

--H.R.6133--

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One Hundred Second Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Friday, the third day of January,
one thousand nine hundred and ninety-two

An Act

To enable the United States to maintain its leadership in land remote sensing by providing data continuity for the Landsat program, to establish a new national land remote sensing policy, and for other purposes.

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 'Land Remote Sensing Policy Act of 1992'.

SEC. 2. FINDINGS.

The Congress finds and declares the following:

- (1) The continuous collection and utilization of land remote sensing data from space are of major benefit in studying and understanding human impacts on the global environment, in managing the Earth's natural resources, in carrying out national security functions, and in planning and conducting many other activities of scientific, economic, and social importance.
- (2) The Federal Government's Landsat system established the United States as the world leader in land remote sensing technology.
- (3) The national interest of the United States lies in maintaining international leadership in satellite land remote sensing and in broadly promoting the beneficial use of remote sensing data.
- (4) The cost of Landsat data has impeded the use of such data for scientific purposes, such as for global environmental change research, as well as for other public sector applications.

(5) Given the importance of the Landsat program to the United States, urgent actions, including expedited procurement procedures, are required to ensure data continuity.

(6) Full commercialization of the Landsat program cannot be achieved within the foreseeable future, and thus should not serve as the near-term goal of national policy on land remote sensing; however, commercialization of land remote sensing should remain a long-term goal of United States policy.

(7) Despite the success and importance of the Landsat system, funding and organizational uncertainties over the past several years have placed its future in doubt and have jeopardized United States leadership in land remote sensing.

(8) Recognizing the importance of the Landsat program in helping to meet national and commercial objectives, the President approved, on February 11, 1992, a National Space Policy Directive which was developed by the National Space Council and commits the United States to ensuring the continuity of Landsat coverage into the 21st century.

(9) Because Landsat data are particularly important for national security purposes and global environmental change research, management responsibilities for the program should be transferred from the Department of Commerce to an integrated program management involving the Department of Defense and the National Aeronautics and Space Administration.

(10) Regardless of management responsibilities for the Landsat program, the Nation's broad civilian, national security, commercial, and foreign policy interests in remote sensing will best be served by ensuring that Landsat remains an unclassified program that operates according to the principles of open skies and nondiscriminatory access.

(11) Technological advances aimed at reducing the size and weight of satellite systems hold the potential for dramatic reductions in the cost, and substantial improvements in the capabilities, of future land remote sensing systems, but such technological advances have not been demonstrated for land remote sensing and therefore cannot be relied upon as the sole means of achieving data continuity for the Landsat program.

(12) A technology demonstration program involving advanced remote sensing technologies could serve a vital role in determining the design of a follow-on spacecraft to Landsat 7, while also helping to determine whether such a spacecraft should be funded by the United States Government, by the private sector, or by an international consortium.

(13) To maximize the value of the Landsat program to the American public, unenhanced Landsat 4 through 6 data should be made available, at a minimum, to United States Government agencies, to global environmental change researchers, and to other researchers who are financially supported by the United States Government, at the cost of fulfilling user requests, and unenhanced Landsat 7 data should be made available to all users at the cost of fulfilling user requests.

(14) To stimulate development of the commercial market for unenhanced data and value-added services, the United States Government should adopt a data policy for Landsat 7 which allows competition within the private sector for distribution of unenhanced data and value-added services.

(15) Development of the remote sensing market and the provision of commercial value-added services based on remote sensing data should remain exclusively the function of the private sector.

(16) It is in the best interest of the United States to maintain a permanent, comprehensive Government archive of global Landsat and other land remote sensing data for long-term monitoring and study of the changing global environment.

SEC. 3. DEFINITIONS.

In this Act, the following definitions apply:

(1) The term `Administrator' means the Administrator of the National Aeronautics and Space Administration.

(2) The term `cost of fulfilling user requests' means the incremental costs associated with providing product generation, reproduction, and distribution of unenhanced data in response to user requests and shall not include any acquisition, amortization, or depreciation of capital assets originally paid for by the United States Government or other costs not specifically attributable to fulfilling user requests.

(3) The term `data continuity' means the continued acquisition and availability of unenhanced data which are, from the point of view of the user--

(A) sufficiently consistent (in terms of acquisition geometry, coverage characteristics, and spectral characteristics) with previous Landsat data to allow comparisons for global and regional change detection and characterization; and

(B) compatible with such data and with methods used to receive and

process such data.

(4) The term `data preprocessing' may include--

(A) rectification of system and sensor distortions in land remote sensing data as it is received directly from the satellite in preparation for delivery to a user;

(B) registration of such data with respect to features of the Earth; and

(C) calibration of spectral response with respect to such data, but does not include conclusions, manipulations, or calculations derived from such data, or a combination of such data with other data.

(5) The term `land remote sensing' means the collection of data which can be processed into imagery of surface features of the Earth from an unclassified satellite or satellites, other than an operational United States Government weather satellite.

