hanced-use lease provides better economic value to the Government than other options, such as—

(A) Federal financing through appropriations; or

(B) sale of the property.

(2) SECURITY AND ACCESS.—Requirement for the identification of proposed physical and procedural changes needed to ensure security and restrict access to specified areas, coordination of proposed changes with existing site tenants, and development of estimated costs of such changes.

(3) MEASURES OF EFFECTIVENESS.—Measures of effectiveness for the enhanced-use lease program.

(4) ACCOUNTING CONTROLS.—Accounting controls and procedures to ensure accountability, such as an audit trail and documentation to readily support financial transactions.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3377.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
31505	42 U.S.C. 17829.	Pub. L. 110–422, title XI, § 1117, Oct. 15, 2008, 122 Stat. 4813.

Subtitle IV—Aeronautics and Space Research and Education

CHAPTER 401—AERONAUTICS

SUBCHAPTER I—GENERAL

SUBCHAPTER I—GENERAL

§ 40101. Definition of institution of higher education

In this chapter, the term ''institution of higher education'' has the meaning given the term by section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3378.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
40101	42 U.S.C. 16701.	Pub. L. 109–155, title IV, § 401, Dec. 30, 2005, 119 Stat. 2923.

§ 40102. Governmental interest in aeronautics research and development

Congress reaffirms the national commitment to aeronautics research made in chapter 201 of this title. Aeronautics research and development remains a core mission of the Administration. The Administration is the lead agency for civil aeronautics research. Further, the government of the United States shall promote aeronautics research and development that will expand the capacity, ensure the safety, and increase the efficiency of the Nation's air transportation system, promote the security of the Nation, protect the environment, and retain the leadership of the United States in global aviation.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3379.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
40102	42 U.S.C. 16711.	Pub. L. 109–155, title IV, § 411, Dec. 30, 2005, 119 Stat. 2923.

Statutory Notes and Related Subsidiaries

EXPERIMENTAL AIRCRAFT PROJECTS

Pub. L. 117–167, div. B, title VII, § 10831, Aug. 9, 2022, 136 Stat. 1746, provided that:

''(a) SENSE OF CONGRESS.—It is the sense of Congress that—

''(1) developing high-risk, precompetitive aerospace technologies for which there is not yet a profit rationale is a fundamental role of the [National Aeronautics and Space] Administration;

''(2) large-scale flight test experimentation and validation are necessary for—

''(A) transitioning new technologies and materials, including associated manufacturing processes, for aviation and aeronautics use; and

''(B) capturing the full extent of benefits from investments made by the Aeronautics Research Mission Directorate; and

''(3) a level of funding that adequately supports large-scale flight test experimentation and validation, including related infrastructure, should be ensured over a sustained period of time to restore the capacity of the Administration—

''(A) to see legacy priority programs through to completion; and

''(B) to achieve national economic and security objectives.

''(b) STATEMENT OF POLICY.—It is the policy of the United States—

''(1) to maintain world leadership in—

''(A) civilian aeronautical science and technology; and

''(B) aerospace industrialization; and

''(2) to maintain as a fundamental objective of the aeronautics research of the Administration the steady progression and expansion of flight research and capabilities, including the science and technology of critical underlying disciplines and competencies, such as—

''(A) computational-based analytical and predictive tools and methodologies;

''(B) aerothermodynamics;

''(C) propulsion;

''(D) advanced materials and manufacturing processes;

''(E) high-temperature structures and materials; and

''(F) guidance, navigation, and flight controls.

''(c) EXPERIMENTAL AIRCRAFT FLIGHT DEMONSTRATIONS.—

''(1) IN GENERAL.—In meeting the objectives described in subsection (b), the Administrator [of the National Aeronautics and Space Administration] shall carry out experimental aircraft demonstrations, including—

''(A) a subsonic demonstrator to demonstrate the performance and feasibility of advanced, ultra-efficient, and low emissions subsonic flight demonstrator configurations;

''(B) a low boom flight demonstrator to validate design tools and technologies that can be applied to low sonic boom commercial supersonic aircraft and support the development of a noise-based standard for supersonic overland flight; and

''(C) a flight research demonstrator to test the performance and feasibility of advanced, ultra-efficient and net-zero emissions aircraft concepts and configurations.

''(2) ELEMENTS.—For each demonstration under paragraph (1), the Administrator shall—

''(A) include the development of experimental aircraft and all necessary supporting flight test assets;

''(B) pursue a robust technology maturation and flight test validation effort;

''(C) improve necessary facilities, flight testing capabilities, and computational tools to support the demonstration;

''(D) award any primary contracts for design, procurement, and manufacturing to United States persons, consistent with international obligations and commitments; and

''(E) coordinate research and flight test demonstration activities with other Federal agencies and the United States aviation community, as the Administrator considers appropriate.

