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NATIONAL SECURITY CONTROLS AND SCIENTIFIC INFORMATION

# ISSUE BRIEF NUMBER IB82083

# Issue Brief





CONGRESSIONAL RESEARCH SERVICE THE LIBRARY OF CONGRESS



# NATIONAL SECURITY CONTROLS AND SCIENTIFIC INFORMATION

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#### ISSUE DEFINITION

Growing concern about the acquisition of American technology by the Soviet Union and its Warsaw Pact allies has prompted the Federal Government, for reasons of protecting national security, to seek restriction of the communication of certain scientific information to foreign nationals, both within the United States and abroad. Because such endeavors could give rise to a potential conflict with traditions promoting intellectual freedom, they have raised issues concerning the Government's authority for these actions and the stifling effect they might have on research, especially scientific studies, and on teaching. The result is a germinating, complex, and multi-faceted controversy, with a central issue being the means by and extent to which Communist bloc nations acquire scientific information from the West.

# BACKGROUND AND POLICY ANALYSIS

For many years, Federal policy has been consistent with the view that the advancement of knowledge depends upon openness, sharing ideas, and building upon the findings of the past. From time to time, however, Federal law has recognized circumstances that present what are believed to be obvious and compelling reasons for imposing secrecy on research or restrictions on the communication of research findings in various fields. Certain patent applications were protected against public disclosure during both world wars. The secrecy surrounding the Manhattan Project was continued by the Atomic Energy Act of 1946, but then relaxed in 1954 when private industry was given the opportunity to explore the applications of nuclear power.

The Government clearly has the authority to impose secrecy restrictions on certain research conducted by its own employees or undertaken by private parties using Federal funds. Since 1940, a succession of Presidential executive orders has prescribed criteria and procedures for the security classification of executive branch records and materials. Individuals unaffiliated with the Government or working on research without its financial support, however, generally have been free to communicate and disseminate their ideas, discoveries, and invention data as they wish.

In November 1954, the Secretary of Commerce announced that, at the direction of the President and on the recommendation of the National Security Council, he was creating an Office of Strategic Information within his Department. The mission of this new entity, according to the Secretary, was to work with various private sector groups "in voluntary efforts to prevent unclassified strategic data from being made available to those foreign nations which might use such data in a manner harmful to the defense interests of the United States." However, because the concept of "strategic information" was not clearly defined, its regulatory application appeared to be of uneven, i.e. sometimes unfair, impact. Nevertheless, the OSI sought to prevent the dissemination of various kinds of scientific, technical, and economic information by scientists, businesses, and the press.

Prior to this development, American scientists mailing unclassified scientific information to friends and colleagues abroad were required by the Commerce Department to affix an "Export license not required" label on the outside of envelopes to indicate they were aware of export regulations and had not violated general export license requirements. This situation resulted from a claim by the Department that the Export Control Act of 1949 (63 Stat. 7) conveyed discretionary authority over the export of technical data as well as commodities with "technical data" being interpreted to include basic scientific research information.

Both the press and science communities brought their protests against the regulatory efforts of the OSI to the attention of the Special Subcommittee on Government Information of the House Committee on Government Operations. Later known for its role in producing the Freedom of Information Act, the Subcommittee pressed for the abolition of the Office of Strategic Information, which finally occurred in 1957. The panel also championed a recommendation, formally endorsed by the Committee on Government Operations, that the Export Control Act be amended to make it clear that "technical data" did not include scientific information of an unclassified nature. Although the Commerce Department revised its regulations to permit overseas mailings of nonclassified scientific and technical information if the material was sent first class by a person without "commercial" connections, the controversy did not subside until a more liberal policy on exports to Communist bloc countries emerged during the 1960s and until the Export Administration Act of 1969 (83 Stat. 841), reflecting this new position, was adopted.

Heightened concern of late about the acquisition of American technology by the Soviet Union and its Warsaw Pact allies has prompted the Federal Government to pursue restrictions on the public availability and communication of some scientific information once again. During the first year of the Reagan Administration, officials expressed concern that: bilateral US-USSR agreements were resulting largely in one-sided information exchanges favoring the Soviet Union and providing access to technological data in areas in which the Soviets are known to be deficient; scholarly exchanges were being misued by the Soviets who send senior, experienced, technical people, some of whom are from closed military research institutes; a high volume of sensitive, defense-related information was being disseminated by American scientists at professional conferences and symposia without awareness of or regard for attendees from Communist bloc countries; the authors of basic and applied research papers published in the open scientific literature were unaware of the implications their explicit explanations of purpose, professional affiliation, or research sponsorship may have for Soviet intelligence analysts. Commerce Department investigators have complained that American firms are often the hapless dupes of front companies that buy embargoed U.S. technology without giving full or accurate details as to their purpose in acquiring the material or its ultimate destination. A 1981 Defense Department publication entitled Soviet Military Power warned that, "The Soviets are seeking Western technology and equipment by any and all means in their quest for technological superiority." CIA Director William J. Casey recently elaborated on this comment in a Mar. 8, 1982, interview appearing in U.S. News and World Report:

> We have determined that the Soviet strategic advances depend on Western technology to a far greater degree than anybody ever dreamed of. It just doesn't make any sense for us to spend additional billions of dollars to protect ourselves against the capabilities that the Soviets have developed largely by virtue of having pretty much of a free ride on our R&D. They use every method you can imagine --

purchase, legal and illegal; theft; bribery; espionage; scientific exchange; study of trade press; and invoking the Freedom of Information Act -- to get to this information.

# RESTRICTING SCIENTIFIC COMMUNICATION

Since the late 1970s, Federal officials frequently have imposed limitations on certain presentations or participants at scientific professional conferences and on the teaching of some scientific subject matter to certain foreign students. A number of problems have arisen, in part, because American advanced technology of a supposedly non-military nature nonetheless may have major defense potential for some foreign powers. Examples of Federal restraint efforts can be cited, some illustrating the difficulty of judgments in this area.

In 1977, before the beginning of a symposium on important new developments in cryptology sponsored by the Information Theory Group of the Institute of Electrical and Electronics Engineers, an IEEE member employed by the National Security Agency sent a letter to the Institute's headquarters warning that the presentation of the papers on the program might subject the authors and the IEEE to prosecution under the Arms Export Control Act. After due deliberation and slight modification of the manner in which papers were to be presented, the symposium went forward. No action was taken by the Government.

