relief; and Congress, frustrated by the inability of the Government to promulgate a unified policy, passed two statutes in 1984 dealing with rights in technical data (P.L. 98-

525 covering DoD and P.L. 98-577 covering all civilian agencies except NASA). The DoD statute was amended in 1986 by P.L. 99-661 to provide further guidance on proprietary data policy. These statutes attempt to restore the balance that existed in the proprietary rights area in the 1960s and 1970s and should provide the foundation for the new proprietary rights policy of the 1980s. While they are dissimilar in minor respects, they should not prevent the Government from adopting a unified policy in the FAR. However, at the present time, the two policies in the FAR and the DFARS will remain as separate policies.

This paper suggests a totally new proprietary rights policy that will serve the Government into the 1990s. It proposes a rights in technical data policy as covered by the statutes and a rights in computer software policy which is outside of the scope of the statutes. It accepts neither the current statutes nor the old DoD policy as valid but strives to attain a new balance.

BASIC POLICY GOALS

A policy that can survive in the new competitive era must attain three major policy goals.

1. Provide the Benefits of Competition

The new policy should attempt to preclude contractors from creating a sole source position in the long-term manufacture of a product designed and developed under a Government contract. There can be little question that the Government needs to bring the full force of competition to bear on its procurements in order to obtain the products it needs within the amount of funds available. The benefits of competition have been well documented in Kratz & Gansler, Effective Competition During Weapon System Acquisition, NCMA Challenge Monograph Series, Vol. 1 (1985). This goal can usually be achieved, however, without destroying a contractor's proprietary rights. The following techniques are documented in Nash & Rawicz, Patents and Technical Data (Geo. Wash. Univ. 1983) as being usable for this purpose:

a. Competitive copying -- providing competitors performance specifications and samples of the product to be used in submitting competitive offers for the product in subsequent procurements. This technique is now mandated for spare parts procurements in 10 U.S.C. 2320(d).

b. Form, fit or function specification -- permitting competitors to design new products against the original performance specifications.

c. Licensing -- requiring the developer to license competitors or to grant the Government the right to sublicense competitors.

d. Leader-follower -- requiring the developer to establish a second source by subcontracting a portion of the production quantity or by licensing.

e. Specific acquisition -- purchasing the necessary rights in technical data to permit its use in competition.

f. Reverse engineering -- preparing detailed manufacturing drawings by analysis of the product without use of the proprietary drawings.

While none of these techniques can be used to obtain competition in all situations, they have all been used effectively by the military services in specific procurements. (DFARS 217.7201-2 contains limited guidance on the use of some of these techniques.) Thus, there are numerous techniques available to obtain competition without taking away all proprietary rights of contractors.

2. Protect Proprietary Rights

An equally important goal is that the policy protect the proprietary rights of contractors. It should be understood that contractors seeing a strong commercial market for their products will not give up all proprietary rights to those products in order to sell them to the Government. There are two broad classes of contractors that fall in this category: specialty subcontractors and vendors of software. If faced with a demand for Government unlimited rights in technical data and computer software, they can be expected to i) refuse to sell to the Government, ii) add a significant premium to the price, or iii) redesign so as not to use the proprietary information. None of these courses of action benefit the Government and all can be expected to increase the price of the design and development effort.

Fortunately, the Government does not need unlimited rights to carry out its mission. Under the present DoD policy, the procuring agency is given only two choices --to accept the data or software with proprietary markings (limited or restricted rights) agreeing to restrictions on its use or to take unlimited rights to use the data and to disclose it at will. The FAR policy provides a third choice -- to permit complete withholding of the proprietary data. However, another, superior choice is readily available -- to take full rights to use the data for Governmental purposes while preserving the commercial rights in the contractor. The Final Report of the President's Commission on Defense Management (June 1986) (the Packard Commission) makes the following recommendations in Appendix I:

a. Except for data needed for operation and maintenance,

the government should not, as a precondition for buying the product, acquire unlimited rights in data pertaining to commercial products or products developed exclusively at private expense. If, as a condition of the procurement, the government seeks additional rights in order to establish competitive sources, it should normally acquire lesser rights (such as directed licensing or sublicensing) rather than unlimited ones. The rights least obtrusive to the private developer's proprietary position should be selected.

