Yet we cannot ignore the evidence that our oceans and coasts are imperiled. Since 1950 production from world fisheries and aquaculture has increased by a factor of five. Food and Agriculture Organization [FAO] analysis of hte world's fishing resources in 1995 concluded that most of the major fish stocks in the world can be classified as fully fished, overfished, depleted, or recovering. Approximately 45 percent of the Nation's threatened and endangered species inhibit coastal areas, and almost 75 percent of the endangered and threatened mammals and birds rely on these coastal habitats.

We are inundated every day with stories of marine, estuarine and reverine pollution, wetlands loss, algal blooms, coastal and marine habitat degradation, fishery over-harvesting, and the looming threat of sea-level rise. With all of the legislation, regulations, and Federal, State and local programs and policies, we somehow still seem to be failing in our mission to have healthy, sustainable oceans and coasts.

The situation will only get worse as coastal populations increase: Two-thirds of the world's cities with populations over 1.6 million are located in the coastal zone. By the year 2010 it is estimated that at least 75 percent of the United States population will live within 50 miles of the coast, with all of the attendant potential environmental consequences of having so many people concentrated in areas of diverse and fragile ecosystems.

Part of the problem is that we are not investing enough in learning about our oceans; for all of the money we have spent in space exploration, we know woefully little about the amazing characteristics of the 71 percent of our planet's surface that is the world's oceans. The fact is, we know less about the surface of our own planet than we do about that of Mars, Venus, or the Moon. I believe that we need to put our national ocean exploration programs on par with the space program, and our efforts to conserve the marine environment at least equal to that provided to the land portion of our country. Our efforts to protect our marine environment through our national marine sanctuary system provide only 0.7 percent of the funding we give just to our national parks.

The legislation I am introducing is patterned after the law which was enacted in 1966 to establish the Commission on Marine Science, Engineering and Resources, known as the Stratton Commission, after its chairman, Julius Stratton of the Ford Foundation. The Commission was given the task of examining the Nation's stake in the development, utilization, and preservation of the marine environment, to assess the Nation's current and anticipated marine activities; and, on the basis of this information, to formulate a comprehensive, long-term, national program for marine affairs with the goal of meeting current and future needs in the most efficient manner possible. In January of 1969, the Stratton Commission released its report ''Our Nation and the Sea: A Plan for National Action.''

The report and recommendations of the Commission led to the creation of the National Oceanic and Atmospheric Administration, supported the impetus for the enactment of the Coastal Zone Management Act in 1972, and provided the vision and structure for ocean and coastal policy for the past thirty years. Today, however, U.S. population has grown from 196.5 million in 1966 to 265.6 million in 1996, over half of whom lives within 50 miles of our shores; ocean and coastal resources once thought inexhaustible are now seriously depleted; and wetlands and other marine habitats are threatened by pollution and human activities.

As the 30-year anniversary of the Stratton Commission's report approaches, it is of great importance that we again do a thorough assessment of the current state of our Nation's coastal and marine resources, programs, and policies, and that we create a new national ocean plan to lead us into the 21st century. The Oceans Act of 1997 contains similar provisions to the 1966 act. It calls for the creation of a Stratton-type commission, called the Commission on Ocean Policy, to examine ocean and coastal activities and to report within 18 months its recommendations for a national policy. In developing the report, the Commission would assess Federal programs and funding priorities, infrastructure requirements, conflicts among marine users, and technological opportunities. The Commission would then meet at a minimum of once every 5 years to assess the Nation's progress in meeting the purposes and objectives of the act. An appropriation of $6 million over the course of fiscal years 1998 and 1999 would be authorized for the Commission to complete its work. In addition, such sums as necessary would be authorized for the Commission to meet in the 10 years following the submission of the report.

It would also call for the President, with the assistance of the heads of relevant agencies and departments, and on the advice of the Commission, to develop and implement a coherent national ocean and coastal policy that provides for protection against natural hazards; responsible stewardship of fisheries and other ocean and coastal resources; protection of the marine environment; resolution of conflicts among users of the marine environment; advancement of research, education and training in fields related to marine activities; continued investment in marine technologies; coordination and cooperation within and among governments; and preservation of U.S. leadership on ocean and coastal issues.

I believe that a comprehensive ocean and coastal conservation and management plan for our country is absolutely necessary. Our efforts have got to be coordinated, and we've got to act now to increase our knowledge of this critical area of our planet, and to ensure proper management of marine resources, and healthy, vibrant coastal and ocean ecosystems we all can enjoy.

## H.R. 2544, THE TECHNOLOGY TRANSFER COMMERCIALIZATION ACT OF 1997

### HON. CONSTANCE A. MORELLA

OF MARYLAND

IN THE HOUSE OF REPRESENTATIVES

*Thursday, September 25, 1997*

Mrs. MORELLA. Mr. Speaker, today I am introducing H.R. 2544, the Technology Transfer Commercialization Act of 1997, a bill which promotes technology transfer by facilitating licenses for federally owned inventions.