In February 1980, the American Vacuum Society held a small international meeting on magnetic bubble devices. A few days before the conference began, the Commerce Department informed the AVS the session was covered by its regulations concerning exports and that "oral exchanges of information in the U.S. with foreign nations constitute export of technical data." The implications of this communique appeared to be that presentations at the AVS meeting were subject to an export license. Failure to comply with this requirement would expose conference organizers and some participants to large fines and to prison sentences of up to ten years. Subsequently, the Society rescinded its invitations to scheduled attendees from Hungary, Poland, and the USSR. Just before the conference began, the Commerce Department agreed to permit scientists from the People's Republic of China to attend the gathering, provided that they signed an agreement not to "re-export" what they learned to any nationals from 18 named countries, including their own.

Later during that same month, IEEE and Optical Society of America organizers of a conference on lasers, electro-optical systems, and inertial confinement fusion were notified by the State Department that nine Soviet nationals who were scheduled to attend or participate in the meeting were being prohibited from traveling to the gathering, partly because certain technical equipment of potential military value would be on open display there and also because of official United States response to the invasion of Afghanistan by the USSR.

In April 1981, a special public cryptography study committee of the American Council on Education issued a report containing the unprecedented recommendation that the National Security Agency conduct, on a trial basis, a voluntary pre-publication review of research manuscripts on cryptography -the development and deciphering of codes. The study panel was created in 1980 in response to a request by the NSA for a dialogue with the academic community to resolve disputes over the public dissemination of privately developed cryptography research information. One of the committee's nine members vigorously dissented from the position taken by his colleagues. Although others involved in cryptographic research and studies also expressed criticism of and skepticism about the pre-publication review proposal, the Director of NSA indicated a desire to implement it and urged scholars and publishers to cooperate.

In the autumn of 1981, the computer sciences department of the University of Minnesota received a communique from the Department of State suggesting that a visiting Chinese scholar should be restricted from any access to: unpublished or classified studies undertaken for the Government; design, construction, or maintenance data relevant to individual items of computer hardware; or computer source codes or their development. In his reply to this letter, the President of the University of Minnesota, C. Peter Magrath, reminded the Department that the University did no classified work because of its policy against secret research. He also said: "Both in principle and in practice, the restrictions proposed in your letter are inappropriate for an American research university." A few weeks later, the State Department began asking academic officials at various universities to cooperate in prohibiting visiting students from the People's Republic of China from engaging in research and studies in certain scientific and technological areas that the Department regarded as being subject to export restrictions. President Magrath responded in a letter which, in part, said: "Our mission is teaching, research and public service, and neither our faculty nor our administrators were hired to implement government security actions."

In May 1982, five Chinese scholars and students awaiting the takeoff of a flight in New York which would return them to their own country were summoned from their seats and were informed that Federal customs agents were confiscating suspicious-looking items from their luggage. The objects in question included articles from scientific journals, classroom notebooks, thesis and lecture materials, slides, innocuous computer software, and tapes of rock music. The students had been studying engineering at the University of Michigan and Michigan State University. All of the material subsequently was returned. The search was conducted as part of a new aggressive program -- identified as Operation Exodus by a Commerce Department official -- to check the outflow of high technology information. FBI agents reportedly also were involved in the luggage search and earlier had made inquiries at the University of Michigan concerning the books that the visiting students had examined.

Such attempts to impose secrecy on or to restrict the communication of scientific information are based upon statutes and administrative regulations currently in force. The laws in question are neither new nor part of a comprehensive or integrated system of information control. However, their application does have a common basis -- protection of the "national security." For some, this term is troublesome because of its vague and elusive meaning. Clearly, however, there is general consensus that the Nation's security should be protected. Although the precise origins of the "national security" concept are uncertain, its adaptive value was well appreciated by 1949 when Sidney W. Souers, then Executive Secretary of the National Security Council, described it as "a point of view rather than a distinct area of governmental responsibility." At present, "national security" appears some 240 times in the U.S. Code as a policy condition granting the Executive extensive discretionary power -- e.g. "for reasons of national security," "for purposes of national security," "in the interest of national security," or "detrimental to the national security."

Although it appears that a number of scientists have not yet formed an opinion about attempts by the Government to restrict the availability and communication of certain scientific information for reasons of protecting national security, some support these actions, viewing them as necessary for the preservation of the country.

There are other scientists and educators, however, who are concerned about the vague nature of officials' proposals for a new policy restricting the dissemination of scientific information for reasons of national security, the proposals' seeming conflict with the principle of open scientific communication, and pragmatic effects on research and teaching. Although it is recognized that scientific findings and data have significance for the country's safety and strength, there is a belief that security is attained by continued achievement, not concealment, in science. Some scientists and educators also are reported to be annoyed, if not alarmed, by recent Government attempts unilaterally to impose secrecy on the dissemination of certain scientific research information, relying upon broad interpretations of authority to engage in such actions as well as implied threats of possible prosecution for failure to comply.

# ECONOMIC CONSIDERATIONS

Finally, commercial considerations should not be ignored. The national security of the United States has been partially dependent on American technological superiority and advances in technological innovation. Indeed, innovation is vital to the economic growth of the country. A study by Edward Denison attributes up to one-third of the economic growth in the United States from 1929 to 1969 to advances in technological, managerial, and organizational knowledge. (see Edward F. Denison. Accounting for U.S. Economic Growth 1929-69. Washington, The Brookings Institution, 1974. p. 129-131) In a later study, Denison found that advances in knowledge were responsible for an estimated 42% of productivity increases in the country during 1948-1973. (see Edward F. Denison. Accounting for Slower Economic Growth. Washington, The Brookings Institution, 1979. p. 80) Opponents of Government restrictions may argue that control of technological development is not conducive to innovation and could point to the situation in planned economic systems such as the Soviet Union. They also might argue that uncertainty about the imposition of official secrecy or other national security restrictions on research and development and technical information is likely to create a disincentive to industrial innovation. At best, innovation is a risky venture and the imposition of controls might increase industry's reluctance to engage in research and development if decisions on the utilization of results are made elsewhere. Reluctance to commit resources to research and development could compound the innovation and productivity problems American industry is now confronting.

However, proponents of reasonably selective national security restrictions on scientific information note that the very favorable economic growth and productivity attributed by Dennison to advances in knowledge occurred during a period when, for part of that time, rather strict controls were in effect. They also observe that many of the most successful and innovative corporations in the Nation are those that deal extensively in areas of national security information restrictions and themselves engage in additional industrial security practices. Thus, they argue that little persuasive evidence of economic damage or innovative chill due to selective applications of reasonable national security restrictions is to be found in U.S. experience.