YES →

b. The government should encourage a combination of private and government funding in the development of products. Significant private funding in this mix should entitle the developer to ownership of the resulting data, subject to a license to the government permitting use internally and use by contractors on behalf of the government. If government funding is substantial, the license should be on a royalty-free basis; otherwise, it should be on a reduced or fair-royalty basis. Whenever practicable, the rights of the parties should be established before contract award.

c. If products are developed exclusively with government funding, the contractor/developer should be permitted to retain a proprietary position in the technical data (a) not required to be delivered under the contract or (b) delivered but not needed by the government for competition, publication, or other release. Use by or for the government should be without additional payment to the contractor/developer.

These recommendations point the way to a new policy that will protect essential proprietary rights.

3. Simplicity

A third goal is of equal importance. The present DoD regulations and contract clauses are far too complex to be understandable. The new FAR is shorter and clearer but remains difficult to interpret. The regulations are problematic primarily because they do not contain clear explanations of the policies relating to very difficult issues. The contract clauses are complex because they are single omnibus clauses to be used for both research and development and manufacturing contracts and for both technical data and computer software. As a result, they are probably the longest clauses in the entire Government contracting process and certainly the most complex clauses currently in use. There is great doubt if either the regulations or the clauses are understood by even the seasoned veterans of the procurement profession.

Simplicity is necessary because the issue of proprietary

rights is one which is raised on a day-to-day basis in the negotiation and administration of contracts. The personnel charged with these responsibilities are generally not legally trained and cannot be expected to deal with esoteric legal terminology and undefined provisions. They need contract provisions and regulatory guidance that they can comprehend and work with. The Report of the Packard Commission recommends that this problem be addressed by preparing separate clauses for computer software and for manufacturing contracts.

ELEMENTS OF A NEW POLICY

The following elements are suggested for inclusion in the new policy for proprietary rights. Each element is discussed in terms of the current statutes and regulations and the prior experience that has been attained in using the policy.

1. Issuing a Single Regulation

One of the major goals of the FAR system was to provide uniform guidance to the Government and its contractors on procurement policy. Technical data and computer software are the major areas where the Government has been unable to formulate such policy. The Packard Commission identifies this problem and makes the following recommendation:

> The FAR System (a single uniform regulation applicable to all agencies, with supplements by agencies as needed) should be used to cover data rights. Without the discipline of a uniform system, similar terms and concepts are defined and treated differently. The differences are not justified. The FAR should provide common definitions of basic terms, since there is no apparent reason for agencies to use different definitions, a practice that causes great confusion.

Unfortunately, the statutes are not helpful in this area. Both of the statutes passed in 1984, while somewhat dissimilar in language, contained a requirement that they be implemented "as part of a single system of Government-wide procurement regulations." However, the DoD statute was change by P.L. 99-661 in 1986 to call for implementation in the DFARS. Thus, Congress has become part of the problem of arriving at a single unified regulation. The DoD statute should be amended to permit the FAR to contain the fundamental policies of the Government on technical data and computer software. Included in this new FAR should be all major alternative policies which are necessary for DoD and other agencies in the acquisition of hardware for their own use. Special policies can then be adopted by the DFARS and other supplemental regulations.

The FAR should also contain guidance on the methods of

obtaining competition on proprietary products without violating proprietary rights. As discussed above, these techniques are covered, in a limited way, in DFARS 217.7201-2. However, there is no coverage of this subject in the FAR with the result that civilian agencies are given no help when they face this difficult problem.

2. Separating Technical Data From Computer Programs

Recent studies of proprietary rights policy have concluded that clarity could be achieved and a more effective policy implemented by separately treating technical data and computer software. See the Report of the Packard Commission and the recent report of the Software Engineering Institute, Technical Report CMN/SEI-86-TR-2, Proposal for a New "Rights in Software" Clause for Software Acquisitions by the Department of Defense (Sept. 1986). The reasoning supporting this recommendation is that most computer programs are more like hardware than technical data since they are end products which generally function as a part of an operating system. Thus, they are not used to reproduce (manufacture), operate or maintain hardware as technical data is used, but rather are products which need technical data to tell the users how they are to be operated and maintained. (Some software, such as Computer Aided Manufacture ("CAM") software, drives a machine to make a part--like a drawing is used to manufacture a part.) Furthermore, the entire legal structure that has been developed in the commercial world to protect rights in computer programs (basically the techniques of the copyright law) is different than that used by the Government to protect rights in technical data. Thus, separate treatment of technical data and computer programs will permit the Government to more closely follow the commercial model in procuring computer programs.

