

103^D CONGRESS
1ST SESSION

H. R. 1675

To provide for enhanced cooperation between the Federal Government and the United States civil aviation manufacturing industry in aeronautical technology research, development, design, and commercialization, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 2, 1993

Mr. GEJDENSON (for himself and Mr. GEPHARDT) introduced the following bill; which was referred jointly to the Committees on Science and Technology and Public Works and Transportation

A BILL

To provide for enhanced cooperation between the Federal Government and the United States civil aviation manufacturing industry in aeronautical technology research, development, design, and commercialization, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Aeronautical Tech-
5 nology Consortium Act of 1993”.

6 **SEC. 2. FINDINGS AND PURPOSES.**

7 (a) FINDINGS.—The Congress finds the following:

1 (1) A strong civil aviation manufacturing indus-
2 try is critical to the health of the United States
3 economy; aircraft production in the United States
4 affects nearly 80 percent of the economy, and for
5 every additional dollar of shipments of aircraft, out-
6 put of the economy increases by an estimated \$2.30.

7 (2) A strong civil aviation manufacturing indus-
8 try is critical to the national security of the United
9 States because of the synergies between civil and
10 military aeronautical technologies and the need for a
11 strong advanced technology industrial base.

12 (3) The National Critical Technologies Panel
13 (established pursuant to section 601 of the National
14 Science and Technology Policy, Organization, and
15 Priorities Act of 1976 (42 U.S.C. 6681)) has identi-
16 fied aeronautics as one of 22 categories of tech-
17 nologies critical to national economic prosperity and
18 to national security.

19 (4) While the United States has traditionally
20 dominated the world commercial aircraft market, the
21 United States civil aviation manufacturing industry
22 is facing the two critical challenges of significant
23 cutbacks in defense procurement and related mili-
24 tary spending, and the growing competitive strength

1 of foreign subsidized aviation industries, such as the
2 European aircraft consortium, Airbus Industrie.

3 (5) Airbus Industrie, a consortium of 4 Euro-
4 pean aircraft manufacturing companies that are sup-
5 ported by their governments, has developed a family
6 of competitive aircraft models and has captured $\frac{1}{4}$
7 of the world market for large civil aircraft.

8 (6) In 1992, the United States signed an agree-
9 ment with the European Community that permits
10 the European governments to continue to subsidize
11 up to 33 percent of the development costs of new
12 large civil aircraft.

13 (7) Given current and expected reductions in
14 defense spending and increased competitive pres-
15 sures in the civil aircraft market, it is critical for the
16 Federal Government to coordinate its aeronautics
17 and related programs and redirect these resources to
18 assist the United States civil aviation manufacturing
19 industry to meet the competitive challenge from for-
20 eign suppliers such as Airbus Industrie.

21 (8) The Federal Government has played an ac-
22 tive role in research and development of aeronautical
23 technologies since the National Advisory Committee
24 on Aeronautics was created in 1915.

1 (9) In recent years, however, Federal Govern-
2 ment support for aerospace research and develop-
3 ment has focused overwhelmingly on military and
4 space technologies.

5 (10) Federal programs relating to aeronautics
6 research and development today are spread among a
7 number of differing Federal agencies, including the
8 Department of Defense, the Department of Trans-
9 portation, and the Department of Commerce, as well
10 as the National Aeronautics and Space Administra-
11 tion and the National Science Foundation.

12 (11) Federal financial assistance to the semi-
13 conductor industry consortium known as Sematech
14 has been successful in improving the competitiveness
15 of the United States semiconductor industry.

16 (12) The Federal Government should use
17 Sematech as a model in developing a program to
18 provide financial assistance to an industry-led con-
19 sortium of United States civil aviation manufactur-
20 ing companies.

21 (13) Such a government-industry consortium
22 should focus its efforts on research, development, de-
23 sign, and commercialization of new aeronautical
24 technologies and related manufacturing technologies,
25 as well as the transfer and conversion of aeronauti-

1 cal technologies developed for national security pur-
2 poses to commercial applications for large civil air-
3 craft.

4 (b) PURPOSE.—The purpose of this Act is to
5 strengthen and assist the United States civil aviation man-
6 ufacturing industry.