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#### CONTROL LAWS

One of the oldest statutory authorities employed by the Government to control the disclosure of certain independently developed scientific information is the Atomic Energy Act. Originally adopted in 1946 (60 Stat. 755) and significantly overhauled in 1954 (68 Stat. 919; 42 U.S.C. 2011-2296), this law gives the Government exclusive authority over so-called Restricted Data "concerning (1) design, manufacture, or utilization of atomic weapons; (2) the production of special nuclear material; or (3) the use of special nuclear material in the production of energy .... " (42 U.S.C. 2014(y)) Information in this category is "born classified," i.e., it is subject to official secrecy protection from the moment of its creation, regardless of where located, and can be removed from its privileged status only by an affirmative determination of the Government. Under this authority the Government has moved against private parties, including both scientists and non-scientists, who allegedly have produced Restricted Data, by imposing secrecy restrictions. Although there is some question as to whether or not Congress intended the Restricted Data protections of the Atomic Energy Act to be so applied to private parties who independently developed information asserted to be of this type, executive branch officials have maintained this position when imposing such restrictions. The issue arose most recently when the Government restrained The Progressive magazine from publishing an article on the way a hydrogen bomb works. See United States v. The Progressive, Inc., 467 F. Supp. 990 (W.D. Wis. 1979). The court's preliminary injunction was vacated after similar information was published in a Wisconsin newspaper.

Another statute which the Government may use to impose dissemination control on a type of independently developed scientific information is the Invention Secrecy Act of 1951 (35 U.S.C. 181-188). Shortly after American entry into World War I in 1917, Congress provided authority for the Commissioner of Patents (40 Stat. 394) or the President (40 Stat. 411, 422) to withhold certain patents, the publication of which might "be detrimental to the public safety or defense, or may assist the enemy or endanger the successful prosecution of the war," in order to keep the invention in question secret. Congress broadened the Patent Commissioner's authority in 1940 by deleting the requirement that the United States be at war and by empowering the Commissioner to withhold the grant of a patent "for such period or periods as in his opinion the national interest requires." (54 Stat. 710) This authority lasted until the end of World War II (56 Stat. 370). A permanent statute on this matter subsequently was enacted in 1952 (66 Stat. 3; 66 Stat. 792, 805).

The Invention Secrecy Act presently provides that, "Whenever the publication or disclosure of an invention by the granting of a patent, in which the Government does not have a property interest, might, in the opinion of the [Patent] Commissioner, be detrimental to the national security," he shall make the application available to certain specified defense agencies for review. In the event that one of these defense agencies determines that "the publication or disclosure of the invention by the granting of a patent therefor would be detrimental to the national security, ... the Commissioner shall order that the invention be kept secret and shall withhold the grant of a patent" for not more than one year, subject to a possible renewal. These secrecy restrictions may be appealed to the Secretary of Commerce (35 U.S.C. 181) and a claim for compensation for the damage caused by such a secrecy order may be made through the proper Federal court (35 U.S.C. 183).

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Although patent secrecy orders are not applied to a large quantity of independently developed scientific information, their effect is decisive. A scientist or inventor subject to such an order, who willfully publishes or discloses the information it covers, can be fined \$10,000 or imprisoned for two years, or both (35 U.S.C. 186). Depending on market circumstances, the affected research area may be abandoned or derivative research may Ъe foregone to avoid the possibility of additional secrecy orders. Items which recently have been the object of controversial patent secrecy orders include a cipher device based upon advanced mathematical techniques and a voice scrambler allowing radio or telephone users to speak to each other without being intelligible to an intruding third party. These secrecy orders were subsequently lifted. (See H.Rept. 96-1540, p. 21-24.)

Both the Arms Export Control Act (22 U.S.C. 2751-2794) and the Export Administration Act (50 U.S.C. App. 2420) govern the export of goods from the United States as well as the access of foreign nationals to such materials in the country. Agency regulations implementing these statutes not only embrace a certain type of scientific information ("Technical Data"), but also define export in sufficiently broad terms to include the domestic publication or dissemination of that information. Because the Export Administration Act will expire at the end of September 1983, a new export control policy will be considered early in the next Congress.

Relying upon export control law and the International Traffic in Arms Regulations (22 C.F.R. 121-130 (1982)) issued pursuant to the Arms Export Control Act, the Government, as noted earlier, has attempted to restrict some research presentations at conferences of scientific and technical groups or has sought to prevent certain foreign nationals from attending these meetings.

In addition to these existing authorities, other policies for controlling the dissemination of scientific information are being proposed, discussed, or perfected. Among the amendments to the Freedom of Information Act offered in 1981 by the Reagan Administration (S. 1751, H.R. 4805) was a proposed new protective exemption allowing agencies to withhold "technical data that may not be exported lawfully outside the United States without an approval, authorization, or a license from an agency, unless the requester has obtained the appropriate approval, authorization, or license." It subsequently was appended to another bill modifying the FOI Act (S. 1730) which was marked-up in subcommittee. This measure was reported (S.Rept. 97-690) with this provision from the Committee on the Judiciary but the Senate took no action on the controversial bill before the adjournment of the 97th Congress. (See IB82003: The Freedom of Information Act Amenments).

During 1981, at the request of the Department of Energy, a provision was appended to its national security program authorization for 1982 (S. 1549) by the Senate Committee on Armed Services (see S.Rept. 97-173) to permit the Secretary of Energy to prohibit the dissemination of certain unclassified information if disclosure reasonably could be expected to result in significant adverse effects on public health and safety or the common defense by increasing the likelihood of theft, diversion, or sabotage of nuclear material or the defense facilities of the department. The House-passed version of this legislation (H.R. 3413) did not contain such a provision, but it was accepted in conference (see H.Rept. 97-342) and enacted in the final law (95 Stat. 1163, 1169; 42 U.S.C. 2168).

Although the legislative history of the new section is very sketchy, it appears that this authority may well fall within the third exemption of the

FOI Act (5 U.S.C. 552(b)(3)), thereby allowing Department of Energy officials to withhold agency records containing certain kinds of unclassified information broadly described in the provision. It is not clear to what extent this authority may be used to prevent private citizens from publicly disseminating these same types of information. The new law creates the following penalty: "Any person who violates any regulation or order of the Secretary [of Energy] issued under this section with respect to the unauthorized dissemination of information shall be subject to a civil penalty, to be imposed by the Secretary, of not to exceed \$100,000 for each such violation."

In early January 1982, then-CIA Deputy Director Bobby R. Inman, speaking as a panelist at the annual meeting of the American Association for the Advancement of Science, suggested that "A potential balance between national security and science may lie in an arrangement to include in the peer review process (prior to the start of research and prior to publication) the question of potential harm to the nation." As Director of the National Security Agency, Admiral Inman had prompted the American Council on Education to form its public cryptography study committee which recommended a voluntary system for the pre-publication review of manuscripts on cryptography. He seemed to be advocating in his January speech the creation of a similar review system embracing not only pre-publication review, but also the initiation of research as well, and including various other areas of scientific study. Examples which he suggested included computer hardware and software, electronic gear and techniques, lasers, crop projections, and manufacturing processes. If scientists do not cooperate in keeping some of their research information safeguarded voluntarily, Inman warned the AAAS audience, public outrage over the resulting "hemorrhage of the country's technology" will result in law restricting the publication of scientific work that the Government might consider "sensitive" on national security grounds.