The difficulty with the recommendation of the Packard Commission and the Software Engineering Institute is that they propose separate policies for technical data and computer software while their reasoning is based on the difference between technical data and computer programs. Under current policies, software comprises both computer programs and computer data bases. Most computer data bases, however, are much more like technical data in that they are compilations of information. Thus, it makes more sense to continue to treat computer data bases in the same way that technical data is treated. (Some data bases are an integral part of a program and should be treated as programs.) A further problem in this area is created by the current DoD policy which includes software documentation as technical data rather than as computer software. Software documentation relating to computer programs is an integral part of such programs and often contains the most valuable proprietary information possessed by the contractor. Recognizing this fact, the policy should treat software documentation of programs in the

same manner that it treats the computer programs. This is the position adopted by the FAR in spite of the fact that the current statutes define technical data to include computer software documentation (but give no further guidance on the treatment of computer software). For the purpose of clarity, the statutes should be amended to alter this definition. It is believed that such statutory change can be readily achieved since the statutes merely adopted the current DoD definition without considering the implications with regard to computer software.

In summary, it is recommended that the Government promulgate separate policies and contract clauses covering:

a. Information concerning items or processes such as technical data, computer data bases, and software programs which are substitutes for technical data, such as CAM software, and

b. End items such as computer programs, documentation of these programs, and computer data bases that are an integral part of a computer program.

This paper includes no further discussion of the policy that should be adopted for computer programs and their documentation.

3. Protecting Commercial Rights in Technical Data

The 1964 technical data policy adopted by DoD provided that all data would be provided with either "limited rights" or "unlimited rights" and gave unlimited rights to all data that pertained to an item, component or process not developed at private expense which did not fall within any of five listed categories: i) data resulting directly from performance of any Government contract or subcontract requiring research and development work, ii) changes to Government-furnished data, iii) form, fit or function data, iv) operation, installation, training or maintenance manuals and v) public domain data. The civilian agencies have followed a similar policy of taking unlimited rights in a large amount of technical data. This sweeping policy of taking unlimited rights was very restrictive of the proprietary rights of contractors since "unlimited rights" were defined as the --

> rights to use, duplicate, or disclose technical data, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so.

Since proprietary rights in technical data are in the nature of a trade secret, this full right to disclose the data to the public gave the Government the right to effectively destroy the trade secret and, hence, to destroy the commercial value of the data. While a copyright could be preserved in such cases, there is

generally little commercial value in the copyright on technical data.

In recent years, the attitude of some Government agencies with regard to proprietary rights which derive from work on Government contracts has changed. It is being recognized more widely that there is public value in permitting contractors to retain commercial rights in innovative work done on Government contracts so that they can exploit such technological advances in the commercial marketplace, both in the United States and abroad. It is reasoned that the public gains through more domestic employment and a better balance of payments position. Further, it has been argued that the contractor that created the innovation is the most likely to exploit it and hence the most likely to provide the new technology to the American consumer. This reasoning has already resulted in the total change of Government contracts patent policy which now calls for the contractor to retain all commercial rights to inventions made in the course of performing Government contracts. See Public Law 96-517 (35 U.S.C. 200 et seq.) and the President's Memorandum on Government Patent Policy, Feb. 18, 1983. The same reasoning is applicable to rights in technical data.

The first recommendation of the Packard Commission, set forth above, partially adopts this reasoning. However, the current DoD statute, 10 U.S.C. 2320(a)(2), contains two provisions which muddy the waters in this area. These provisions state:

> (A) In the case of an item or process that is developed by a contractor or subcontractor exclusively with Federal funds, the United States shall have the unlimited right to -
>
> > (i) use technical data pertaining to the item or process; or
> >
> > (ii) release or disclose the technical data to persons outside the government or permit the use of the technical data by such persons.
>
> (G) The Secretary of Defense may -
>
> > * * * *
> >
> > (ii) agree to restrict rights of the United States in technical data pertaining to an item or process developed entirely or in part with Federal funds if the United States receives a royalty-free license to use, release, or disclose the data for purposes of the United States (including purposes of competitive procurement).

The civilian agency statute, 41 U.S.C. 418a(b)(1), contains equally troublesome language. This statutory language may require amendment or clarification to permit the Government to adopt a policy which gives broad protection to the commercial rights of contractors.