7 **SEC. 3. DEFINITIONS.**

8 For purposes of this Act:

9 (1) The term “Advisory Committee” means the
10 Aeronautical Technical Advisory Committee estab-
11 lished in section 6.

12 (2) The term “Consortium” means the Aero-
13 nautical Technology Consortium referred to in sec-
14 tion 5.

15 (3) The term “Coordinating Committee” means
16 the Aeronautical Technology Coordinating Commit-
17 tee referred to in section 4(c).

18 (4) The term “Director” means the Director of
19 the Office of Science and Technology Policy.

20 (5) The term “Federal laboratory” has the
21 meaning given such term in section 4(6) of the Ste-
22 venson-Wydler Technology Innovation Act of 1980
23 (15 U.S.C. 3703(6)).

24 (6) The term “joint venture” has the meaning
25 given such term in section 28(j)(1) of the National

1 Institute of Standards and Technology Act (15
2 U.S.C. 278n(j)(1)).

3 (7) The term “large civil aircraft” means all
4 aircraft that are designed for passenger or cargo
5 transportation and have 100 or more passenger
6 seats or its equivalent in cargo configuration.

7 (8) The term “manufacturing technology”
8 means techniques and processes designed to improve
9 manufacturing quality, productivity, and practices,
10 including engineering design, quality assurance, con-
11 current engineering, continuous process production
12 technology, energy efficiency, waste minimization,
13 design for recyclability or parts reuse, shop floor
14 management, inventory management, worker train-
15 ing, and communications with customers and suppli-
16 ers, as well as manufacturing equipment and soft-
17 ware.

18 (9) The term “Program” means the Aeronauti-
19 cal Technology Program established pursuant to sec-
20 tion 4(a).

21 (10) The term “Strategy” means the National
22 Aeronautics Strategy developed pursuant to section
23 4(b)(1).

24 (11) The term “United States-owned company”
25 means a company or other business entity the ma-

1 jority ownership or control of which is by United
2 States citizens.

3 **SEC. 4. AERONAUTICAL TECHNOLOGY PROGRAM.**

4 (a) ESTABLISHMENT.—The President shall establish
5 an Aeronautical Technology Program which shall—

6 (1) provide for interagency coordination of Fed-
7 eral research and development programs relating to
8 aeronautical technologies and related manufacturing
9 technologies;

10 (2) provide a mechanism for private industry
11 comment and guidance regarding the cost-effective-
12 ness and commercial practicability of existing and
13 proposed Federal research and development pro-
14 grams relating to aeronautical technologies and re-
15 lated manufacturing technologies;

16 (3) promote, to the maximum extent prac-
17 ticable, the transfer and conversion to commercial
18 applications of aeronautical technologies developed
19 for national security purposes;

20 (4) coordinate and expand existing Federal re-
21 search and development programs relating to sub-
22 sonic and supersonic aeronautics, with particular
23 focus on government-industry cooperative programs
24 to develop large civil aircraft beyond the financial
25 means of any single company;

1 (5) assist the United States civil aviation manu-
2 facturing industry in developing an Aeronautical
3 Technology Consortium for the purpose of providing
4 Federal assistance to industry-led joint ventures es-
5 tablished for research, development, design, and
6 commercialization of aeronautical technologies and
7 related manufacturing technologies applicable to
8 large civil aircraft; and

9 (6) establish other goals and priorities for Fed-
10 eral research and development programs relating to
11 aeronautical technologies and related manufacturing
12 technologies.

13 (b) NATIONAL AERONAUTICS STRATEGY.—

14 (1) IN GENERAL.—The President, acting
15 through the Coordinating Committee, shall develop a
16 National Aeronautics Strategy to implement the
17 Program. The Strategy shall contain specific rec-
18 ommendations for a 5-year national effort, to be
19 submitted to the Congress within 6 months after the
20 date of enactment of this Act.