(6) The term `Landsat Program Management' means the integrated program management structure--

(A) established by, and responsible to, the Administrator and the Secretary of Defense pursuant to section 101(a); and

(B) consisting of appropriate officers and employees of the National Aeronautics and Space Administration, the Department of Defense, and any other United States Government agencies the President designates as responsible for the Landsat program.

(7) The term `Landsat system' means Landsats 1, 2, 3, 4, 5, and 6, and any follow-on land remote sensing system operated and owned by the United States Government, along with any related ground equipment, systems, and facilities owned by the United States Government.

(8) The term `Landsat 6 contractor' means the private sector entity which was awarded the contract for spacecraft construction, operations, and data marketing rights for the Landsat 6 spacecraft.

(9) The term `Landsat 7' means the follow-on satellite to Landsat 6.

(10) The term `National Satellite Land Remote Sensing Data Archive' means the archive established by the Secretary of the Interior pursuant to the archival responsibilities defined in section 502.

(11) The term `noncommercial purposes' refers to those activities

undertaken by individuals or entities on the condition, upon receipt of unenhanced data, that--

(A) such data shall not be used in connection with any bid for a commercial contract, development of a commercial product, or any other non-United States Government activity that is expected, or has the potential, to be profitmaking;

(B) the results of such activities are disclosed in a timely and complete fashion in the open technical literature or other method of public release, except when such disclosure by the United States Government or its contractors would adversely affect the national security or foreign policy of the United States or violate a provision of law or regulation; and

(C) such data shall not be distributed in competition with unenhanced data provided by the Landsat 6 contractor.

(12) The term `Secretary' means the Secretary of Commerce.

(13) The term `unenhanced data' means land remote sensing signals or imagery products that are unprocessed or subject only to data preprocessing.

(14) The term `United States Government and its affiliated users' means--

(A) United States Government agencies;

(B) researchers involved with the United States Global Change Research Program and its international counterpart programs; and

(C) other researchers and international entities that have signed with the United States Government a cooperative agreement involving the use of Landsat data for noncommercial purposes.

SEC. 4. REPEAL OF LAND REMOTE-SENSING COMMERCIALIZATION ACT OF 1984.

The Land Remote-Sensing Commercialization Act of 1984 (15 U.S.C. 4201 et seq.) is repealed.

TITLE I--LANDSAT

SEC. 101. LANDSAT PROGRAM MANAGEMENT.

(a) ESTABLISHMENT- The Administrator and the Secretary of Defense shall be responsible for management of the Landsat program. Such responsibility shall

be carried out by establishing an integrated program management structure for the Landsat system.

(b) MANAGEMENT PLAN- The Administrator, the Secretary of Defense, and any other United States Government official the President designates as responsible for part of the Landsat program, shall establish, through a management plan, the roles, responsibilities, and funding expectations for the Landsat Program of the appropriate United States Government agencies. The management plan shall--

(1) specify that the fundamental goal of the Landsat Program Management is the continuity of unenhanced Landsat data through the acquisition and operation of a Landsat 7 satellite as quickly as practicable which is, at a minimum, functionally equivalent to the Landsat 6 satellite, with the addition of a tracking and data relay satellite communications capability;

(2) include a baseline funding profile that--

(A) is mutually acceptable to the National Aeronautics and Space Administration and the Department of Defense for the period covering the development and operation of Landsat 7; and

(B) provides for total funding responsibility of the National Aeronautics and Space Administration and the Department of Defense, respectively, to be approximately equal to the funding responsibility of the other as spread across the development and operational life of Landsat 7;

(3) specify that any improvements over the Landsat 6 functional equivalent capability for Landsat 7 will be funded by a specific sponsoring agency or agencies, in a manner agreed to by the Landsat Program Management, if the required funding exceeds the baseline funding profile required by paragraph (2), and that additional improvements will be sought only if the improvements will not jeopardize data continuity; and

(4) provide for a technology demonstration program whose objective shall be the demonstration of advanced land remote sensing technologies that may potentially yield a system which is less expensive to build and operate, and more responsive to data users, than is the current Landsat system.

(c) RESPONSIBILITIES- The Landsat Program Management shall be responsible for--

(1) Landsat 7 procurement, launch, and operations;

(2) ensuring that the operation of the Landsat system is responsive to the broad interests of the civilian, national security, commercial, and foreign users of the Landsat system;

(3) ensuring that all unenhanced Landsat data remain unclassified and that, except as provided in section 506 (a) and (b), no restrictions are placed on the availability of unenhanced data;

(4) ensuring that land remote sensing data of high priority locations will be acquired by the Landsat 7 system as required to meet the needs of the United States Global Change Research Program, as established in the Global Change Research Act of 1990, and to meet the needs of national security users;

(5) Landsat data responsibilities pursuant to this Act;

(6) oversight of Landsat contracts entered into under sections 102 and 103;

(7) coordination of a technology demonstration program, pursuant to section 303; and

(8) ensuring that copies of data acquired by the Landsat system are provided to the National Satellite Land Remote Sensing Data Archive.