The policy that should be adopted to accomplish this purpose of protecting commercial rights is to provide for an intermediate type of right between limited rights and unlimited rights. This new type of right should permit the contractor to treat all data generated on a contract as proprietary giving the Government the right to use the data for internal purposes and requiring the licensing of other contractors to use the technical data to achieve competition on Government procurements. In lieu of the licensing requirement the policy could permit the Government to sublicense others for this purpose. The former technique is preferable because it permits the contractor to deal directly with the companies using the data and saves the Government from being in the undesirable position of having to serve as a middleman in the negotiation of the terms of the license. In either case, the contractor should be required to provide technical assistance to licensees to ensure that they are able to use the data to successfully manufacture the product. The license granted by the contractor would, of course, be limited to work for the Government and would prohibit use of the technical data on commercial or foreign work. It would apply to all data originated in the performance of the contract without regard to the source of funds. Thus, it would preclude the current situation where contractors claim rights to portions of the data delivered under their contracts and the parties then enter into lengthy negotiations over the propriety of placing limited rights legends on specific items of data. The Air Force has used licensing policies of this nature for a number of years with considerable success and the adoption of such a policy was recommended by the OSD Technical Data Rights Study Group in its report, Who Should Own Data Rights: Government or Industry? Seeking a Balance (June 1984).

While the FAR contains no mention of this type of policy, the proposed DFARS includes recognition of both types of licensing. It provides in the standard technical data clause for "Government purpose license rights" giving the Government the right to license competitors of the contractor to use the data only for competition on Government contracts. Such rights are used in three situations under this proposed policy:

a. If the contractor has funded over 50% but not all of the development cost of the item, component or process, and the contracting officer does not determine that unlimited rights are required (DFARS 227.472-5(b)),

b. If the contractor is a small business firm or nonprofit organization that agrees to commercialize the technology and that has funded part but not all of the development cost of the item, component or process, and the contracting officer does not determine that unlimited rights are required (DFARS 227.472-5(b)),

c. If the contractor has funded less than 50% of the development cost of the item, component or process and agrees to commercialize the technology, and the contracting officer determines that the Government does not need unlimited rights (DFARS 227.472-7).

Proposed DFARS 227.474-3 also permits the use of direct licenses from the contractor to competitors but it states that such provisions are generally not appropriate for other than high-dollar-value procurements. These provisions are a first step in the recognition of these licensing techniques. However, they are confusing and almost completely lacking in guidance for contracting officers who are expected to implement them. They also adopt the most difficult licensing technique (the Government sublicense) as the standard technique, relegating the preferable technique (direct licensing) to a subsidiary role.

The difficult problem which has not been addressed by any of the studies or discussions of a licensing policy is whether it should be applied to all technical data generated on a contract. It has generally been assumed (by the Air Force, for example) that licensing is applicable to technical data that would otherwise be limited rights data, i.e., data meeting the test of pertaining to items, components or processes developed at private expense. The Packard Commission Report and the proposed DFARS go further in suggesting that licensing is a viable technique for data created with "mixed funding." This is in response to the requirement of the statutes that a policy be adopted for such data. See, for example, the new statute, 10 U.S.C. 2320(2)(E), stating:

> (E) In the case of an item or process that is developed in part with Federal funds and in part at private expense, the respective rights of the United States and of the contractor or subcontractor in technical data pertaining to such item or process shall be agreed upon as early in the acquisition process as practicable (preferably during contract negotiations), based upon consideration of all of the following factors:
>
> (i) The statement of congressional policy and objectives in section 200 of title 35, the statement of purposes in section 2(b) of the Small Business Innovation Development Act of 1982 (15 U.S.C. 638

note), and the declaration of policy in section 2 of the Small Business Act (15 U.S.C. 631).

(ii) The interest of the United States in increasing competition and lowering costs by developing and locating alternative sources of supply and manufacture.

(iii) The interest of the United States in encouraging contractors to develop at private expense items for use by the Government.

What is proposed here is to go further and apply the licensing policy to all technical data without regard to the source of funding--even that data generated entirely with Government funds.

If this new licensing policy is adopted as a third type of right, the issue arises as to when a contractor would qualify for this type of right in lieu of giving the Government unlimited rights. Here the current patent policy can be used as guidance. This policy allows commercial rights to be taken away from the contractor by giving the Government "march-in rights" in 35 U.S.C. 203 if such action is necessary --

(a) because the contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of subject invention in such field of use;

(b) to alleviate health or safety needs which are not reasonably satisfied by the contractor, assignee, or their licensees;

(c) to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the contractor, assignee, or licensees; or

(d) because the agreement required by section 204 [giving preference for United States industry] has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of its agreement obtained pursuant to section 204.