21 (2) CONTENTS OF STRATEGY.—The Strategy
22 shall—

23 (A) establish the specific goals and prior-
24 ities for the Program for the fiscal year in

1 which the Strategy is submitted and the suc-
2 ceeding 4 fiscal years;

3 (B) set forth the role of each Federal
4 agency and department in implementing the
5 Program;

6 (C) describe the levels of Federal funding
7 for each agency and specific research, develop-
8 ment, and commercialization activities required
9 to achieve such goals and priorities;

10 (D) take into account the recommenda-
11 tions of the Advisory Committee established in
12 section 6; and

13 (E) consider and use, as appropriate, re-
14 ports and studies conducted by Federal agen-
15 cies and departments, the National Research
16 Council, or other entities.

17 (3) FEDERAL AGENCIES AND DEPARTMENTS TO
18 BE ADDRESSED.—The Secretary shall address,
19 where appropriate, the relevant programs and activi-
20 ties of—

21 (A) the Department of Defense, particu-
22 larly the Department of the Air Force, the De-
23 partment of the Navy, and the Defense Ad-
24 vanced Research Projects Agency;

1 (B) the Departments of Commerce, par-
2 ticularly the National Institute of Standards
3 and Technology;

4 (C) the Department of Transportation,
5 particularly the Federal Aviation Administra-
6 tion;

7 (D) the National Aeronautics and Space
8 Administration;

9 (E) the National Science Foundation;

10 (F) the Federal laboratories; and

11 (G) such other agencies and departments
12 as the President or the Coordinating Committee
13 considers appropriate.

14 (c) COORDINATING COMMITTEE.—

15 (1) AUTHORITY; COMPOSITION.—The Program
16 shall be administered by an Aeronautical Technology
17 Coordinating Committee composed of the following
18 officials:

19 (A) The Director, who shall be chair-
20 person.

21 (B) The Secretary of Defense.

22 (C) The Secretary of Commerce.

23 (D) The Secretary of Transportation.

24 (E) The Administrator of the National
25 Aeronautics and Space Administration.

1 (F) The Director of the National Science
2 Foundation.

3 (2) FUNCTIONS.—The Coordinating Committee
4 shall—

5 (A) serve as the lead entity responsible for
6 implementation of the Program;

7 (B) coordinate all Federal research and de-
8 velopment programs relating to aeronautical
9 technologies and related manufacturing tech-
10 nologies;

11 (C) consult regularly with and seek rec-
12 ommendations from the Advisory Committee es-
13 tablished by section 6;

14 (D) consult with academic, State, industry,
15 and other appropriate groups conducting re-
16 search on and using aeronautical technologies;
17 and

18 (E) submit to the Congress an annual re-
19 port, along with the President's annual budget
20 request, describing the implementation of the
21 Program.

22 **SEC. 5. AERONAUTICAL TECHNOLOGY CONSORTIUM.**

23 (a) IN GENERAL.—Under the Program, the Coordi-
24 nating Committee shall provide assistance to an Aero-

1 nautical Technology Consortium, which shall consist of all
2 eligible firms that—

3 (1) are engaged in research, development, test-
4 ing, design, demonstration, or production of aero-
5 nautical technology applicable to the production of
6 large civil aircraft;

7 (2) are selected by the Coordinating Committee,
8 through the Director, on the basis of the criteria
9 specified under subsection (e); and

10 (3) are necessary to enable the Consortium to
11 achieve its purpose as described under subsection
12 (c).

13 (b) ELIGIBLE FIRMS.—For purposes of this section,
14 the term “eligible firm” means a company or other busi-
15 ness entity (including a consortium of such companies or
16 other business entities, as determined by the Secretary of
17 Commerce) that, as determined by such Secretary—

18 (1) conducts a significant level of its research,
19 development, engineering, design, and manufactur-
20 ing activities in the United States; and

21 (2) either—

22 (A) is a United States-owned company; or

23 (B) is a company incorporated in the
24 United States and has a parent company which

1 is incorporated in a country the government of
2 which—

3 (i) affords United States-owned com-
4 panies opportunities, comparable to those
5 afforded any other company, to participate
6 in research and development consortia to
7 which the government of that country pro-
8 vides funding directly or provides funding
9 indirectly through international organiza-
10 tions or agreements; and

11 (ii) affords adequate and effective pro-
12 tection for the intellectual property rights
13 of United States-owned companies.