''(3) UNITED STATES PERSON DEFINED.—In this subsection, the term 'United States person' means—

''(A) a United States citizen or an alien lawfully admitted for permanent residence to the United States; or

''(B) an entity organized under the laws of the United States or of any jurisdiction within the United States, including a foreign branch of such an entity.

''(d) COLLABORATION WITH INDUSTRY AND ACADEMIA.—The Administration shall seek means to expand collaboration with industry and academia on basic research and technology development related to experimental aircraft, and on the experimental aircraft demonstrations required by subsection (c).

''(e) ADVANCED MATERIALS AND MANUFACTURING TECHNOLOGY PROGRAM.—

''(1) IN GENERAL.—The Administrator may establish an advanced materials and manufacturing technology program—

''(A) to develop—

''(i) new materials, including composite and high-temperature materials, from base material formulation through full-scale structural validation and manufacture;

''(ii) advanced materials and manufacturing processes, including additive manufacturing, to reduce the cost of manufacturing scale-up and certification for use in aeronautics; and

''(iii) noninvasive or nondestructive techniques for testing or evaluating aviation and aeronautics structures, including for materials and manufacturing processes;

''(B) to reduce the time it takes to design, industrialize, and certify advanced materials and manufacturing processes;

''(C) to provide education and training opportunities for the aerospace workforce; and

''(D) to address global cost and human capital competitiveness for United States aeronautical industries and technological leadership in advanced materials and manufacturing technology.

''(2) ELEMENTS.—In carrying out a program under paragraph (1), the Administrator may—

''(A) build on work that was carried out by the Advanced Composites Project of the Administration;

''(B) partner with the private and academic sectors, such as members of the Advanced Composites Consortium of the Administration, the Joint Advanced Materials and Structures Center of Excellence of the Federal Aviation Administration, the Manufacturing USA institutes of the Department of Commerce, and national laboratories, as the Administrator considers appropriate;

''(C) provide a structure for managing intellectual property generated by the program based on or consistent with the structure established for the Advanced Composites Consortium of the Administration;

''(D) ensure adequate Federal cost share for applicable research; and

''(E) coordinate with advanced manufacturing and composites initiatives in other mission directorates of the Administration, as the Administrator considers appropriate.

''(f) RESEARCH PARTNERSHIPS.—In carrying out the demonstrations under subsection (c) and a program under subsection (e), the Administrator may engage in cooperative research programs with—

''(1) academia; and

''(2) commercial aviation and aerospace manufacturers.''

[For definition of ''Manufacturing USA institute'' as used in section 10831 of Pub. L. 117–167, set out above, see section 18901 of Title 42, The Public Health and Welfare.]

Executive Documents

EX. ORD. NO. 13419. NATIONAL AERONAUTICS RESEARCH AND DEVELOPMENT

Ex. Ord. No. 13419, Dec. 20, 2006, 71 F.R. 77565, provided:

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 204 of the National Science and Technology Policy, Organization, and Priorities Act of 1976, as amended (42 U.S.C. 6613), section 101(c) of the National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109–155), and section 301 of title 3, United States Code, it is hereby ordered as follows:

SECTION 1. *National Aeronautics Research and Development Policy*. Continued progress in aeronautics, the science of flight, is essential to America's economic success and the protection of America's security interests at home and around the globe. Accordingly, it shall be the policy of the United States to facilitate progress in aeronautics research and development (R&D) through appropriate funding and activities of the Federal Government, in cooperation with State, territorial, tribal, local, and foreign governments, international organizations, academic and research institutions, private organizations, and other entities, as appropriate. The Federal Government shall only undertake roles in supporting aeronautics R&D that are not more appropriately performed by the private sector. The National Aeronautics Research and Development Policy prepared by the National Science and Technology Council should, to the extent consistent with this order and its implementation, guide the aeronautics R&D programs of the United States through 2020.

SEC. 2. *Functions of the Director of the Office of Science and Technology Policy*. To implement the policy set forth in section 1 of this order, the Director of the Office of Science and Technology Policy (the ''Director'') shall:

(a) review the funding and activities of the Federal Government relating to aeronautics R&D;

(b) recommend to the President, the Director of the Office of Management and Budget, and the heads of executive departments and agencies, as appropriate, such actions with respect to funding and activities of the Federal Government relating to aeronautics R&D as may be necessary to

(i) advance United States technological leadership in aeronautics;

(ii) support innovative research leading to significant advances in aeronautical concepts, technologies, and capabilities;

(iii) pursue and develop advanced aeronautics concepts and technologies, including those for advanced aircraft systems and air transportation management systems, to benefit America's security and effective and efficient national airspace management;

(iv) maintain and advance United States aeronautics research, development, test and evaluation infrastructure to provide effective experimental and computational capabilities in support of aeronautics R&D;

(v) facilitate the educational development of the future aeronautics workforce as needed to further Federal Government interests;

(vi) enhance coordination and communication among executive departments and agencies to maximize the effectiveness of Federal Government R&D resources; and

(vii) ensure appropriate Federal Government coordination with State, territorial, tribal, local, and foreign governments, international organizations, academic and research institutions, private organizations, and other entities.