(d) **AUTHORITY TO CONTRACT-** The Landsat Program Management may, subject to appropriations and only under the existing contract authority of the United States Government agencies that compose the Landsat Program Management, enter into contracts with the private sector for services such as, but not limited to, satellite operations and data preprocessing.

(e) **Landsat Advisory Process-**

(1) **ESTABLISHMENT-** The Landsat Program Management shall seek impartial advice and comments regarding the status, effectiveness, and operation of the Landsat system, using existing advisory committees and other appropriate mechanisms. Such advice shall be sought from individuals who represent--

(A) a broad range of perspectives on basic and applied science and operational needs with respect to land remote sensing data;

(B) the full spectrum of users of Landsat data, including representatives from United States Government agencies, State and local government agencies, academic institutions, nonprofit organizations, value-added companies, the agricultural, mineral extraction, and other user industries, and the public, and

(C) a broad diversity of age groups, sexes, and races.

(2) REPORTS- Within 1 year after the date of the enactment of this Act and biennially thereafter, the Landsat Program Management shall prepare and submit a report to the Congress which--

(A) reports the public comments received pursuant to paragraph (1); and

(B) includes--

(i) a response to the public comments received pursuant to paragraph (1);

(ii) information on the volume of use, by category, of data from the Landsat system; and

(iii) any recommendations for policy or programmatic changes to improve the utility and operation of the Landsat system.

SEC. 102. PROCUREMENT OF LANDSAT 7.

(a) CONTRACT NEGOTIATIONS- The Landsat Program Management shall, subject to appropriations and only under the existing contract authority of the United States Government agencies that compose the Landsat Program Management, expeditiously contract with a United States private sector entity for the development and delivery of Landsat 7.

(b) DEVELOPMENT AND DELIVERY CONSIDERATION- In negotiating a contract under this section for the development and delivery of Landsat 7, the Landsat Program Management shall--

(1) seek, as a fundamental objective, to have Landsat 7 operational by the expected end of the design life of Landsat 6;

(2) seek to ensure data continuity by the development and delivery of a satellite which is, at a minimum, functionally equivalent to the Landsat 6 satellite; and

(3) seek to incorporate in Landsat 7 any performance improvements required to meet United States Government needs that would not jeopardize data continuity.

(c) NOTIFICATION OF COST AND SCHEDULE CHANGES- The Landsat Program Management shall promptly notify the Congress of any significant deviations from the expected cost, delivery date, and launch date of Landsat 7, that are specified by the Landsat Program Management upon award of the contract

under this section.

(d) UNITED STATES PRIVATE SECTOR ENTITIES- The Landsat Program Management shall, for purposes of this Act, define the term 'United States private sector entities', taking into account the location of operations, assets, personnel, and other such factors.

SEC. 103. DATA POLICY FOR LANDSAT 4 THROUGH 6.

(a) CONTRACT NEGOTIATIONS- Within 30 days after the date of enactment of this Act, the Landsat Program Management shall enter into negotiations with the Landsat 6 contractor to formalize an arrangement with respect to pricing, distribution, acquisition, archiving, and availability of unenhanced data for which the Landsat 6 contractor has responsibility under its contract. Such arrangement shall provide for a phased transition to a data policy consistent with the Landsat 7 data policy (developed pursuant to section 105) by the date of initial operation of Landsat 7. Conditions of the phased arrangement should require that the Landsat 6 contractor adopt provisions so that by the final phase of the transition period--

(1) such unenhanced data shall be provided, at a minimum, to the United States Government and its affiliated users at the cost of fulfilling user requests, on the condition that such unenhanced data are used solely for noncommercial purposes;

(2) instructional data sets, selected from the Landsat data archives, will be made available to educational institutions exclusively for noncommercial, educational purposes at the cost of fulfilling user requests;

(3) Landsat data users are able to acquire unenhanced data contained in the collective archives of foreign ground stations as easily and affordably as practicable;

(4) adequate data necessary to meet the needs of global environmental change researchers and national security users are acquired;

(5) the United States Government and its affiliated users shall not be prohibited from reproduction or dissemination of unenhanced data to other agencies of the United States Government and other affiliated users, on the condition that such unenhanced data are used solely for noncommercial purposes;

(6) nonprofit, public interest entities receive vouchers, data grants, or other such means of providing them with unenhanced data at the cost of fulfilling user requests, on the condition that such unenhanced data are used solely for noncommercial purposes.

(7) a viable role for the private sector in the promotion and development of the commercial market for value added and other services using unenhanced data from the Landsat system is preserved; and

(8) unenhanced data from the Landsat system are provided to the National Satellite Land Remote Sensing Data Archive at no more than the cost of fulfilling user requests.

