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# PEACE AND NATIONAL SECURITY IN THE NEW SPACE AGE: THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

LUDWIG TELLER

SPACE is no longer an ordinary word of the English language. It has taken on a secondary meaning identified with the science and technology of astronautics and expressive of the awesome responsibilities which missiles and satellites and flight beyond the earth's atmosphere and into the mysterious reaches of outer regions have imposed upon us. Who controls space controls the world.

The 85th Congress has just completed a comprehensive three-pronged framework which incorporates our national policy that outer space activities should be used for peaceful purposes consistent with the national defense, that the United States should join with other nations of the world in the establishment of international agreements for the peaceful exploration of outer space, and that the Congress through newly created standing committees should keep pace with the swiftly moving developments in the new dimensions of space.

The first of these three objectives, which provides for the establishment of a national space policy, is effectuated in the National Aeronautics and Space Act of 1958, signed into law on July 29, 1958.<sup>1</sup>

The second, which encourages international compacts in the space field, takes the form of a Concurrent Resolution adopted in the House of Representatives on June 2, 1958, and in the Senate on July 23, 1958.<sup>2</sup>

The third, which points up the continuing preoccupation with outer space activities, is found in the creation of the standing Committee on Science and Astronautics in the House on July 21, 1958,<sup>3</sup> and the standing Committee on Aeronautics and Space Sciences in the Senate on July 24, 1958.<sup>4</sup> The breadth of the jurisdiction of the new standing committees may be gleaned from the statement in the

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<sup>1</sup> Public Law 85-386, July 29, 1958 (85th Cong., 2d Sess.).

<sup>2</sup> H. RES. 480, REPORT No. 1837 (85th Cong., 2d Sess.).

<sup>3</sup> H. CON. RES. 332 (85th Cong., 2d Sess.).

<sup>4</sup> S. RES. 327 (85th Cong., 2d Sess.).

Congressional Record<sup>5</sup> which accompanied the Resolution adopted in the House of Representatives: The Committee will have 25 members, and is given jurisdiction over the exploration and control of outer space and astronautic research and development, including resources, personnel, equipment and facilities. It will take over functions of the Committee on Interstate and Foreign Commerce and the Armed Services Committee having to do with legislation relating to the federal scientific agencies, including the National Science Foundation.

The jurisdiction of the Senate committee has comparable breadth.<sup>6</sup> The novelty of the developing dimensions of space is evidenced by the fact that the newly created standing committees do not significantly reduce the jurisdiction of theretofore existing committees of the Congress.

This article is devoted mainly to a discussion of the National Aeronautics and Space Act of 1958, including an analysis of its provisions, the background against which it was enacted, and the implications of the manner in which it resolved basic differences between House and Senate space bills. The complete text of the Act is set forth at the end of the article, preceded by the text of the President's message which accompanied his signing of the Act.

### I. THE PROVISIONS OF THE ACT

ANCHORED in a declared policy that space activities should be devoted to peaceful purposes, the Act further declares that our nation's aeronautical and space activities shall be conducted for the purposes, among others, of expanding human knowledge, improving the safety and efficiency of space vehicles, preserving the United States as a leader in aeronautical and space science and technology.

Both for the purpose of emphasizing our peaceful design and to fortify our deeply held traditions, it is further declared that control over aeronautical and space activities should reside in a civilian agency.

Account is taken, however, of the fact that the Department of Defense has legitimate and vital interests in those space activities which bear on the nation's defenses, such as weapons systems and research connected with the development of such systems.

<sup>5</sup> Proceedings and Debates of the 85th Cong., 2d Sess. for July 21, 1958, at p. 13246, on House Resolution 580.

<sup>6</sup> See Proceedings and Debates of the 85th Cong., 2d Sess. for July 24, 1958, at p. 13628, on Senate Resolution 327.

The civilian agency created by the Act is known as the National Aeronautics and Space Administration. The National Advisory Committee for Aeronautics established in 1915 to advance aviation is terminated, and is superseded by the newly created Administration. Military aspects are, of course, reserved to the Department of Defense. As to so-called gray areas or mixed projects where questions of jurisdiction may arise, a Civilian-Military Liaison Committee is established.