Similar tests could be used in deciding whether a contractor was entitled to license rights or in providing in the contract clause that the Government was entitled to subsequently take unlimited rights. In addition, the policy should permit the Government to take unlimited rights (subject to compensation for technical data that met the private expense test) if it was determined that sufficient competitors were not willing to enter into the license arrangement in order to compete for the Government work. This right is necessary to protect the Government in those situations

where the commercial marketplace is so competitive that competitors are unwilling to enter into licenses because of the potential restrictions that such licenses might place on their future commercial products.

In summary, it is recommended that the Government adopt a completely new standard policy permitting the Government to use all technical data relating to items, components or processes developed on Government contracts for internal purposes and requiring the contractor to license companies to use the data on Government competitions. This policy would apply without regard to the source of the funding of the development work. The limited rights and unlimited rights policies would be left in place for broad types of technical data not related to hardware, such as final reports on research contracts, and for those situations where the direct licensing policy was not appropriate or could not be agreed to.

4. Compensation for Licensing of Competitors

If the licensing policy recommended above is adopted, there remains the question of what compensation should be paid to the contractor for the licensing of competitors. The DoD statute appears to permit payments of royalties if the licensed data is private expense data or mixed funding data. Conversely, it appears to preclude payment of royalties if the data is Government expense data. The civilian statute is silent on this issue. If this policy is followed, the procuring agency and the contractor will be forced to agree on which category is applicable to each item of data generated on the contract. This cumbersome procedure should be avoided, if possible, since it is currently one of the most unproductive aspects of the Government's technical data policy. (Data validation challenges are consuming substantial resources of both the agencies and their contractors and are of questionable productivity in achieving the long-term mission of the agencies.) Thus, it is highly desirable to arrive at a policy that will base the compensation of the contractor on some factor other than the amount of contractor expense or mixed expense data that is included in the package provided to a competitor.

Fortunately, there is another basis for determining the compensation of a contractor that agrees to license competitors. The payment of a royalty for such a license can be properly viewed as fair compensation for the successful completion of a development effort. Furthermore, a policy that regularized such royalty payments would provide a powerful new incentive to contractors to develop products that were suitable for high volume production over a long period of time. It is exactly this type of new incentive that might serve the Government well in a period of budget stringency.

The questions would undoubtedly be raised as to whether the regular payment of such royalties would add to the overall cost of the procurement process and would result in undue profits to development contractors. With regard to profits, this is a particularly appropriate time to consider the adoption of such a policy in view of the fact that the proposed new DoD profit policy, promulgated in 50 Fed. Reg. 43200, significantly reduces the rate of profit on research and development work. Thus, the payment of a royalty to the developer when a product is produced by another contractor can be seen as a way of balancing the apparently inadvertent reduction of profits in this area. Further, it is a particularly good way of paying profit since it only pays for success. With regard to the question of whether this proposed policy would add to the overall cost of the procurement process, it must be recognized that the royalty would only be paid in selected circumstances. If licensees of the contractor were forced to compete with the contractor, the royalty would only be paid when a licensee won the competition. In this situation, the royalty can be seen as a modest competitive advantage which the Government is willing to give the contractor that developed the product. This competitive advantage would not be large enough to permit the contractor to include exorbitant costs in the price with the result that the payment of the royalty would still provide the major advantage of competition to the Government. The Kratz & Gansler Monograph indicates that in the past, the original developer has frequently won such competitions at substantially reduced prices. If this were to occur under the proposed policy, the Government would not pay the royalty at all. Further, the adoption of this royalty policy might greatly facilitate the achieving of competition because development contractors would regularly agree to license their technical data and to assist their licensees in using the data to manufacture hardware. Considering all of these factors, it can not be determined whether this proposed policy would increase or reduce the overall cost of procurement. However, it does not appear that it would entail substantial additional costs and there is some likelihood that the better incentives and greater competition would result in an overall decrease in costs.

The question of the amount of the royalty must also be addressed. The amount should be established at a rate between 1% and 5% of the price of the manufacturing contract based on two factors -- i) the overall technical competence which the contractor brings to the development effort and ii) the projected needs of the agency for the product being developed. A high royalty rate within this range is warranted when the contractor is providing the Government with a highly skilled development team that has a long history of success in the product area. Generally, such a contractor might be expected to have a portfolio of patented inventions or of private expense technical data that would otherwise be furnished with limited rights, but this would only be one element in this part of the determination.