(b) **FAILURE TO REACH AGREEMENT-** If negotiations under subsection (a) have not, by September 30, 1993, resulted in an agreement that the Landsat Program Management determines generally achieves the goals stated in subsection (b) (1) through (8), the Administrator and the Secretary of Defense shall, within 30 days after the date of such determination, jointly certify and report such determination to the Congress. The report shall include a review of options and projected costs for achieving such goals, and shall include recommendations for achieving such goals. The options reviewed shall include-

(1) retaining the existing or modified contract with the Landsat 6 contractor;

(2) the termination of existing contracts for the exclusive right to market unenhanced Landsat data; and

(3) the establishment of an alternative private sector mechanism for the marketing and commercial distribution of such data.

SEC. 104. TRANSFER OF LANDSAT 6 PROGRAM RESPONSIBILITIES.

The responsibilities of the Secretary with respect to Landsat 6 shall be transferred to the Landsat Program Management, as agreed to between the Secretary and the Landsat Program Management, pursuant to section 101.

SEC. 105. DATA POLICY FOR LANDSAT 7.

(a) **LANDSAT 7 DATA POLICY-** The Landsat Program Management, in consultation with other appropriate United States Government agencies, shall develop a data policy for Landsat 7 which should--

(1) ensure that unenhanced data are available to all users at the cost of fulfilling user requests;

(2) ensure timely and dependable delivery of unenhanced data to the full spectrum of civilian, national security, commercial, and foreign users and the National Satellite Land Remote Sensing Data Archive;

- (3) ensure that the United States retains ownership of all unenhanced data generated by Landsat 7;
- (4) support the development of the commercial market for remote sensing data;
- (5) ensure that the provision of commercial value-added services based on remote sensing data remains exclusively the function of the private sector; and
- (6) to the extent possible, ensure that the data distribution system for Landsat 7 is compatible with the Earth Observing System Data and Information System.

(b) In addition, the data policy for Landsat 7 may provide for--

- (1) United States private sector entities to operate ground receiving stations in the United States for Landsat 7 data;
- (2) other means for direct access by private sector entities to unenhanced data from Landsat 7; and
- (3) the United States Government to charge a per image fee, license fee, or other such fee to entities operating ground receiving stations or distributing Landsat 7 data.

(c) LANDSAT 7 DATA POLICY PLAN- Not later than July 15, 1994, the Landsat Program Management shall develop and submit to Congress a report that contains a Landsat 7 Data Policy Plan. This plan shall define the roles and responsibilities of the various public and private sector entities that would be involved in the acquisition, processing, distribution, and archiving of Landsat 7 data and in operations of the Landsat 7 spacecraft.

(d) REPORTS- Not later than 12 months after submission of the Landsat 7 Data Policy Plan, required by subsection (c), and annually thereafter until the launch of Landsat 7, the Landsat Program Management, in consultation with representatives of appropriate United States Government agencies, shall prepare and submit a report to the Congress which--

- (1) provides justification for the Landsat 7 data policy in terms of the civilian, national security, commercial, and foreign policy needs of the United States; and
- (2) provides justification for any elements of the Landsat 7 data policy which are not consistent with the provisions of subsection (a).

TITLE II--LICENSING OF PRIVATE REMOTE SENSING SPACE

SYSTEMS

SEC. 201. GENERAL LICENSING AUTHORITY.

(a) LICENSING AUTHORITY OF SECRETARY- (1) In consultation with other appropriate United States Government agencies, the Secretary is authorized to license private sector parties to operate private remote sensing space systems for such period as the Secretary may specify and in accordance with the provisions of this title.

(2) In the case of a private space system that is used for remote sensing and other purposes, the authority of the Secretary under this title shall be limited only to the remote sensing operations of such space system.

(b) COMPLIANCE WITH THE LAW, REGULATIONS, INTERNATIONAL OBLIGATIONS, AND NATIONAL SECURITY- No license shall be granted by the Secretary unless the Secretary determines in writing that the applicant will comply with the requirements of this Act, any regulations issued pursuant to this Act, and any applicable international obligations and national security concerns of the United States.

(c) DEADLINE FOR ACTION ON APPLICATION- The Secretary shall review any application and make a determination thereon within 120 days of the receipt of such application. If final action has not occurred within such time, the Secretary shall inform the applicant of any pending issues and of actions required to resolve them.

(d) IMPROPER BASIS FOR DENIAL- The Secretary shall not deny such license in order to protect any existing licensee from competition.

(e) REQUIREMENT TO PROVIDE UNENHANCED DATA- (1) The Secretary, in consultation with other appropriate United States Government agencies and pursuant to paragraph (2), shall designate in a license issued pursuant to this title any unenhanced data required to be provided by the licensee under section 202(b)(3).

(2) The Secretary shall make a designation under paragraph (1) after determining that--

(A) such data are generated by a system for which all or a substantial part of the development, fabrication, launch, or operations costs have been or will be directly funded by the United States Government; or

(B) it is in the interest of the United States to require such data to be provided by the licensee consistent with section 202(b)(3), after considering the impact on the licensee and the importance of promoting widespread access to remote sensing data from United States and foreign

systems.