The top agency which the Act creates is the National Aeronautics and Space Council, composed of the President, the Secretary of State, the Secretary of Defense, the Administrator of the National Aeronautics and Space Administration, the Chairman of the Atomic Energy Commission, one additional federal agency member, and three members appointed by the President from private life.

The actual determinations in the assignment of new programs are made by the Council; neither the Administration of the National Aeronautics and Space Administration nor the Secretary of Defense can pre-empt an area of space activity. But the missions of the Civilian-Military Liaison Committee are to minimize the chance that differences will arise in the first instance over struggles for jurisdiction and rivalry for power, and to clarify and if possible to narrow the issues and conflicts which are given over to the Council for final determination.

Authority is given, and machinery is established under the Act, for making monetary awards (called "contributions awards") to persons for scientific or technical contributions having significant value in the conduct of aeronautical and space activities. Provision is also made for safeguarding the government's property right in patents and inventions made in the performance of work under contract with the National Aeronautics and Space Administration. The Act is a boon to the fields of basic and applied research.

## II. THE BACKGROUND OF THE ACT

THE United States has intensified its strivings for a workable international agreement on the control and use of outer space, but it has not as yet found a practical alternative to pursuing a national space policy.

National space policy, like national security policy, is determined primarily by the requirements of world politics. We do not want to carry on the burden of armaments, but we find that national survival

and the successful pursuit of our national objectives depend upon military strength. In the absence of agreed upon and workable international programs for the control and use of outer space, the United States has little choice but to develop a national space policy as an integral part of its national security program.

A. *International Control of Outer Space*.—On August 29, 1957, the United States proposed before the United Nations Disarmament Subcommittee that within three months after the effective date of a first-stage disarmament treaty, agreement be reached for establishment of a technical committee to study the design of an inspection system which would effectively cover the field of ballistic missiles and other outer space projects.<sup>7</sup> The Soviet Union and the United States were unable to reach an agreement on disarmament. This was all the more unfortunate, because one month after the Disarmament Subcommittee discussions broke down, the Soviet launching of the first earth satellite heralded man's first step into the larger cosmos which surrounds him.

The Sputniks also demonstrated that Russia had made far-reaching advances in basic research and scientific development, especially in the field of ballistic missiles. The initial American reaction to the Sputniks was to review the relative positions of the United States and the Soviet Union with respect to military power, scientific achievement, and social-economic strength. This review led to consideration of a future in which astronautics and space exploration would play an increasing role in the lives of men and nations.

On January 12, 1958, President Eisenhower proposed to Russian Premier Bulganin a halt in the production of missiles with atomic warheads. Acceptance of this proposal, he said, "would mean that outer space could be 'dedicated to the peaceful purposes of mankind and denied to the purposes of war.'"<sup>8</sup> Four days later, Secretary of State Dulles, in a speech before the National Press Club, called for the formation of a UN international commission to insure that outer space will be used only for peaceful purposes.<sup>9</sup> Senator Lyndon B. Johnson proposed that the United States invite all UN members to join in the adventure into outer space.<sup>10</sup>

<sup>7</sup> *Pathway to Peace*. Prepared by the Disarmament Staff, The White House, Washington, D. C., 17.

<sup>8</sup> Washington Post, January 13, 1958, § A, p. 1.

<sup>9</sup> Washington Star, January 17, 1958, § A, p. 3.

<sup>10</sup> Newsweek, January 27, 1958, p. 36.