Almost three months later, testifying at a congressional hearing on the impact of national security considerations on science and technology, which was jointly held by two subcommittees of the House Committee on Science and Technology, Inman explained that increasing counterintelligence efforts by the Government seemingly have and increasingly will continue to limit the acquisition of American technology by Communist bloc intelligence organizations through illegal sales, theft, and espionage. As a consequence, such entities have pursued less protected sources of scientific and technical data. According to Admiral Inman, "since the late 1970s, there has been an increased emphasis by these hostile intelligence services on the acquisition of new Western technologies emerging from universities and research centers."

Aware of this development, he has sought, according to his testimony, to encourage scientists to cooperate in finding ways to better protect research information. "From my past experience, I was persuaded, and I remain persuaded, that if we can energize the academic and scientific communities to think about the problem, we have a reasonable prospect that they will come up with innovative ideas which will not close off that flow, but will substantially lower the risks they, as citizens of this country, share with the rest of us."

Inman also indicated that, as "knowledge of Soviet successes" in acquiring American scientific and technological information becomes better known, he has worried about "what other branches of the government might ultimately propose in the way of regulation." Although, in his view, the "intelligence community will have essentially no role in writing the regulations," he said, "I think six months, a year, 18 months down the road, as the full magnitude

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of the Soviet's success of acquiring technology in the West comes to the front of the agenda to be considered by the government, and the government decides how to react, at that point I believe there will be proposals to try to regulate it." Asked to identify the formulators of such policy, Admiral Inman said: "I think it may come from a combination of Commerce, Defense, State, the entire national security apparatus."

In late January of 1982, a report by the Defense Science Board Task Force on University Responsiveness to National Security Requirements found, among other conclusions, that "Certain specific areas of university research, especially those conducted under DOD contract, are sensitive from an export control point-of-view." Accordingly, interpretation of International Traffic in Arms Regulations and the Export Administration Regulations for university researchers "is required" and consistent guidelines limiting the distribution of certain sensitive, non-classified information was recommended. These controls would be written into all Defense Department funded research contracts, some research contracts funded by other Federal departments, and would provide guidance in certain privately funded research contracts. Guidelines are to be formulated "with the help of the universities" and are not to be "overly restrictive" or to "inhibit the legitimate flow of scientific information."

After months of preparation, the Reagan Administration issued a new executive order on security classification policy and procedures in early April. This directive, E.O. 12356 (47 Fed. Reg. 14874-14884 (Apr. 6, 1982)), also has implications for Government control of scientific information. Although it prohibits the classification of basic scientific research information not clearly related to the national security, this limitation may have unpredictable effect where the distinction between basic and applied research, such as in biotechnology, is not always clear. Also, as noted earlier, the concept of "national security" is subject to broad interpretation.

Because E.O. 12356 expands the categories of classifiable information, mandates that information falling within these categories be classified, and makes reclassification authority available, security classification may be more frequently and broadly applied to scientific research produced by and for the Federal Government. In addition, E.O. 12356, reflecting a position not inconsistent with the recommendations of the Defense Science Board Task Force report discussed above, warns "contractors, licensees, and grantees" that they shall be subject to appropriate sanctions for improperly handling classified information.

E.O. 12356 also might conceivably be used to classify privately produced scientific information in a limited range of applications. The objects of this use of official secrecy might include information within such classification categories as "the vulnerabilities or capabilities of systems, installations, projects, or plans relating to the national security;" "scientific, technological, or economic matters relating to the national security;" or "cryptology." The predecessor executive order (E.O. 12065) had a provision prohibiting the classification of a "product of nongovernment research and development that does not incorporate or reveal classified information to which the producer or developer was given prior access . . until and unless the government acquires a proprietary interest in the product." Lacking this restriction, E.O. 12356 may be applied to "any information or material, regardless of its physical form or characteristics, that is owned by, produced by or for, or is under the control of the United States Government." To the extent that private scientific data is subject to

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export license, it is arguably "under the control of the United States Government." Thus, if that same information falls within one of the classification categories mentioned above, official secrecy might be imposed. Classification could be used in this manner in the event scientists refuse to protect selected research information and limit its communication on a voluntary basis, such as was suggested by Admiral Inman or as was recommended by the Defense Science Board Task Force report. However, the prospect of Government secrecy controls being extended in this way to private information, without infringing upon First and Fifth Amendment rights, seems dim.

In related developments, U.S. Attorneys around the country were informed by the Department of Justice on Aug. 6, 1982, that "the Administration has assigned a high priority to controlling the export of critical militarily-applicable technology to the Soviet Union and its allied countries." Announcing the creation of an Export Control Enforcement Unit in the Internal Security Section of the Criminal Division, the Department advised its lawyers "to undertake speedy and vigorous prosecutions of violations of federal laws involving the transfers of strategic technology to the Soviet Bloc" and requested them "to seek the imposition of appropriate sentences and to solicit appropriate media coverage of these prosecutions, in accordance with Department regulations, in order to maximize the deterrent effect of this essential program." This advice probably was prompted by a desire to reinforce the President's ban on the shipment of American technology for use in the operation of a natural gas pipeline being constructed in Europe with primary backing by the Soviet Union.

Elsewhere, the 1983 Department of Defense Authorization Act, signed into law on September 8 (P.L. 97-252), directed the Secretary of Defense to report to Congress with "recommendations for making improvements to the Department's technology transfer control policy as well as the desirability of establishing a separate office to manage and coordinate such policies within the Department of Defense" (H.Rept. 97-749, p. 170). Although dated February 1983, this report was not transmitted to Congress until early April. It said nothing about the desirability of establishing a separate technology transfer policy management and coordination office in DOD, but did emphasize that the Under Secretary of Defense for Policy would have primary responsibility for representing the Department in interagency, national, and international forums on technology transfer matters. With regard to scientific the communication, the report made slight reference to of government-to-government science and technology agreements by the U.S.S.R. to "ease Soviet access to established and new technologies, including those just emerging from universities, laboratories, and high-technology industry." The report concluded by saying that the level of funding and personnel sought for the technology transfer control program "is necessary to sustain the program in FY84 roughly as it operated in FY83."