(3) A designation made by the Secretary under paragraph (1) shall not be inconsistent with any contract or other arrangement entered into between a United States Government agency and the licensee.

SEC. 202. CONDITIONS FOR OPERATION.

(a) LICENSE REQUIRED FOR OPERATION- No person who is subject to the jurisdiction or control of the United States may, directly or through any subsidiary or affiliate, operate any private remote sensing space system without a license pursuant to section 201.

(b) LICENSING REQUIREMENTS- Any license issued pursuant to this title shall specify that the licensee shall comply with all of the requirements of this Act and shall--

- (1) operate the system in such manner as to preserve the national security of the United States and to observe the international obligations of the United States in accordance with section 506;
- (2) make available to the government of any country (including the United States) unenhanced data collected by the system concerning the territory under the jurisdiction of such government as soon as such data are available and on reasonable terms and conditions;
- (3) make unenhanced data designated by the Secretary in the license pursuant to section 201(e) available in accordance with section 501;
- (4) upon termination of operations under the license, make disposition of any satellites in space in a manner satisfactory to the President;
- (5) furnish the Secretary with complete orbit and data collection characteristics of the system, and inform the Secretary immediately of any deviation; and
- (6) notify the Secretary of any agreement the licensee intends to enter with a foreign nation, entity, or consortium involving foreign nations or entities.

(c) ADDITIONAL LICENSING REQUIREMENTS FOR LANDSAT 6 CONTRACTOR- In addition to the requirements of paragraph (b), any license issued pursuant to this title to the Landsat 6 contractor shall specify that the Landsat 6 contractor shall--

- (1) notify the Secretary of any value added activities (as defined by the Secretary by regulation) that will be conducted by the Landsat 6

contractor or by a subsidiary or affiliate; and

(2) if such activities are to be conducted, provide the Secretary with a plan for compliance with section 501 of this Act.

SEC. 203. ADMINISTRATIVE AUTHORITY OF THE SECRETARY.

(a) FUNCTIONS- In order to carry out the responsibilities specified in this title, the Secretary may--

(1) grant, condition, or transfer licenses under this Act;

(2) seek an order of injunction or similar judicial determination from a United States District Court with personal jurisdiction over the licensee to terminate, modify, or suspend licenses under this title and to terminate licensed operations on an immediate basis, if the Secretary determines that the licensee has substantially failed to comply with any provisions of this Act, with any terms, conditions, or restrictions of such license, or with any international obligations or national security concerns of the United States.

(3) provide penalties for noncompliance with the requirements of licenses or regulations issued under this title, including civil penalties not to exceed \$10,000 (each day of operation in violation of such licenses or regulations constituting a separate violation);

(4) compromise, modify, or remit any such civil penalty;

(5) issue subpoenas for any materials, documents, or records, or for the attendance and testimony of witnesses for the purpose of conducting a hearing under this section;

(6) seize any object, record, or report pursuant to a warrant from a magistrate based on a showing of probable cause to believe that such object, record, or report was used, is being used, or is likely to be used in violation of this Act or the requirements of a license or regulation issued thereunder; and

(7) make investigations and inquiries and administer to or take from any person an oath, affirmation, or affidavit concerning any matter relating to the enforcement of this Act.

(b) REVIEW OF AGENCY ACTION- Any applicant or licensee who makes a timely request for review of an adverse action pursuant to subsection (a)(1), (a)(3), (a)(5), or (a)(6) shall be entitled to adjudication by the Secretary on the record after an opportunity for any agency hearing with respect to such adverse action. Any final action by the Secretary under this subsection shall be

subject to judicial review under chapter 7 of title 5, United States Code.

SEC. 204. REGULATORY AUTHORITY OF THE SECRETARY.

The Secretary may issue regulations to carry out this title. Such regulations shall be promulgated only after public notice and comment in accordance with the provisions of section 553 of title 5, United States Code.

SEC. 205. AGENCY ACTIVITIES.

(a) LICENSE APPLICATION AND ISSUANCE- A private sector party may apply for a license to operate a private remote sensing space system which utilizes, on a space-available basis, a civilian United States Government satellite or vehicle as a platform for such system. The Secretary, pursuant to this title, may license such system if it meets all conditions of this title and--

(1) the system operator agrees to reimburse the Government in a timely manner for all related costs incurred with respect to such utilization, including a reasonable and proportionate share of fixed, platform, data transmission, and launch costs; and

(2) such utilization would not interfere with or otherwise compromise intended civilian Government missions, as determined by the agency responsible for such civilian platform.

(b) ASSISTANCE- The Secretary may offer assistance to private sector parties in finding appropriate opportunities for such utilization.

(c) AGREEMENTS- To the extent provided in advance by appropriation Acts, any United States Government agency may enter into agreements for such utilization if such agreements are consistent with such agency's mission and statutory authority, and if such remote sensing space system is licensed by the Secretary before commencing operation.

(d) APPLICABILITY- This section does not apply to activities carried out under title III.