It was disclosed that the Administration was devoting thought to carrying out the President's suggestion that outer space be used only for peaceful purposes. One Administration idea, it was reported, involved a UN commission that would be primarily a policing agency, concerned with control and inspection. A second idea, less generally favored in Administration circles, contemplated a UN commission that would supervise as well as inspect all outer space projects.<sup>11</sup> Senator Lyndon B. Johnson urged the Administration to consider joint exploration of outer space by the United Nations.<sup>12</sup>

The Administration's and Senator Johnson's outer space proposals were more general than the Russian offer on outer space. The Soviet plan called for a control organization within the UN that would supervise both a ban on the military use of outer space and the liquidation of the military bases "some nations have on other nations' territories." Moscow further proposed that a UN organ be set up to coordinate international research and information on outer space and to supervise the launching of outer space rockets. Because the Soviet plan called for the liquidation of overseas bases, the United States found it "wholly unacceptable."<sup>13</sup>

B. *American Outer Space Policy: 1. Administration Policy.*—The Administration's first major post-Sputnik step toward meeting space and astronautical problems; which was prodded by substantial rumblings in Congress, was taken when it proposed to lodge space development responsibility in the Advanced Research Projects Agency (ARPA) of the Department of Defense. Both the Administration and the Congress, however, regarded this as a temporary measure. Congress, in spelling out Defense Department authority for ARPA, made known that it would examine closely the functioning of ARPA within the Department of Defense and the relationship of ARPA to an over-all national space program.<sup>14</sup>

The Administration acted on this issue when the President directed his scientific adviser, Dr. James R. Killian, to study and resolve the problem of civilian versus military control over outer space programs. On the basis of a plan prepared by Dr. Killian, who was assisted by twelve consultants, the President recommended to Congress on April 2, 1958, a new civilian space agency and a comprehen-

<sup>11</sup> New York Times, January 19, 1958, p. 1.

<sup>12</sup> Washington Post, February 4, 1958, § A, p. 1.

<sup>13</sup> New York Times, March 16, 1958, p. 1.

<sup>14</sup> Washington Post, February 7, 1958, § A, p. 1.

sive program leading to nonmilitary space flights. The new agency, to be called the National Aeronautics and Space Agency, would take over and enlarge the existing National Advisory Commission on Aeronautics (NACA). The National Aeronautics and Space Agency (NASA) was to be governed by a 17-man board whose members and chairman would be appointed by the President. The President listed four reasons for establishing the new agency:

1. The compelling urge of man to explore the unknown.
2. The need to assure that full advantage is taken of the military potential of space.
3. The effect on national prestige of accomplishments in space science and explorations.
4. The opportunities for scientific observation and experimentation that will add to our knowledge of the universe.

The Administration's legislative proposal contemplated that the NASA should perform the following functions:

1. Develop a comprehensive program of research in the aeronautical and space sciences.
2. Plan, direct, and conduct scientific studies and investigations of the problems of manned and unmanned flight within or outside the earth's atmosphere with a view to their practical solution.
3. Develop, test, launch, and operate aeronautical and space vehicles.
4. Arrange for participation by the scientific community in planning scientific measurements and observations to be made through use of aeronautical and space vehicles, and conduct or arrange for the conduct of such measurements and observations; and provide, as appropriate, for dissemination of data collected.
5. Submit to the President for transmittal to Congress an annual report of operations and accomplishments.<sup>15</sup>

Under the President's plan, the civilian scientific part of national space programs would be turned over to NASA. The scientific community would be brought into NASA space planning through the National Science Foundation and the National Academy of Sciences. At least one member of the NASA's governing board would be from the Department of Defense. In an explanatory memorandum sent to the Defense Department, the President stated that the civilian agency would be responsible for all space programs "except those

<sup>15</sup> *Ibid.*, April 3, 1958, § A, p. 1.

peculiar to or primarily associated with military weapons systems or military operations.”<sup>16</sup>

2. *Congress and Space Proposals and Problems.*—National space policy, like national policy for atomic energy, requires joint and cooperative effort by the Executive and Legislative Branches of our Government. The dawn of the space age, like the advent of atomic energy, has brought to the federal government a host of new and immensely complex problems. At the same time, it was bombarded with space plans and proposals prepared by the Administration, individual members of Executive Departments, members of Congress, private organizations, and individual citizens.