14 (c) PURPOSE.—The purpose of the Consortium is to
15 conduct industry-led joint ventures, including studies, re-
16 lating to—

17 (1) manufacturing technologies applicable to
18 the production of large civil aircraft;

19 (2) the aeronautical infrastructure, including
20 next-generation wind tunnels and associated tech-
21 nology, and test beds for aeronautical systems and
22 subsystems;

23 (3) the transfer and conversion of aeronautical
24 technologies developed for national security purposes
25 to commercial applications for large civil aircraft;

1 (4) subsonic aeronautical technologies applica-
2 ble to the development and production of large civil
3 aircraft;

4 (5) supersonic aeronautical technologies appli-
5 cable to the development and production of large
6 civil aircraft; and

7 (6) environmental technologies necessary for
8 aeronautical competitiveness, including technologies
9 that limit or reduce noise and air pollution.

10 (d) ASSISTANCE TO BE PROVIDED.—In providing as-
11 sistance to the Consortium, the Coordinating Committee,
12 acting through the Director, shall—

13 (1) provide financial and other assistance to the
14 United States civil aviation manufacturing industry
15 in the formation of the Consortium;

16 (2) support the Consortium, and such subordi-
17 nate joint ventures as the Consortium may establish,
18 by making available equipment, facilities, and per-
19 sonnel;

20 (3) aid the Consortium, and such subordinate
21 joint ventures as the Consortium may establish, by
22 means of grants, cooperative agreements, contracts,
23 and provision of organizational and technical advice;

24 (4) enter into contracts and cooperative agree-
25 ments in support of the Consortium with independ-

1 ent research organizations, institutions of higher
2 education, and agencies of State and local govern-
3 ments;

4 (5) involve the Federal laboratories in the Con-
5 sortium, where appropriate, using among other au-
6 thorities the cooperative research and development
7 agreements provided for under section 12 of the
8 Stevenson-Wydler Technology Innovation Act of
9 1980 (15 U.S.C. 3710a); and

10 (6) carry out, in a manner consistent with this
11 section, such other cooperative research activities
12 with the Consortium and joint ventures as may be
13 authorized by law or assigned to the Coordinating
14 Committee by the President.

15 (e) SELECTION OF CONSORTIUM PARTICIPANTS.—
16 The criteria for selection of industry participants in the
17 Consortium, as referred to in subsection (a)(2), are as
18 follows:

19 (1) The extent of present participation of the
20 eligible firm in Federal research and development
21 programs relating to aeronautical technologies and
22 related manufacturing technologies.

23 (2) The extent of present manufacturing activ-
24 ity of the eligible firm relating to the development
25 and production of large civil aircraft, engines, ad-

1 vanced materials, avionics, and other related compo-
2 nents.

3 (3) The extent of present manufacturing activi-
4 ty of the eligible firm relating to aeronautical tech-
5 nologies developed for national security purposes
6 that may have commercial applications for large civil
7 aircraft.

8 (4) The technical excellence of the eligible firm.

9 (5) The extent of financial commitment of the
10 eligible firm to the Consortium.

11 (6) Such other criteria that the Director pre-
12 scribes.

13 (f) CHARTER; OPERATING PLAN.—The Consortium
14 shall have—

15 (1) a charter, agreed to by all industry partici-
16 pants in the Consortium, that meets requirements
17 established by the Coordinating Committee; and

18 (2) an annual operating plan that is developed
19 in consultation with the Coordinating Committee
20 and the Advisory Committee established in section 6.

21 (g) FINANCIAL COMMITMENT OF INDUSTRY PARTICI-
22 PANTS.—

23 (1) IN GENERAL.—The Director shall ensure
24 that, to the maximum extent the Director deter-
25 mines to be practicable, the total amount of the

1 funds provided by the Federal Government to the
2 Consortium does not exceed the total amount pro-
3 vided by the industry participants in the Consor-
4 tium.

5 (2) AUTHORITY TO EXCEED 50 PERCENT FED-
6 ERAL FUNDING.—Nothing in this subsection shall be
7 construed to prohibit the Federal Government from
8 providing greater than 50 percent of the funds for
9 any individual joint venture, project, or program
10 where the Director determines such funding to be
11 consistent with the goals of the Program.