Discussion and debate of the need for controls on the communication of scientific research information, attempts by the Government to exercise authority in this regard, and proposals for new policy toward this end are underway in a number of forums. Various scientific organizations are studying these issues with a view to finding ways to relieve the tension and uncertainty that the Government's actions and proposals are said to have produced. The National Academy of Sciences formed a special panel to explore these matters in February and a report of findings and recommendations was released on Sept. 30, 1982. In general, the panel indicated that the country's long-term national security is best protected through continued scientific and technological achievement which openness in scientific

communication helps foster. Short-term security, it cautioned, may be achieved by restricting the flow of scientific information, but such limitation has a price. Although the panel concluded that current losses of technology to the Soviet Union and its allies are both "substantial and serious," the information reviewed "failed to reveal specific evidence of damage to U.S. national security caused by information obtained from U.S. academic sources." It was concluded that, at present, only a "very small part" of the technology loss to Communist bloc nations can be attributed to the scientific tradition of open communication. Subsequently, on Dec. 23, 1982, President Reagan signed National Security Study Directive 14-82 establishing the terms of reference for an interagency panel to review the issue of protecting sensitive, but unclassified scientific research information, taking into account the recommendations of the National Academy study group. Chaired by the Office of Science and Technology Policy, the interagency panel is to report by late autumn of 1983.

It was also in February 1982 that a special committee, composed of eight university presidents, the heads of three education organizations, and nine members representing DOD, met to begin discussing technology transfer and export controls, research support for universities, graduate education in the physical sciences, and other matters of mutual interest to the Department and the academic community. The House Subcommittee on Government Information and Individual Rights held hearings on the new security classification executive order in March and May of 1982. Two subcommittees of the House Committee on Science and Technology jointly convened a hearing in late March regarding the impact of national security considerations on science and technology. The Senate Permanent Subcommittee on Investigations also held hearings during the first half of May evaluating the effectiveness of the executive branch in• enforcing export controls, particularly with regard to the transfer of technology to the Soviet Union and other Warsaw Pact nations. In mid-April, the Senate Subcommittee on International Finance and Monetary Policy held a hearing on East-West trade and technology transfer. However, no specific legislation was under direct consideration at any of these congressional proceedings.

# THE NEW CONGRESS

Shortly after the new Congress got underway in 1983, a number of bills (H.R. 483, H.R. 1566, S. 397, S. 434) were introduced to replace the Export Administration Act of 1979, which will expire automatically at the end of September 1983. The Act is one of the principal authorities for controlling the communication of sensitive scientific information to foreign interests. Hearings on this and related legislation began before the House Subcommittee on International Economic Policy and Trade in late February and the Senate Subcommittee on International Finance and Monetary Policy a few days later in very early March. These proceedings and publicity surrounding them suggest the impact of new national security export controls on scientific communication may be overshadowed by two other issues: the problems of U.S. businesses attempting to compete in international trade and overseas markets and new administrative arrangements for implementing export control law.

A considerable amount of controversy surrounds both the matter of how much latitude to allow the business community in selling sensitive high technology to foreign interests as well as the question of new export administration structure. With regard to the latter consideration, one reform proposal (H.R. 483) vests major export authority in a new National Security Control Agency located within the Department of Defense; another bill (S. 434)

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creates an independent Office of Strategic Trade within the executive branch which would assume export control responsibilities presently exercised by the Departments of Commerce and State. In addition, legislation (H.R. 1202, s. 21) transforming the Department of Commerce into a Department of Trade and Commerce would consolidate almost all export functions of various executive branch entities in the new department; another bill (S. 121) transfers the export administration responsibilities of the Department of Commerce to a new Department of Trade (these measures have been referred to the House Committee on Government Operations and the Senate Committee on Governmental Affairs). The President transmitted a draft of proposed legislation to amend and reauthorize the Export Administration Act on Apr. 4, 1983. Subsequently introduced in both Houses of Congress by request (S. 979, H.R. 2500), the provisions of the proposal appear to have only indirect application to scientific communication. However, some uncertainty on this point exists because hearings on legislation to revise and extend the Export Administration Act have not explored the implications of the different proposals for scientific communication.

To the extent that new export control law does not set stringent national security restraints on the overseas sale of high technology by U.S. businesses, scientific communication concomitantly may be unfettered. Some, however, would prefer that the issue of national security export restrictions on scientific information be more directly addressed and demarcated in the new export control statute. This may not happen if other matters, such as those noted above, take precedence. There is concern within the U.S. scientific community that, if the new export control law or its legislative history offer no obvious, particularized, and specific guidance on the extent to which national security export restrictions may be applied to scientific communication, then a supplementary Presidential directive on this matter may result. Various actions by the Reagan Administration and statements by officials over the past two years suggest that such a unilateral White House policy pronouncement would likely prescribe broader and more stringent national security limitations on scientific communication than might be expected from the mutual efforts of Congress and the President.

The House Subcommittee on International Economic Policy and Trade began marking up a package of amendments (H.R. 2761) to the Export Administration Act on April 28. The Subcommittee completed its action on May 3 and, two days later, the parent House Committee on Foreign Affairs began hearings on this legislation and a clean bill which was subsequently introduced on May 11 as H.R. 2971. Neither measure, however, contained any provisions explicitly restraining application of the statute's export control authority to traditional scientific communication of universities and the academic community such as basic research, publication, and exchanges in the open classroom and among scholars. The Committee began mark-up of H.R. 2971 on May 18. At that time, the following amendment to the bill, adding a new provision to the policy section of the Export Administration Act, was offered by Rep. Lee Hamilton and was accepted by the panel:

It is the policy of the United States to sustain vigorous scientific enterprise. To do so requires protecting the ability of scientists and other scholars freely to communicate their research findings by means of publication, teaching, conferences,

and other forms of scholarly exchange. On May 26, the Committee directed that a clean bill incorporating the amendments adopted by the panel be introduced. This measure was offered on CRS-13

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June 6 as H.R. 3231, was referred to the Committee, and favorably reported (H.Rept. 98-257) to the House. Portions of the bill were then referred to the Committee on Armed Services, the Committee on Banking, Finance, and Urban Affairs, and the Committee on the Judiciary for consideration during a period ending not later than July 22, 1983. The measure also was subsequently referred to the Committee on Rules. All of these panels completed their consideration of the legislation by July 26 when it was committed to the Committee of the Whole House on the State of the Union. That same day, a bill (H.R. 3646) containing substitute language for revising and extending the Export Administration Act was introduced.

On May 25, when the Senate Committee on Banking, Housing, and Urban Affairs marked up its legislation to revise and extend the Export Administration Act, the Hamilton provision was offered as an amendment by Senators Jake Garn, John Heinz, and William Proxmire, and was accepted by the panel. The revised bill was then reported to the Senate, (S.Rept. 98-170). It was subsequently considered by the Subcommittee on International Trade in a hearing on Aug. 4, 1983.