(e) EFFECT ON FCC AUTHORITY- Nothing in this title shall affect the authority of the Federal Communications Commission pursuant to the Communications Act of 1934 (47 U.S.C. 151 et seq.).

TITLE III--RESEARCH, DEVELOPMENT, AND DEMONSTRATION

SEC. 301. CONTINUED FEDERAL RESEARCH AND DEVELOPMENT.

(a) ROLES OF NASA AND DEPARTMENT OF DEFENSE- (1) The Administrator and the Secretary of Defense are directed to continue and to enhance

programs of remote sensing research and development.

(2) The Administrator is authorized and encouraged to--

(A) conduct experimental space remote sensing programs (including applications demonstration programs and basic research at universities);

(B) develop remote sensing technologies and techniques, including those needed for monitoring the Earth and its environment; and

(C) conduct such research and development in cooperation with other United States Government agencies and with public and private research entities (including private industry, universities, non-profit organizations, State and local governments, foreign governments, and international organizations) and to enter into arrangements (including joint ventures) which will foster such cooperation.

(b) Roles of Department of Agriculture and Department of Interior-

(1) In order to enhance the ability of the United States to manage and utilize its renewable and nonrenewable resources, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to conduct programs of research and development in the applications of remote sensing using funds appropriated for such purposes.

(2) Such programs may include basic research at universities, demonstrations of applications, and cooperative activities involving other Government agencies, private sector parties, and foreign and international organizations.

(c) ROLE OF OTHER FEDERAL AGENCIES- Other United States Government agencies are authorized and encouraged to conduct research and development on the use of remote sensing in the fulfillment of their authorized missions, using funds appropriated for such purposes.

SEC. 302. AVAILABILITY OF FEDERALLY GATHERED UNENHANCED DATA.

(a) GENERAL RULE- All unenhanced land remote sensing data gathered and owned by the United States Government, including unenhanced data gathered under the technology demonstration program carried out pursuant to section 303, shall be made available to users in a timely fashion.

(b) PROTECTION FOR COMMERCIAL DATA DISTRIBUTOR- The President shall seek to ensure that unenhanced data gathered under the technology demonstration program carried out pursuant to section 303 shall, to the extent practicable, be made available on terms that would not adversely effect

the commercial market for unenhanced data gathered by the Landsat 6 spacecraft.

SEC. 303. TECHNOLOGY DEMONSTRATION PROGRAM.

(a) ESTABLISHMENT- As a fundamental component of a national land remote sensing strategy, the President shall establish, through appropriate United States Government agencies, a technology demonstration program. The goals of such programs shall be to--

(1) seek to launch advanced land remote sensing system components within 5 years after the date of the enactment of this Act.

(2) demonstrate within such 5-year period advanced sensor capabilities suitable for use in the anticipated land remote sensing program; and

(3) demonstrate within such 5-year period an advanced land remote sensing system design that could be less expensive to procure and operate than the Landsat system projected to be in operation through the year 2000, and that therefore holds greater potential for private sector investment and control.

(b) EXECUTION OF PROGRAM- In executing the technology demonstration program, the President shall seek to apply technologies associated with United States National Technical Means of intelligence gathering, to the extent that such technologies are appropriate for the technology demonstration and can be declassified for such purposes without causing adverse harm to United States national security interests.

(c) BROAD APPLICATION- To the greatest extent practicable, the technology demonstration program established under subsection (a) shall be designed to be responsive to the broad civilian, national security, commercial, and foreign policy needs of the United States.

(d) PRIVATE SECTOR FUNDING- The technology demonstration program under this section may be carried out in part with private sector funding.

(e) LANDSAT PROGRAM MANAGEMENT COORDINATION- The Landsat Program Management shall have a coordinating role in the technology demonstration program carried out under this section.

(f) REPORT TO CONGRESS- The President shall assess the progress of the technology demonstration program under this section and, within 2 years after the date of enactment of this Act, submit a report to the Congress on such progress.

TITLE IV--ASSESSING OPTIONS FOR SUCCESSOR LAND REMOTE

SENSING SYSTEM

SEC. 401. ASSESSING OPTIONS FOR SUCCESSOR LAND REMOTE SENSING SYSTEM.

(a) **ASSESSMENT-** Within 5 years after the date of the enactment of this Act, the Landsat Program Management, in consultation with representatives of appropriate United States Government agencies, shall assess and report to the Congress on the options for a successor land remote sensing system to Landsat 7. The report shall include a full assessment of the advantages and disadvantages of--

- (1) private sector funding and management of a successor land remote sensing system;
- (2) establishing an international consortium for the funding and management of a successor land remote sensing system;
- (3) funding and management of a successor land remote sensing system by the United States Government; and
- (4) a cooperative effort between the United States Government and the private sector for the funding and management of a successor land remote sensing system.