SEC. 3. *Implementation of National Aeronautics Research and Development Policy*. To implement the policy set forth in section 1 of this order, the Director shall:

(a) develop and, not later than 1 year after the date of this order, submit for approval by the President a plan for national aeronautics R&D and for related infrastructure, (the ''plan''), and thereafter submit, not less often than biennially, to the President for approval any changes to the plan;

(b) monitor and report to the President as appropriate on the implementation of the approved plan;

(c) ensure that executive departments and agencies conducting aeronautics R&D:

(i) obtain and exchange information and advice, as appropriate, from organizations and individuals outside the Federal Government in support of Federal Government planning and performance of aeronautics R&D;

(ii) develop and implement, as appropriate, measures for improving dissemination of R&D results and facilitating technology transition from R&D to applications; and

(iii) identify and promote innovative policies and approaches that complement and enhance Federal Government aeronautics R&D investment; and

(d) report to the President on the results of the efforts of executive departments and agencies to implement paragraphs (c)(i) through (iii) of this section.

SEC. 4. *General Provisions*. (a) In implementing this order, the Director shall:

(i) obtain as appropriate the assistance of the National Science and Technology Council in the performance of the Director's functions under this order, consistent with Executive Order 12881 of November 23, 1993, as amended;

(ii) coordinate as appropriate with the Director of the Office of Management and Budget; and

(iii) obtain information and advice from all sources as appropriate, including individuals associated with academic and research institutions and private organizations.

(b) The functions of the President under subsection (c) of section 101 of the National Aeronautics and Space Administration Authorization Act of 2005, except the function of designation, are assigned to the Director of the Office of Science and Technology Policy. In performing these assigned functions, the Director shall, as appropriate, consult the Administrator of the National Aeronautics and Space Administration, the Secretary of Defense, the Secretary of Transportation, the Director of the Office of Management and Budget, and other heads of executive departments and agencies as appropriate. The Director also shall ensure that all actions taken in the performance of such functions are consistent with the authority set forth in subsections (a) through (d) of section 6 of Executive Order 13346 of July 8, 2004.

(c) This order shall be implemented in a manner consistent with:

(i) applicable law, including section 102A(i) of the National Security Act of 1947, as amended ([former] 50 U.S.C. 403–1(i)) [now 50 U.S.C. 3024(i)], and subject to the availability of appropriations; and

(ii) statutory authority of the principal officers of executive departments and agencies as the heads of their respective departments and agencies.

(d) This order shall not be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, and legislative proposals.

(e) This order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity by a party against the United States, its departments, agencies, instrumentalities, or entities, its officers, employees, or agents, or any other person.

GEORGE W. BUSH.

§ 40103. Cooperation with other agencies on aeronautics activities

The Administrator shall coordinate, as appropriate, the Administration's aeronautics activities with relevant programs in the Department of Transportation, the Department of Defense, the Department of Commerce, and the Department of Homeland Security, including the activities of the Next Generation Air Transportation System Joint Planning and Development Office established under section 709 of the Vision 100—Century of Aviation Reauthorization Act (Public Law 108–176, 49 U.S.C. 40101 note).

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3379.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
40103	42 U.S.C. 16712(b).	Pub. L. 110–69, title II, § 2002(b), Aug. 9, 2007, 121 Stat. 583.

The words ''Next Generation Air Transportation System'' are inserted before ''Joint Planning and Development Office'' for consistency with section 709 of the Vision 100—Century of Aviation Reauthorization Act (Public Law 108–176, 49 U.S.C. 40101 note).

§ 40104. Cooperation among Mission Directorates

Research and development activities performed by the Aeronautics Research Mission Directorate with the primary objective of assisting in the development of a flight project in another Mission Directorate shall be funded by the Mission Directorate seeking assistance.

(Pub. L. 111–314, § 3, Dec. 18, 2010, 124 Stat. 3379.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
40104	42 U.S.C. 17724.	Pub. L. 110–422, title III, § 307, Oct. 15, 2008, 122 Stat. 4788.

SUBCHAPTER II—HIGH PRIORITY AERONAUTICS RESEARCH AND DEVELOPMENT PROGRAMS

§ 40111. Fundamental research program

(a) OBJECTIVE.—In order to ensure that the Nation maintains needed capabilities in funda-