After several days of debate, the Senate, on July 26, 1983, adopted the Omnibus Defense Authorization Act, 1984 (S. 675), which empowers (section 1024) the Secretary of Defense to withhold from public disclosure any technical data with military or space application in the possession of, or under the control of, the Department of Defense, if such data may not be exported lawfully outside the United States without approval, authorization, or license under the Export Administration Act or the Arms Export Control Act. The scope of the provision was outlined in a colloquy on the Senate floor the previous day (see Congressional Record, v. 129, July 25, 1983. p. Sl0748-Sl0749). The House-passed version of this legislation contained no such provision.

#### LEGISLATION

#### H.R. 40 (Bennett)

Amends the Arms Export Control Act by authorizing the Secretary of Defense, in consultation with the Secretary of State and the Secretary of Energy, to prescribe regulations which specify information pertaining to items in the U.S. Munitions List that is required in the interest of the United States to be protected from disclosure in order to preclude the possibility of unauthorized export. Introduced Jan. 3, 1983; referred to the Committee on Foreign Affairs.

H.R. 381 (Roe)

Amends the Export Administration Act of 1969 by assigning to the Secretary of Defense the primary responsibility for identifying the types of technologies and goods which shall be controlled for national security purposes; by providing for a comprehensive and continuing review of export controls with a view to strengthening controls over exports of critical technologies and goods while facilitating exports of any technologies and goods which will not significantly adversely affect the national security of the United States; and by providing for congressional oversight of such exports; and for other purposes. Introduced Jan. 3, 1983; referred jointly to the Committee on Foreign Affairs and the Committee on Armed Services.

H.R. 483 (Byron)

Revises the Export Administration Act of 1979 by establishing new export control policy; by authorizing the President or his designee to prohibit or curtail the export of any goods or technology subject to the jurisdiction of the United States by reason of origin, location, law, regulation or otherwise or exported by any person subject to the jurisdiction of the United States; by creating a National Security Control Agency within the Office of the Under Secretary of Defense for Policy to assist in carrying out the policy and other authorities and responsibilities of the Secretary of Defense under the Act; and by creating a National Security Control List, as part of the commodity control list, which shall clearly identify all goods and technology subject to controls under the Act; and for other purposes. Introduced Jan. 6, 1983; referred jointly to the Committee on Foreign Affairs and the Committee on Armed Services; hearings begun by the Subcommittee ΟD International Economic Policy and Trade on Feb. 24, 1983.

H.R. 1566 (Bonker)

Amends the Export Administration Act by creating a comprehensive operations license eliminating the need for specific approval of each shipment by a U.S. company to an overseas subsidiary; by eliminating the requirement for validated licenses for exports to countries which cooperate with the United States on multilateral controls; by eliminating license requirements based solely on the fact that a product contains an imbedded, non-reprogrammable microprocessor; by prohibiting the application of new foreign policy export controls to any existing contract or extraterritorially, unless specifically approved by a joint resolution of Congress; by granting new enforcement authority to the Department of Commerce; by authorizing export promotion programs for the Department of Commerce; and for other purposes. Introduced Feb. 22, 1983; referred jointly to the Committee on Foreign Affairs and the Committee on Rules; hearings begun by the Subcommittee on International Economic Policy and Trade on Feb. 24, 1983.

#### H.R. 2761 (Bonker et al.)

Amends the Export Administration Act by prescribing penalties for persons conspiring or attempting to engage in unauthorized exports or possessing goods or technology with the intent to engage in unauthorized exports; by granting new enforcement authority to both the Department of Commerce and the Customs Service; by establishing a variety of new export licenses; by establishing new conditions for both national security and foreign policy export controls; by establishing new consultation requirements with countries with which the United States maintains export controls cooperatively; by creating an export promotion program; and for other purposes. Introduced Apr. 27, 1983; referred jointly to the Committee on Foreign Affairs and the Committee on Rules; mark-up by Subcommittee on International Economic Policy and Trade begun on Apr. 28 and completed on May 3; vacated for H.R. 2971.

# H.R. 2971 (Bonker)

Amends the Export Administration Act by prescribing penalties for persons conspiring or attempting to engage in unauthorized exports or possessing goods or technology with the intent to engage in unauthorized exports; by granting new enforcement authority to both the Department of Commerce and the Customs Service; by establishing various new export licenses; by establishing new conditions for both national security and foreign policy export controls; by establishing new consultation requirements with countries with which the United States maintains export controls cooperatively; by creating an export promotion program; and for other purposes. Introduced May 11, 1983; referred to the Committee on Foreign Affairs; hearings by Committee on subcommittee-developed draft version of bill begun on May 5; mark-up by Committee begun on May 18; vacated for H.R. 3231.

# H.R. 3231 (Bonker et al.)

Amends the Export Administration Act by prescribing certain penalties for persons conspiring or attempting to engage in unauthorized exports or possessing goods or technology with the intent to engage in unauthorized exports; by granting new enforcement authority to the Department of Commerce and the Customs Service; by specifying new findings and declarations of policy, including United States' commitment to sustaining vigorous scientific enterprise and protection of the ability of scientists to communicate research findings; by establishing new types of export licenses; by requiring the integration of the list of militarily critical technologies into the commodity control list not later than April 1, 1985; by establishing an export promotion program; and for other purposes. Introduced June 6, 1983; referred to the Committee on Foreign Affairs. Reported (H.Rept. 98-257 Part 1) from Committee on June 6, 1983; portions referred to the Committee on Armed Services (H.Rept. 98-257 Part 2), Committee on Banking, and Urban Affairs, and Committee on the Judiciary for a period ending not later than July 22, 1983. Subsequently considered by Committee on Rules (H.Rept. 98-257 Part 3) and committed to the Committee of the Whole House on the State of the Union on July 26, 1983.

# H.R. 3646 (Bonket et al.)

Amends the Export Administration Act by prescribing certain penalties for persons conspiring or attempting to engage in unauthorized exports or possessing goods or technology with the intent to engage in unauthorized exports; by granting new enforcement authority to the Department of Commerce and the Customs Service; by specifying new findings and declarations of policy, including United States' commitment to sustaining vigorous scientific enterprise and protection of the ability of scientists to communicate research findings; by establishing new types of export licenses; by requiring the integration of the list of militarily critical technologies into the commodity control list not later than Apr. 1, 1985; by establishing an export promotion program; and for other purposes. Introduced July 26, 1983; referred to the Committee on Foreign Affairs.