(b) **GOALS-** In carrying out subsection (a), the Landsat Program Management shall consider the ability of each of the options to--

- (1) encourage the development, launch, and operation of a land remote sensing system that adequately serves the civilian, national security, commercial, and foreign policy interests of the United States;
- (2) encourage the development, launch, and operation of a land remote sensing system that maintains data continuity with the Landsat system; and
- (3) incorporate system enhancements, including any such enhancements developed under the technology demonstration program under section 303, which may potentially yield a system that is less expensive to build and operate, and more responsive to data users, than is the Landsat system projected to be in operation through the year 2000.

(c) **PREFERENCE FOR PRIVATE SECTOR SYSTEM-** If a successor land remote sensing system to Landsat 7 can be funded and managed by the private sector while still achieving the goals stated in subsection (b) without jeopardizing the domestic, national security, and foreign policy interests of the United States, preference should be given to the development of such a system by the

private sector without competition from the United States Government.

TITLE V--GENERAL PROVISIONS

SEC. 501. NONDISCRIMINATORY DATA AVAILABILITY.

(a) GENERAL RULE- Except as provided in subsection (b) of this section, any unenhanced data generated by the Landsat system or any other land remote sensing system funded and owned by the United States Government shall be made available to all users without preference, bias, or any other special arrangement (except on the basis of national security concerns pursuant to section 506) regarding delivery, format, pricing, or technical considerations which would favor one customer or class of customers over another.

(b) EXCEPTIONS- Unenhanced data generated by the Landsat system or any other land remote sensing system funded and owned by the United States Government may be made available to the United States Government and its affiliated users at reduced prices, in accordance with this Act, on the condition that such unenhanced data are used solely for noncommercial purposes.

SEC. 502. ARCHIVING OF DATA.

(a) PUBLIC INTEREST- It is in the public interest for the United States Government to--

- (1) maintain an archive of land remote sensing data for historical, scientific, and technical purposes, including long-term global environmental monitoring;
- (2) control the content and scope of the archive; and
- (3) assure the quality, integrity, and continuity of the archive.

(b) ARCHIVING PRACTICES- The Secretary of the Interior, in consultation with the Landsat Program Management, shall provide for long-term storage, maintenance, and upgrading of a basic, global, land remote sensing data set (hereinafter referred to as the 'basic data set') and shall follow reasonable archival practices to assure proper storage and preservation of the basic data set and timely access for parties requesting data.

(c) DETERMINATION OF CONTENT OF BASIC DATA SET- In determining the initial content of, or in upgrading, the basic data set, the Secretary of Interior shall--

- (1) use as a baseline the data archived on the date of enactment of this Act;

(2) take into account future technical and scientific developments and needs, paying particular attention to the anticipated data requirements of global environmental change research;

(3) consult with and seek the advice of users and producers of remote sensing data and data products;

(4) consider the need for data which may be duplicative in terms of geographical coverage but which differ in terms of season, spectral bands, resolution, or other relevant factors;

(5) include, as the Secretary of the Interior considers appropriate, unenhanced data generated either by the Landsat system, pursuant to title I, or by licensees under title II;

(6) include, as the Secretary of the Interior considers appropriate, data collected by foreign ground stations or by foreign remote sensing space systems; and

(7) ensure that the content of the archive is developed in accordance with section 506.

(d) PUBLIC DOMAIN- After the expiration of any exclusive right to sell, or after relinquishment of such right, the data provided to the National Satellite Land Remote Sensing Data Archive shall be in the public domain and shall be made available to requesting parties by the Secretary of the Interior at the cost of fulfilling user requests.

SEC. 503. NONREPRODUCTION.

Unenhanced data distributed by any licensee under title II of this Act may be sold on the condition that such data will not be reproduced or disseminated by the purchaser for commercial purposes.

SEC. 504. REIMBURSEMENT FOR ASSISTANCE.

The Administrator, the Secretary of Defense, and the heads of other United States Government agencies may provide assistance to land remote sensing system operators under the provisions of this Act. Substantial assistance shall be reimbursed by the operator, except as otherwise provided by law.

SEC. 505. ACQUISITION OF EQUIPMENT.

The Landsat Program Management may, by means of a competitive process, allow a licensee under title II or any other private party to buy, lease, or otherwise acquire the use of equipment from the Landsat system, when such equipment is no longer needed for the operation of such system or for the sale

of data from such system. Officials of other United States Government civilian agencies are authorized and encouraged to cooperate with the Secretary in carrying out this section.

SEC. 506. RADIO FREQUENCY ALLOCATION.

(a) APPLICATION TO FEDERAL COMMUNICATIONS COMMISSION- To the extent required by the Communications Act of 1934 (47 U.S.C. 151 et seq.), an application shall be filed with the Federal Communications Commission for any radio facilities involved with commercial remote sensing space systems licensed under title II.

(b) DEADLINE FOR FCC ACTION- It is the intent of Congress that the Federal Communications Commission complete the radio licensing process under the Communications Act of 1934 (47 U.S.C. 151 et seq.), upon the application of any private sector party or consortium operator of any commercial land remote sensing space system subject to this Act, within 120 days of the receipt of an application for such licensing. If final action has not occurred within 120 days of the receipt of such an application, the Federal Communications Commission shall inform the applicant of any pending issues and of actions required to resolve them.