A high royalty rate would also be warranted if the Government anticipated a relatively low expenditure of dollars in the production phase since this would provide the contractor a low base for computation of the royalty. It might be necessary to include an adjustment feature in the agreement in the event the Government's original estimate of its needs turned out to be highly inaccurate.

In summary, it is recommended that the Government adopt a policy that will compensate its development contractors by paying them a royalty when one of their licensees manufactures hardware which they have successfully developed. This royalty will provide additional incentive for successful development and will reward them for assisting a licensee in becoming a successful manufacturer.

5. Controlling the Techniques Used to Obtain Competition

As discussed earlier, there are a number of techniques available to achieve competition without violating the proprietary rights of contractors. However, the guidance on the use of these techniques is quite sparse and there appears to be a lack of understanding of all of the alternatives available to contracting officers. As a result, the military services have used several techniques in recent years which have created great antagonism among their contractors. Two techniques in particular have been seen as unfair methods of obtaining rights in proprietary data -- i) placing a time limit on limited rights and ii) requiring a contractor to submit alternate proposals granting the Government unlimited rights to data delivered under the contract. Neither of these techniques is necessary to achieve competition on military procurement and they should both be banned. At the same time, as recommended above, substantial guidance should be given on the legitimate techniques -- competitive copying, use of form, fit or function specifications, leader-follower, specific acquisition and reverse engineering -- as well as on the licensing technique recommended above.

Placing a time limit on proprietary rights proved to be a highly controversial technique when it was first used by the Air Force in 1983. The proposed time limits varied from two to five years and appeared to have no relationship to the expected period of time that the proprietary information might have commercial value. Thus, they were seen as arbitrary ways of using the Government's bargaining power to deprive contractors of legitimate proprietary rights. Unfortunately, the DoD statute contains very cryptic language on this subject. 10 U.S.C. 2320(c) states:

> (c) Nothing in this section or in section 2305(d) of this title prohibits the Secretary of Defense from prescribing standards of determining whether a contract

entered into by the Department of Defense shall provide for a time to be specified in the contract after which the United States shall have the right to use (or have used) for any purpose of the United States all technical data required to be delivered to the United States under the contract or providing for such a period of time (not to exceed 7 years) as a negotiation objective.

There should be no objection to a policy that removes stale proprietary legends from data. However, arbitrarily short time periods are an unfair means of taking away a contractor's rights without compensation. Proposed DFARS 227.474-4 ameliorates this problem somewhat by providing that the Government will normally receive Government purpose license (rather than unlimited) rights upon the expiration of the limited rights. However, since the entire issue has generated an undue amount of friction with little commensurate benefit to the Government, this policy should be abandoned and the statutory provision repealed if that is thought necessary.

The requirement for alternate proposals giving up all proprietary rights was adopted as standard policy by the Navy and has been used by all of the military services. It is a way of using the full force of competition to obtain a low price for a contractor's proprietary rights. This would appear to be inconsistent with a policy of honoring proprietary rights and may be prohibited by the statute. See 10 U.S.C. 2320(a)(2)(F) stating:

> (F) A contractor or subcontractor (or a prospective contractor or subcontractor) may not be required, as a condition of being responsive to a solicitation or as a condition for the award of a contract, to sell or otherwise relinquish to the United States any rights in technical data except --
>
> (i) rights in technical data described in subparagraph (C) [correction or change data, form, fit or function data, manuals or public domain data]; or
>
> (ii) under the conditions described in subparagraph (D) [release for emergency repair or use of a foreign government under restricted conditions and with notice to the contractor].

This statutory provision is included in proposed DFARS 227.472-4 without supplementation. Minimal additional guidance is included in DFARS 227.473-2. DoD should directly acknowledge that this technique is an undesirable means of obtaining competition and should ban its use.

It can be seen from this discussion that there is a great need for guidance on the ways to obtain competition without violating proprietary rights. Until such guidance is given, the forces driving for competition will impel procuring activities to try new techniques to obtain proprietary rights without adequate compensation to the contractor. What must be communicated is that the Government is far better served if it enlists the contractor's assistance in obtaining and using the proprietary information. In this way, the contractor can be used to provide technical assistance and effective competition can be more readily attained.

In summary, the Government should ban time periods on limited rights and competitive alternate proposals requiring unlimited rights. Further, substantial guidance should be issued on the acceptable ways of obtaining competition without violating proprietary rights.