# S. 397 (Heinz)

Amends the Export Administration Act by requiring the Office of Export Administration and the Department of Defense to report quarterly on operation and improvement of the Government's ability to assess foreign availability of goods or technology that is subject to export control; by making it a criminal offense to possess restricted items with the intent to illegally export, and to conspire to illegally export restricted items; by transferring export enforcement authority to the Customs Service while leaving export licensing with the Department of Commerce; by providing for denial of U.S. export as a possible penalty for violation of any Federal law, such as the Espionage Act, arising out of the export of goods or technology prohibited by or under the Export Administration Act; by requiring the imposition of import controls on a country whenever foreign policy export controls are imposed, with the possibility of exemptions for specified goods and technology as the President may describe; by strengthening the criteria for foreign policy export controls through a requirement that the President "determine" that controls will achieve the intended foreign policy purpose(s); by authorizing the Secretary of Commerce to prohibit offenders of the Act from importing

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goods or technology into the United States; and for other purposes. Introduced Feb. 2, 1983; referred to the Committee on Banking, Housing and Urban Affairs; hearings begun by the Subcommittee on International Finance and Monetary Policy on Mar. 2, 1983.

S. 407 (Nunn)

Amends the Export Administration Act by making it a criminal offense to possess or attempt to possess restricted goods with the intent to illegally export such goods; by transferring export enforcement authority to the Customs Service while leaving export licensing with the Department of Commerce; by broadening enforcement tools currently available to the Customs Service; and for other purposes. Introduced Feb. 2, 1983; referred to the Committee on Banking, Housing and Urban Affairs; hearings begun by the Subcommittee on International Finance and Monetary Policy on Mar. 2, 1983.

S. 434 (Garn)

Replaces the Export Administration Act with new policy, procedures, and administrative arrangements by establishing an Office of Strategic Trade as an independent executive agency; by transferring export control authority currently exercised by the Department of Commerce and Department of State to the Office of Strategic Trade; by authorizing the OST to issue export licenses in accordance with prescribed criteria; by instructing the Director of the OST to establish and maintain a commodity control list consisting of goods or technology subject to export controls under the Act; by preventing the imposition of export controls for foreign policy or national security reasons when the President determines adequate evidence has been presented that the goods or technology are available without restrictions from foreign sources and that the absence of such controls would not prove detrimental to U.S. foreign policy or national security; by authorizing the President to control exports under U.S. jurisdiction for national security purposes through the Director of the OST; by requiring the Director of the OST, in consultation with the Secretary of Defense, to establish and maintain, as part of the commodity control list, a national security control list containing all items subject to national security export control; by authorizing the President to control, through the Director of the OST, the export of any items subject to U.S. jurisdiction or exported by any person subject to U.S. jurisdiction to the extent necessary to significantly further U.S. foreign policy; and for other purposes. Introduced Feb. 3, 1983; referred to the Committee on Banking, Housing and Urban Affairs; hearings begun by the Subcommittee on International Finance and Monetary Policy on Mar. 2, 1983.

S. 979 (Heinz, by request)/H.R. 2500 (Roth and Bonker, by request) Amends the Export Administration Act by adding new provisions to the findings, declaration of policy, general provisions, national security controls, foreign policy controls, and violations provisions sections of the statute, as well as other sections, for purposes of revising and extending the Act, authorizing appropriations, and setting a new expiration date, and for other purposes. Introduced Apr. 6, 1983 in the Senate; referred to the Committee on Banking, Housing, and Urban Affairs. Introduced Apr. 12, 1983 in the House; referred to the Committee on Foreign Affairs. Hearings underway before subcommittees of both committees at the time of introduction. Senate bill reported (S. Rept. 98-170) with amendments on May 25, 1983. Considered by Subcommittee on International Trade in hearings on Aug. 4, 1983.

S. 1299 (Tsongas and Gorton)

Amends the Export Administration Act by prescribing new export licences and licensing arrangements; by limiting unilaterally imposed national security export controls to one year's duration, subject to extension only by the President; by establishing new standards for the inclusion of items on the Military Critical Technologies List; by preventing the imposition of export controls on goods simply because they contain microprocessors or microcomputers; by providing for the removal of export restrictions on goods on the commodity control list for which no denials have been made over a year's time, unless there is good cause in the opinion of the Secretary of Commerce to retain them; and for other purposes. Introduced May 17, 1983; referred to the Committee on Banking, Housing, and Urban Affairs.

#### S. 1334 (Gorton)

Amends the Export Administration Act by prescribing new export licensing arrangements; by forbidding the imposition of export controls on exports pursuant to a contract entered into prior to the imposition of such controls; by establishing certain criteria for the imposition, expansion, or extension of foreign policy export controls by the President; by preventing the imposition of export controls on goods simply because they contain microprocessors or microcomputers; by requiring the Secretary of Commerce to review on a continuous basis the foreign availability of goods subject to export controls and preventing the Secretary from requiring an export license to export a good available in a foreign market, unless the Presidnet determines that such a control is essential for foreign policy pruposes; and for other purposes. Introduced May 19, 1983; referred to Committee on Banking, Housing, and Urban Affairs.

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# CHRONOLOGY OF EVENTS

- 09/30/83 -- The Export Administration Act of 1979 (P.L. 96-72; 93 Stat. 503; 50 U.S.C. App. 2401) automatically expires unless terminated on a prior date which the President by proclamation has designated.
- 08/04/83 -- Senate Subcommittee on International Trade held a hearing on legislation revising and extending the Export Administration Act.
- 07/26/83 -- All House committees that had been considering any provisions of H.R. 3231 revising and extending the Export Administration Act completed their action and the bill was reported to the Committee of the Whole House on the State of the Union.
  - -- Senate completed debate on and adopted S. 675, the Omnibus Defense Authorization Act, 1984, which empowers the Secretary of Defense to withhold from public disclosure any technical data with military or space application in the possession of or under the control of the Department of Defense, if such data may not be exported lawfully outside the United States without approval, authorization, or license under the Export Administration Act or the Arms Export Control Act.
- 06/06/83 -- House Committee on Foreign Affairs reported (H.Rept. 98-257) a bill (H.R. 3231) revising and extending the Export Administration Act of

1979. Portions of the legislation were referred to other committees for their consideration for a period ending not later than July 22, 1983.