Each day research and development programs at our Nation's over 700 Federal laboratories produce new knowledge, processes, and products. Often, technologies and techniques generated in these Federal laboratories have commercial applications, if further developed by the industrial community.

As a result, Federal laboratories are working closely with U.S. business, industry, and State and local governments to help them apply these new capabilities to their own particular needs. Through this technology transfer process our Federal laboratories are sharing the benefits of our national investment in scientific progress with all segments of our society.

It seems clear that the economic advances of the 21st century will rooted in the research and development performed in our Nation's laboratories. These advances are becoming even more dependent upon the continuous transfer of technology into commercial goods and services. By spinning-off and commercializing federally developed technology, the results of our Federal research and development enterprise are being used today to enhance our Nation's ability to compete in the global marketplace.

For over a decade and a half, Congress, led the Science Committee, has embraced the use of technology transfer from our Federal laboratories to help boost our international competitiveness. We have enacted legislation establishing a system to facilitate this transfer of technology to the private sector and to State and local governments.

The primary law to promote the transfer of technology from Federal laboratories is the Stevenson-Wydler Technology Innovation Act of 1980. The Stevenson-Wydler Act, Public Law 96–480, makes it easier to transfer technology from the laboratories and provides a means for private sector researchers to access laboratory development.

In addition, Congress has enacted additional laws to foster technology transfer, including the Federal Technology Transfer Act of 1986 (Public Law 99–502); the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418); the National Competitiveness Technology Transfer Act of 1989 (Public Law 101–189); and the American Technology Preeminence Act of 1991 (Public Law 102–245), among others. In addition, Congress enacted the amendments to the Patent and Trademark Laws, also known as the Bayh-Dole of 1980 (Public Law 96–517).

Most recently, in the past Congress, the National Technology Transfer and Advancement Act of 1995 (Public Law 104–113), which I introduced, was enacted into law. Public Law 104–113 amends the Stevenson-Wydler Technology Innovation Act of 1980 and the Federal Technology Transfer Act of 1986 to improve U.S. competitiveness by speeding commercialization of inventions developed through collaborative agreements between the Government and industry. The law also promotes partnership ventures with Federal laboratories and the private-sector and creates incentives to laboratory personnel for new inventions.

As the chair of the House Science Committee's Technology Subcommittee, I am pleased to continue this tradition of advancing technology transfer and encouraging research and development partnerships between Government and industry with the introduction of H.R. 2544, the Technology Transfer Commercialization Act. H.R. 2544 seeks to remove the legal obstacles to effectively license federally owned inventions, created in Government-owned, Government-operated laboratories, by

adopting the successful Bayh-Dole Act as a framework.

The bill provides parallel authorities to those currently in place under the Bayh-Dole Act for licensing university or university-operated Federal laboratory inventions. The bill also amends the Stevenson-Wydler Act, as amended, to allow Federal laboratories to include already existing patented inventions into a cooperative research and development agreement [CRADA].

Thus, agencies would be provided with two important new tools for effectively commercializing on-the-shelf Federally owned technologies—either licensing them as stand-alone inventions, under the bill's revised authorities of section 209 of the Bayh-Dole Act, or including them as part of a larger package under a CRADA. In doing so, this will make both mechanisms much more attractive to U.S. companies that are striving to form partnerships with Federal laboratories.

Additionally, H.R. 2544 removes language requiring onerous public notification procedures in the current law, recognizing that in partnering with Government, industry must undertake great risks and expenditures to bring new discoveries to the marketplace and that in today's competitive world economy, time-to-market commercialization is a critical factor for successful products. Federal regulations currently require a 3-month notification of the availability of an invention for exclusive licensing in the Federal Register. If a company responds by seeking to license the invention exclusively, another notice requirement follows providing for a 60-day period for filing objections. The prospective licensee is publicly identified along with the invention during this second notice. This built-in delay of at least 5 months, along with public notification that a specific company is seeking the license, is a great disincentive to commercializing on-the-shelf Government inventions.

No such requirements for public notification and filing of objections exist for licensing university patents or patents made by contractor-operated Federal laboratories. In addition, no such restriction applies to companies seeking a CRADA, which now guarantees companies the right to an exclusive field of use license. In all the years that the statutes have been utilized, no evidence has arisen that the universities or contractor-operated laboratories abuse these authorities. The steady increase of university licensing agreements, royalties, commercialized technologies, and economic benefits to the U.S. economy shows that removing such legal impediments is critical to success.

Changing this provision would not only speed the commercialization of billions of dollars of on-the-shelf technologies, it would also allow these discoveries to be effectively included in CRADA, which is now very difficult to do. These built-in delays fundamentally exacerbate the biggest industry complaint about dealing with the Federal Government as a R&D partner—it simply takes too long to complete a deal. Requiring a half year delay to receive a license that both parties want to grant makes no sense.