SUMMARY OF REQUIRED ACTIONS

The specific actions required to implement the recommendations contained in this paper are:

1. Adopt a FAR section on technical data and computer programs containing the basic policies to be used by all agencies. This will require a joint effort by DoD and the civilian agencies. In order to simplify the issues, Congress should be requested to adopt a single statute relating to technical data.

2. Write the FAR so that it contains separate guidance and separate contract clauses for (i) information relating to items or processes such as technical data, most computer data bases, and software programs which are substitutes for technical data, and (ii) end items such as computer programs, documentation of these programs, and computer data bases that are an integral part of a computer program. The policies for the procurement of rights in the second category should be coordinated throughout the Government since many agencies now purchase such items.

3. Include in the FAR a new standard technical data policy giving the Government the right to direct the contractor to license the right to use technical data when competition is required. This will require an amendment to the data statutes and substantial new regulatory guidance to aid contracting officers in the implementation of the policy.

4. Include in the FAR guidance on the computation of the royalty that will be paid for the Government license to use technical data for competitive procurement purposes. This guidance will probably be general in nature since each agency will have to coordinate the royalty payment with their profit

policy on research and development contracts. The data statutes should be amended to permit such royalties when no proprietary data is involved.

5. Include in the FAR guidance on the techniques that are available to obtain competition without violating proprietary rights and ban the use of arbitrary time limitations on proprietary rights and the solicitation of alternate proposals giving up all proprietary rights.

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DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY LABORATORY COMMAND
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REPLY TO
ATTENTION OF

SLCIS-CC-IP

5 June 1987

MEMORANDUM FOR SARDA-PP (John Conklin)

SUBJECT: Comments on Procurement Round Table (PRT) Report - Proprietary Rights in the Competitive Era

1. Responsive to your informal request, the following are my comments on the PRT Report prepared by Professor Ralph C. Nash, Jr.

2. The PRT Report proposes five recommendations:
   1. Consolidate technical data and computer software clauses into a single FAR section.
   2. Write the FAR section so as to separate technical data clauses from computer program clauses.
   3. Permit contractors to retain ownership of technical data (and presumably computer software) regardless of the source of funding, while giving the Government the right to direct contractors to license competitors.
   4. Provide for the payment by the Government of royalties to contractors in compensation for the use of technical data by their competitors.
   5. Prohibit the use of arbitrary time limits on data or the solicitation of alternate proposals in which contractors would relinquish all data rights.

3. The first two proposals are apparently non-controversial. I understand that efforts leading toward implementation of these proposals are already underway, and I certainly agree that these proposals are both desirable and achievable.

4. The third proposal, to grant contractors ownership rights to technical data regardless of the source of funding, carries to its logical conclusion a policy shift that has successfully taken place with respect to the disposition of patent rights.

5. Historically, the Government's viewpoint has been that intellectual property rights such as patents and technical data which arise out of Government funding should belong to the taxpayers. To withhold those rights from the public, or to require the public to pay for their use, has been considered the same as imposing a double payment on the taxpayer, first in having the taxpayer pay for the R&D and again in charging for its use. As a consequence of this view, Government-owned patents have been licensed to the public free of charge upon request, and even when no formal request was made. Technical data delivered with unlimited rights was treated as public information and made available to the public at no charge or perhaps for the cost of reproduction.

6. The historic attitude that the Government's intellectual property should be freely available to the public has been losing ground to a new recognition that when intellectual property is made freely available to everyone, it tends not to be developed by anyone. In the patent arena, the policy has now shifted to permit Government-owned patents to be licensed to industry on an exclusive basis and to have the contractor, rather than the Government, own patented inventions arising out of Government contracts even when the source of funding was exclusively Governmental.

7. Now that contractor ownership of patent rights is firmly established, it is being suggested that technical data be treated the same way. The Packard Commission recommended that contractors be permitted to retain title to technical data just as they are now permitted to retain title to patents. This recommendation has been accepted, at least in part, in the recent DFARS on technical data which permit contractors to own data rights if they have contributed at least 50% of the development cost. In the case of small business, any private expense contribution is sufficient to enable the contractor to own data rights.

8. Clearly, DoD policy has shifted toward some contractor ownership of data rights. The question is whether the policy should be extended to all contractors, and whether it should be applied even when 100% of funding has been at Government expense. I believe that it should, for the same reasons that have supported the patent policy, provided that an effective procedure is implemented to enable the Government to use the technical data for competition.