- 05/25/83 -- Senate Committee on Banking, Housing, and Urban Affairs reported (S.Rept. 98-170) a bill revising and extending the Export Administration Act of 1979.
- 05/25/83 -- Senate Committee on Banking, Housing, and Urban Affairs began a mark-up of legislation to revise and extend the Export Administration Act and accepted a provision amending the policy section of the statute, saying "It is the policy of the United States to sustain vigorous scientific enterprise. To do so requires protecting the ability of scientists and other scholars freely to communicate their research findings by means of publication, teaching, conferences, and other forms of scholarly exchange."
- 05/18/83 -- House Committee on Foreign Affairs began a mark-up of legislation to revise and extend the Export Administration Act and accepted a provision amending the policy section of the statute, saying "It is the policy of the United States to sustain vigorous scientific enterprise. To do so requires protecting the ability of scientists and other scholars freely to communicate their research findings by means of publication, teaching, conferences, and other forms of scholarly exchange."
- 05/05/83 -- House Committee on Foreign Affairs began hearings on legislation to revise and extend the Export Administration Act.
  - -- William Schneider, Jr., Under Secretary of State for Security Assistance Science and Technology, issued a statement indicating, in part, that "the State and Justice Departments have been directed to apply the appropriate provisions of Immigration and Nationality Act to deny or restrict visas when there is reason to believe that an alien is seeking to come to the United States to acquire controlled strategic technology illegally" and added, "This policy is now in effect, and we are taking the steps necessary to implement it."
- 04/28/83 -- House Subcommittee on International Economic Policy and Trade began a mark-up of H.R. 2761 revising and extending the Export Administration Act.
- 04/07/83 -- A report on the technology transfer control program of the Department of Defense, dated February 1983 and required by the Defense Authorization Act for FY83, was received by both Houses of Congress.
- 04/04/83 -- The President transmitted to Congress a draft of proposed legislation to amend and reauthorize the Export Administration Act of 1979. The proposal was introduced by request as S. 979 and H.R. 2500.
- 03/02/83 -- Senate Subcommittee on International Finance and

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Monetary Policy began hearings on legislation to

- replace the expiring Export Administration Act of 1979. 02/24/83 -- House Subcommittee on International Economic Policy and Trade began hearings on legislation to replace the expiring Export Administration Act of 1979.
- 02/03/83 -- Senate Committee on Banking, Housing and Urban Affairs held a oversight hearing on the Export Administration Act.
- 12/23/82 -- President Reagan signed National Security Study Directive 14-82 creating an interagency panel, chaired by the Office of Science and Technology Policy, to review the issue of protecting sensitive, but unclassified scientific research information, taking into account the recommendations of the National Academy of Sciences report on scientific communication and national security. The interagency panel is to report to the National Security Council no later than Mar. 1, 1983 (later changed to late autumn).
- 09/30/82 -- A National Academy of Sciences panel on scientific communication and national security, chaired by Dr. Dale R. Corson, released a two-volume report of findings and recommendations concerning national security restrictions on university-based scientific research information.
- 09/08/82 -- Department of Defense Authorization Act for FY83 was signed into law (P.L. 97-252); section 1105, according to congressional conferees (H.Rept. 97-749), requires the Secretary of Defense to report to Congress with "recommendations for making improvements to the Department's technology transfer control policy as well as the desirability of establishing a separate office to manage and coordinate such policies within the Department of Defense."
- 08/06/82 -- The Department of Justice advised all U.S. Attorneys that "the Administration has assigned a high priority to controlling the export of critical militarily-applicable technology to the Soviet Union and its allied countries" and requested them "to undertake speedy and vigorous prosecutions of violations of Federal laws involving the transfers of strategic technology to the Soviet Bloc" as well as "to seek the imposition of appropriate sentences and to solicit appropriate media coverage of these prosecutions, in accordance with Department regulations, in order to maximize the deterrent effect of this essential program." (Unites States Attorneys' Bulletin, v. 30, Aug. 6, 1982: 395)
- 08/01/82 -- E.O. 12356 prescribing new security classification policy and procedures became effective.
- 06/25/82 -- The Information Security Oversight Office issued the implementing directive for E.O. 12356

on security classification policy and procedures (47 Fed. Reg. 27836-27842).

- 05/11/82 -- The President issued an order pursuant to E.O. 12356 indicating officials with original classification authority (47 Fed. Reg. 20105-20106).
- 05/06/82 -- A luggage search incident involving five students and scholars from the People's Republic of China resulted in a disclosure of Operation Exodus, a new aggressive program administered jointly by the Department of Commerce and the Customs Service and designed to check the outflow of high technology information.
- 05/04/82 -- Senate Permanent Subcommittee on Investigations began hearings evaluating the effectiveness of the executive branch in enforcing export controls, particularly with regard to the transfer of technology to the Soviet Union and other Warsaw Pact nations.
- 04/14/82 -- Senate Subcommittee on International Finance and Monetary Policy held a hearing on the extent of technology transfers from the West to the Soviet Union during the past decade and the contributions such transfers have made to strengthen the Soviet military-industrial base.
- 04/06/82 -- E.O. 12356 prescribing new security classification policy and procedures was published (47 Fed. Reg. 14874-14884).
- 04/00/82 -- The Director of Central Intelligence released a study, entitled "Soviet Acquisition of Western Technology."
- 03/29/82 -- The Subcommittee on Science, Research, and Technology and the Subcommittee on Investigations and Oversight, both of the House Committee on Science and Technology, jointly held a hearing on the impact of national security considerations on science and technology.
- 03/26/82 -- The National Academy of Sciences formally announced the formation of its study panel on scientific communication and national security with Dr. Dale R. Corson as chairman.
- 03/10/82 -- House Subcommittee on Government Information and Individual Rights began hearings evaluating the Reagan Administration's draft executive order on security classification policy and procedures and its impact upon the Freedom of Information Act.

- 03/01/82 -- National Security Agency regulations on voluntary review of papers on cryptography, recommended by the Public Cryptography Study Group of the American Council on Education, were published (47 Fed. Reg. 8704).
- 02/24/82 -- A special committee, formed to explore issues of mutual concern to the academic and national defense communities and jointly chaired by Donald Kennedy, president of Stanford University, and Richard DeLaurer, Under Secretary of Defense for Research and Engineering, held its first meeting. Other members of the panel include two university presidents, the heads of three higher education organizations, and eight DOD representatives.
- 01/28/82 -- The report of the Defense Science Board Task Force on University Responsiveness to National Security Requirements was transmitted to the Secretary of Defense.
- 01/07/82 -- Admiral Bobby R. Inman, appearing as a panelist at the annual meeting of the American Association for the Advancement of Science, recommended that scientists who work in certain areas of research submit their study proposals and papers discussing findings to Government review before making them public.
- 07/13/81 -- The Mathematical and Computer Sciences Advisory Committee of the National Science Foundation released a report on "The Role of the NSF in Supporting Cryptological Research", which is critical of the pre-publication review recommendation of the Public Cryptography Study Group.
- 04/20/81 -- The Public Cryptography Study Group, established by the American Council on Education, issued its final report recommending a trial program of voluntary pre-publication review of cryptography manuscripts by the National Security Agency.
- 02/28/80 -- House Subcommittee on Government Information and Individual Rights began hearings on policies of the executive branch of imposing official secrecy on private scientific research, inventions, and scientific information.

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