Removing this restriction eliminates the last significant legal roadblock to expediting licensing and commercialization of federally funded patents. This should provide an important tool for our economic growth if the agencies apply this new authority aggressively.

While removing language requiring onerous public notification procedures in the current law, it is the intent of the bill that agencies will continue to widely disseminate public notices that inventions are available for licensing. Agencies should approach this in the same manner that they are now providing notice that opportunities or a CRADA are available under the Federal Technology Transfer Act, and universities advertise available licenses under the Bayh-Dole Act.

In providing the appropriate notice of the availability of their technologies for licensing, I would expect that agencies would make the greatest possible use of the Internet. Electronic postings provide instantaneous notice that commercial partners are being sought for developing Federal patents. Virtually all Federal laboratories and universities now already use their Internet websites to post such notices. This should be a far more effective advertising tool than mere publication in the Federal Register, especially since most small businesses do not scan the Federal Register looking for new technologies.

Mr. Speaker, the Technology Transfer Commercialization Act streamlines Federal technology licensing procedures by removing the uncertainty and delay associated with the licensing determination process. Removing the roadblocks to the commercialization of Federal research and development by industry has been a goal we, in Congress, have long supported, and I would urge my colleagues to join me in this effort.

H.R. 2544

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

**SECTION 1. SHORT TITLE.**

This Act may be cited as the ''Technology Transfer Commercialization Act of 1997''.

**SEC. 2. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.**

Section 12(b)(1) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(b)(1)) is amended by inserting ''or, subject to section 209 of title 35, United States Code, in a federally owned invention directly related to the scope of the work under the agreement,'' after ''under the agreement,''.

**SEC. 3. LICENSING FEDERALLY OWNED INVENTIONS.**

(a) AMENDMENT.—Section 209 of title 35, United States Code, is amended to read as follows:

**''§ 209. Licensing federally owned inventions**

''(a) AUTHORITY.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention if—

''(1) granting the license is a reasonable and necessary incentive to—

''(A) call forth the investment capital and expenditures needed to bring the invention to practical application; or

''(B) otherwise promote the invention's utilization by the public;

''(2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public;

''(3) the applicant makes a commitment to achieve practical utilization of the invention within a reasonable time;

''(4) granting the license will not substantially lessen competition or create or maintain a violation of the antitrust laws; and

''(5) in the case of an invention covered by a foreign patent application or patent, the interests of United States industry in foreign commerce will be enhanced.

''(b) MANUFACTURE IN UNITED STATES.—Licenses shall normally be granted under this section only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

''(c) SMALL BUSINESS.—First preference for the granting of licenses under this section shall be given to small business firms having equal or greater likelihood as other applicants to bring the invention to practical application within a reasonable time.

''(d) TERMS AND CONDITIONS.—Licenses granted under this section shall contain such terms and conditions as the granting agency considers appropriate. Such terms and conditions—

''(1) shall include provisions—

''(A) requiring period reporting on utilization of the invention, and utilization efforts, by the licensee; and

''(B) empowering the Federal agency to terminate the license in whole or in part if the agency determines that—

''(i) the licensee is not adequately executing its commitment to achieve practical utilization of the invention within a reasonable time;

''(ii) the licensee is in breach of an agreement described in subsection (b); or

''(iii) termination is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license, and such requirements are not reasonably satisfied by the licensee; and

''(2) may include a requirement that the licensee provide the agency with a plan for development or marketing the invention.

Information obtained pursuant to paragraph (1)(A) shall be treated by the Federal agency as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5, United States Code.

''(e) PUBLIC NOTICE.—No license may be granted under this section unless public notice of the availability of a federally owned invention for licensing in an appropriate manner has been provided at least 30 days before the license is granted. This subsection shall not apply to the licensing of inventions made under a cooperative research and development agreement entered into under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a).''.

(b) CONFORMING AMENDMENT.—The item relating to section 209 in the table of sections for chapter 18 of title 35, United States Code, is amended to read as follows:

''209. Licensing federally owned inventions.''.

## A TRIBUTE TO FAUSTO A. ROSERO

### HON. NYDIA M. VELÁZQUEZ

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

*Thursday, September 25, 1997*

Ms. VELÁZQUEZ. Mr. Speaker, today I rise to pay a very special tribute to one of my constituents, who after working for 30 years is now ready to retire. Mr. Fausto Anibal Rosero is retiring from United Airlines, where he is currently a lead in the Cabin Service Division. During his tenure at United Airlines, Fausto exhibited exceptional leadership skills as well as a commitment to excellence.

His dedication and commitment to excellence led to his designation as a lead cabin serviceman. Under his supervision, Fausto