12 (3) CONSIDERATION OF IN-KIND CONTRIBU-
13 TIONS.—The Director shall prescribe regulations to
14 provide for consideration of in-kind contributions by
15 industry participants in the Consortium and joint
16 ventures for the purpose of determining the share of
17 the funds that have been or are being provided by
18 such participants.

19 (h) MERIT REVIEW.—No contract or other award for
20 a research project may be made under this section until
21 the research project in question has been subject to a
22 merit review, and, in the opinion of the reviewers ap-
23 pointed by the Director, has been shown to have scientific
24 and technical merit.

1 (i) OVERSIGHT OF CONSORTIUM ACTIVITIES.—The
2 Coordinating Committee, acting through the Director,
3 shall take such actions as are necessary and appropriate
4 to ensure that the Consortium’s activities help to achieve
5 the purposes of this Act, including—

6 (1) prescribing regulations for the purposes of
7 this section;

8 (2) establishing procedures for the use by the
9 Coordinating Committee of funds authorized to a
10 particular Federal agency or department that is par-
11 ticipating in the Consortium;

12 (3) establishing procedures regarding financial
13 reporting and auditing to ensure that contracts and
14 other awards are used for the purposes specified in
15 this section and are in accordance with sound ac-
16 counting practices;

17 (4) monitoring how technologies developed
18 through the Consortium are used, and reporting to
19 the Congress on the extent of any overseas transfer
20 of those technologies;

21 (5) assuring that the recommendations of the
22 Advisory Committee established in section 6 are con-
23 sidered routinely in carrying out the responsibilities
24 of the Coordinating Committee under this Act; and

1 (6) providing for the expeditious and timely
2 transfer of technology developed and owned by the
3 Consortium to the participants in the Consortium.

4 (j) EXPORT OF AERONAUTICAL TECHNOLOGY.—Any
5 export of materials, equipment, and technology developed
6 by the Consortium in whole or in part with financial as-
7 sistance provided under this section shall be subject to the
8 Export Administration Act of 1979 (50 U.S.C. App. 2401
9 et seq.) and shall not be subject to the Arms Export
10 Control Act.

11 (k) FREEDOM OF INFORMATION ACT.—Section 552
12 of title 5, United States Code, shall not apply to the fol-
13 lowing information obtained by the Federal Government
14 on a confidential basis in connection with the activities of
15 any industry participant in the Consortium:

16 (1) Information on the business operation of
17 any industry participant in the Consortium.

18 (2) Intellectual property, trade secrets, and
19 technical data possessed or developed by any indus-
20 try participant in the Consortium.

21 (l) INTELLECTUAL PROPERTY.—

22 (1) DISCLOSURE LIMITATIONS.—Notwithstand-
23 ing any other provision of law, intellectual property,
24 trade secrets, and technical data owned and devel-
25 oped by the Consortium or any industry participant

1 in the Consortium may not be disclosed by any offi-
2 cer or employee of the Federal Government except in
3 accordance with a written agreement between the
4 owner or developer and the Director.

5 (2) TITLE TO AND LICENSING OF INVENTIONS
6 AND PATENTS.—Title to any invention or patent
7 arising from assistance provided under this section
8 shall vest in a company or companies incorporated
9 in the United States. The Federal Government may
10 reserve a nonexclusive, nontransferable, irrevocable
11 paid-up license, to have practiced for or on behalf of
12 the Federal Government, in connection with any
13 such invention or patent, but shall not, in the exer-
14 cise of such license publicly disclose proprietary in-
15 formation related to the license. Title to any such in-
16 vention or patent shall not be transferred or passed,
17 except to any company incorporated in the United
18 States, until the expiration of the first patent ob-
19 tained in connection with such invention. For pur-
20 poses of this paragraph, the term “invention or pat-
21 ent” means an invention patentable under title 35,
22 United States Code, or any patent on such an inven-
23 tion.

24 (3) LICENSING TO COMPANIES.—Nothing in
25 this subsection shall be construed to prohibit the li-

1 censing, to any company, of intellectual property
2 rights arising from assistance provided under this
3 section.

4 (m) APPLICATION OF NATIONAL COOPERATIVE RE-
5 SEARCH ACT.—The National Cooperative Research Act of
6 1984 (P.L. 98–462; 15 U.S.C. 4301 note) shall apply to
7 the Consortium in the conduct of the activities of the
8 Consortium under this Act.