9. To understand why a procedure is needed to enable the Government to use contractor-owned technical data but is not needed in the case of contractor-owned patents, it is necessary to understand the difference between these two forms of intellectual property. Patents are a statutory form of intellectual property in which the information is public knowledge, but the exclusive right to use the information is protected by law. Accordingly, it is a simple matter for parties to agree that the property may be used for Governmental purposes but not for commercial purposes.

10. Technical data, on the other hand, is a trade secret form of intellectual property which is protected by contract. Once the information becomes public knowledge, its property characteristic ceases to exist. Accordingly, parties must not only agree on how the property may be used, they must also agree on a procedure to keep the information from becoming public knowledge. It is at this point that the interests of the Government and the contractor diverge. The contractor desires to control and minimize access to the data by third parties while the Government desires just the opposite in order to maximize competition.

11. In my opinion, neither the recent DFARS on technical data, nor the PRT Report, have offered an effective non-disclosure procedure. The PRT Report proposes direct licensing between the contractor who owns the data and a bidder who would become a competitor. The DFARS requires that contractor and competitor enter into a mutually agreeable non-disclosure agreement to protect the data. In either case, the Government would have to delay contract award until all the parties have agreed to cooperate. A more effective procedure would be for the Government to draft a standard non-disclosure agreement which is fair and balanced, and to have such an agreement incorporated into the DFARS. Once such a procedure is in place, there is no reason why DoD's ownership policy for patents could not be extended to include technical data and computer programs as well.

12. The fourth recommendation of the PRT Report is to have the Government pay royalties to any contractor who has developed an item whenever the item is manufactured by a competitor. The royalties would be based upon a percentage of the manufacturing cost and would be paid even if the entire development took place at Government expense. This recommendation goes far beyond DoD's liberal patent policy which merely allows for contractor-ownership of patents but does not pay royalties to contractors. Large windfall profits, without risk or expenditure, would flow to contractors if this recommendation is adopted.

13. There are circumstances, however, when royalties to development contractors would be appropriate. Consider the case of an item that has been developed with mixed funding. It is not necessarily equitable to merely allow the contractor to retain commercial rights while the Government retains a royalty-free license, as is the case under the DFARS technical data rule. The commercial rights may have little or no value, whereas the military application may be enormous. I would apply a royalty formula that would reward contractors in direct proportion to their private expense contribution. Such a formula would look like this:

$$\text{Royalty} = (\text{Royalty Rate}) \times (\text{Manufacturing Cost}) \times \frac{(\text{Private Expense})}{(\text{Total Development Cost})}$$

14. The royalty rate could range from 1% - 5% based on the same considerations outlined in the PRT Report. Under this formula, however, only a contractor who completed the development entirely at private expense would receive the full royalty rate. A contractor who incurred no private expense in the development of the item would receive no royalties. Royalties would be paid in direct proportion to the degree of private expense contribution. Multiple development contractors would each receive fair compensation in proportion to their respective private expense contributions.

15. The main drawback of this formula is the difficulty of tracking the Government's development costs. As an alternative formula, I would propose a return on investment (ROI) scheme in which contractors who have incurred private expense would be compensated for their out-of-pocket costs plus a reasonable rate of return. Such a formula would still require tracking the contractor's expenses, but not the Government's development costs.

16. In formulating a royalty compensation scheme, it may be necessary to consider the extent to which a contractor has been previously reimbursed by having written the development costs off as an IR&D expense item against other Government contracts. In that case I would simply apply the same formula proposed above and then deduct the IR&D reimbursement. This would still leave the development contractor with considerable royalties while avoiding the criticism that the contractor has received double payments.

17. Regarding the PRT Report's fifth recommendation, to prohibit arbitrary time limits on the protection of data rights and to prohibit alternate proposals under which contractors would have to relinquish all data rights, these practices will become unnecessary if the recommendations proposed in the PRT Report and in this paper are adopted.

18. I believe that the major elements of a comprehensive data policy are contained in the PRT Report and in this paper. For the contractor, the proposed policy offers private ownership of technical data which should provide sufficient incentives to develop commercial applications. Where commercial applications are not possible, the proposed policy offers the incentive of royalties for Government use in direct proportion to the contractor's private expense participation. For the Government, the policy affords ready assess to technical data for competitive procurement. For both Government and contractor, the proposed policy offers simplicity of application.

19. Reform of the Government's technical data and computer software regulations is long overdue. The PRT Report represents a step in the right direction.

SAUL ELBAUM
Chief, Intellectual Property
Law Division

CF:
Mr. Burton Blair (AMCCC)