(c) DEVELOPMENT AND CONSTRUCTION OF UNITED STATES SYSTEMS- Authority shall not be required from the Federal Communications Commission for the development and construction of any United States land remote sensing space system (or component thereof), other than radio transmitting facilities or components, while any licensing determination is being made.

(d) CONSISTENCY WITH INTERNATIONAL OBLIGATIONS AND PUBLIC INTEREST- Frequency allocations made pursuant to this section by the Federal Communications Commission shall be consistent with international obligations and with the public interest.

SEC. 507. CONSULTATION.

(a) CONSULTATION WITH SECRETARY OF DEFENSE- The Secretary and the Landsat Program Management shall consult with the Secretary of Defense on all matters under this Act affecting national security. The Secretary of Defense shall be responsible for determining those conditions, consistent with this Act, necessary to meet national security concerns of the United States and for notifying the Secretary and the Landsat Program Management promptly of such conditions.

(b) CONSULTATION WITH SECRETARY OF STATE- (1) The Secretary and the Landsat Program Management shall consult with the Secretary of State on all matters under this Act affecting international obligations. The Secretary of State shall be responsible for determining those conditions, consistent with

this Act, necessary to meet international obligations and policies of the United States and for notifying promptly the Secretary and the Landsat Program Management of such conditions.

(2) Appropriate United States Government agencies are authorized and encouraged to provide remote sensing data, technology, and training to developing nations as a component of programs of international aid.

(3) The Secretary of State shall promptly report to the Secretary and Landsat Program Management any instances outside the United States of discriminatory distribution of Landsat data.

(c) STATUS REPORT- The Landsat Program Management shall, as often as necessary, provide to the Congress complete and updated information about the status of ongoing operations of the Landsat system, including timely notification of decisions made with respect to the Landsat system in order to meet national security concerns and international obligations and policies of the United States Government.

(d) REIMBURSEMENTS- If, as a result of technical modifications imposed on a licensee under title II on the basis of national security concerns, the Secretary, in consultation with the Secretary of Defense or with other Federal agencies, determines that additional costs will be incurred by the licensee, or that past development costs (including the cost of capital) will not be recovered by the licensee, the Secretary may require the agency or agencies requesting such technical modifications to reimburse the licensee for such additional or development costs, but not for anticipated profits. Reimbursements may cover costs associated with required changes in system performance, but not costs ordinarily associated with doing business abroad.

SEC. 508. ENFORCEMENT.

(a) IN GENERAL- In order to ensure that unenhanced data from the Landsat system received solely for noncommercial purposes are not used for any commercial purpose, the Secretary (in collaboration with private sector entities responsible for the marketing and distribution of unenhanced data generated by the Landsat system) shall develop and implement a system for enforcing this prohibition, in the event that unenhanced data from the Landsat system are made available for noncommercial purposes at a different price than such data are made available for other purposes.

(b) AUTHORITY OF SECRETARY- Subject to subsection (d), the Secretary may impose any of the enforcement mechanisms described in subsection (c) against a person who--

(1) receives unenhanced data from the Landsat system under this Act solely for noncommercial purposes (and at a different price than the price

at which such data are made available for other purposes); and

(2) uses such data for other than noncommercial purposes.

(c) ENFORCEMENT MECHANISMS- Enforcement mechanisms referred to in subsection (b) may include civil penalties of not more than \$10,000 (per day per violation), denial of further unenhanced data purchasing privileges, and any other penalties or restrictions the Secretary considers necessary to ensure, to the greatest extent practicable, that unenhanced data provided for noncommercial purposes are not used to unfairly compete in the commercial market against private sector entities not eligible for data at the cost of fulfilling user requests.

(d) PROCEDURES AND REGULATIONS- The Secretary shall issue any regulations necessary to carry out this section and shall establish standards and procedures governing the imposition of enforcement mechanisms under subsection (b). The standards and procedures shall include a procedure for potentially aggrieved parties to file formal protests with the Secretary alleging instances where such unenhanced data has been, or is being, used for commercial purposes in violation of the terms of receipt of such data. The Secretary shall promptly act to investigate any such protest, and shall report annually to the Congress on instances of such violations.

TITLE VI--PROHIBITION OF COMMERCIALIZATION OF WEATHER SATELLITES

SEC. 601. PROHIBITION.

Neither the President nor any other official of the Government shall make any effort to lease, sell, or transfer to the private sector, or commercialize, any portion of the weather satellite systems operated by the Department of Commerce or any successor agency.

SEC. 602. FUTURE CONSIDERATIONS.

Regardless of any change in circumstances subsequent to the enactment of this Act, even if such change makes it appear to be in the national interest to commercialize weather satellites, neither the President nor any official shall take any action prohibited by section 601 unless this title has first been repealed.

Speaker of the House of Representatives.

Vice President of the United States and

President of the Senate.