9 **SEC. 6. AERONAUTICAL TECHNOLOGY ADVISORY COMMIT-**
10 **TEE.**

11 (a) ESTABLISHMENT.—There is established an Aero-
12 nautical Technology Advisory Committee (hereafter in this
13 Act referred to as the “Advisory Committee”).

14 (b) FUNCTIONS.—The Advisory Committee shall ad-
15 vise the Coordinating Committee and the Consortium
16 on—

17 (1) the strategy and other appropriate goals
18 and priorities for the Program, and how best to
19 achieve those goals;

20 (2) the operating plan of the Consortium;

21 (3) the annual progress of the Program and the
22 Consortium in meeting the requirements of section
23 4(a) and, in the first 5 years, the strategy;

24 (4) organizational and programmatic reforms
25 which would improve the effectiveness of Federal re-

1 search and development programs relating to aero-
2 nautical technologies and related manufacturing
3 technologies in promoting the competitiveness of the
4 United States civil aviation manufacturing industry;

5 (5) mechanisms for private industry comment
6 and guidance regarding the cost-effectiveness and
7 commercial practicability of existing and proposed
8 Federal research and development programs relating
9 to aeronautical technologies and related manufactur-
10 ing technologies;

11 (6) policies and mechanisms to promote the
12 transfer and conversion to commercial applications
13 of aeronautical technologies developed for national
14 security purposes; and

15 (7) other goals and priorities for Federal re-
16 search and development programs relating to aero-
17 nautical technologies and related manufacturing
18 technologies.

19 (c) MEMBERSHIP.—The Advisory Committee shall be
20 composed of 12 members, who shall be appointed by the
21 President from among individuals who, because of their
22 experience and accomplishments in the field of aeronautics
23 and related technological and scientific fields, are excep-
24 tionally qualified to analyze and recommend policy relating
25 to aeronautical technology research and development.

1 Membership of the Advisory Committee shall be composed
2 of representatives of—

3 (1) large civil aircraft manufacturing compa-
4 nies;

5 (2) aircraft engine manufacturing companies;

6 (3) advanced materials companies;

7 (4) avionics and other systems and subsystems
8 companies;

9 (5) other subcontractor firms engaged in aero-
10 nautical technology research, design, development,
11 and production; and

12 (6) Federal laboratories, universities, and inde-
13 pendent research institutes.

14 (d) TERMS OF MEMBERSHIP.—Each member of the
15 Advisory Committee shall be appointed for a term of 3
16 years, except that of members first appointed, 4 shall be
17 appointed for a term of 1 year, 4 shall be appointed for
18 a term of 2 years, and 4 shall be appointed for a term
19 of 3 years, as designated by the President at the time of
20 the appointment. A member of the Advisory Committee
21 may serve after the expiration of the member's term until
22 a successor has taken office.

23 (e) CHAIRPERSON.—The President shall appoint 1
24 member of the Advisory Committee to serve as chair-
25 person.

1 (f) QUORUM.—7 members of the Advisory Committee
2 shall constitute a quorum.

3 (g) MEETINGS.—The Advisory Committee shall meet
4 at least quarterly at the call of the chairperson or one-
5 third of its members, and at the call of the Coordinating
6 Committee.

7 (h) COMPENSATION AND EXPENSES.—

8 (1) NO COMPENSATION FOR MEMBERS.—Each
9 member of the Advisory Committee shall serve with-
10 out compensation.

11 (2) TRAVEL EXPENSES AUTHORIZED.—While
12 away from their homes or regular places of business
13 in performance of the duties of the Advisory Com-
14 mittee, members of the Advisory Committee shall be
15 allowed travel expenses in accordance with sub-
16 chapter I of chapter 57 of title 5, United States
17 Code.

18 (i) FEDERAL ADVISORY COMMITTEE ACT.—Section
19 14 of the Federal Advisory Committee Act (5 U.S.C.
20 App.) shall not apply to the Advisory Committee.

21 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

22 There are authorized to be appropriated to the Office
23 of Science and Technology Policy, to carry out the provi-
24 sions of this Act, such sums as may be necessary for the
25 fiscal years 1994 and 1995.



HR 1675 IH—2