The major issue was whether a space agency should be controlled primarily by civilians or the military. A second key and related issue was whether to start a new agency for space or to vest established agencies—notably the Atomic Energy Commission or the National Advisory Commission on Aeronautics—with responsibility for carrying out national space policy formulated by the Executive and Legislative branches.

In addition to organizational problems, proposals, and plans, Congress—like the Executive—had to face many substantive issues. International control of outer space and space law are two subjects which, in themselves, can lead to almost endless study and analysis.

3. *The House Select Committee on Astronautics and Space Exploration.*—Shortly after the launching of the first earth satellites, Congress became aware that in order to play its proper role in the formulation and control of space policy it would have to organize itself for this task. Consequently, on February 7, 1958, the Senate established a special 13 member committee called the Special Committee on Space and Astronautics. Similar action was taken by the House of Representatives when, on March 5, 1958, it agreed to House Resolution 496, which created a 13 member Select Committee on Astronautics and Space Exploration.<sup>17</sup> The House hearings were the more extensive. They were held from April 25, 1958, through May 12, 1958, on seventeen separate days, and the printed transcript consists of 1542 pages.<sup>18</sup> The Senate hearings, which were no less searching, were held on six separate days in the period from May 6, 1958, through

<sup>16</sup> Christian Science Monitor, April 2, 1958, p. 1; New York Times, April 30, 1958, p. 15.

<sup>17</sup> CONGRESSIONAL RECORD, House, March 5, 1958, p. 3020.

<sup>18</sup> *Hearings Before the Select Committee on Astronautics and Space Exploration on H. R. 11881* (85th Cong., 2d Sess.).



May 15, 1958; the printed transcript consists of 413 pages, and in part dealt with the same subject matter as that dealt with in the House Hearings.<sup>19</sup>

An appreciation of both the complexity of outer space problems and the firm intention of Congress to play a major role in national space policy is gained from that part of House Resolution 496 relating to the purposes and responsibilities of the Select Committee:

"The select committee is authorized and directed to conduct a thorough and complete study and investigation with respect to all aspects and problems relating to the exploration of outer space and the control, development, and use of astronautical resources, personnel, equipment, and facilities. All bills and resolutions introduced in the House, and all bills and resolutions from the Senate, proposed legislation in the field of astronautics and space exploration shall be referred to the select committee. The select committee is authorized and directed to report to the House by June 1, 1958, or the earliest practical date thereafter, but not later than January 3, 1959, by bill or otherwise, with recommendations upon any matters covered by this resolution."<sup>20</sup>

Testimony given before the House Select Committee covered a wide range of space and astronautical subjects. Among the space problems and proposals of special and recurring importance were these:

a. *Military Versus Civilian Control of Space Programs.*—The position of the military and the Defense Department was that the development of space weapons must take priority over nonmilitary space exploration. Major General Bernard A. Schriever, the Air Force's ballistic missile chief, told the Select Committee:

"I believe very strongly that the military must not be inhibited in carrying out its own program . . . including in this program the development of weather observation satellites, reconnaissance satellites, manned space vehicles and million-pound rockets.

A civilian space organization should be created, but only for research, and projects that might be classified as 'screwball—long-range nonmilitary projects that the Defense Department might be criticized for attempting.'"<sup>21</sup>

Those who took General Schriever's point of view did not oppose

<sup>19</sup> *Hearings Before the Special Committee on Space and Astronautics on S. 3609* (85th Cong., 2d Sess.).

<sup>20</sup> *Id.* at 3019.

<sup>21</sup> *Hearings Before Select Committee on Astronautics and Space Exploration* (85th Cong., 2d Sess.), p. 647.

the Administration's space agency proposal as such. For example, Roy W. Johnson, head of the Defense Department's Advance Research Projects Agency, stated that the President's proposed civilian space agency should be a "side-show" effort compared with the military space program.<sup>22</sup>

On the other hand, at least some military men favored civilian control of the national outerspace program. Rear Admiral Hyman C. Rickover strongly urged this, because "the Defense Department is already too large, and if you let it grow on as it is, it soon will be controlling the entire country."<sup>23</sup> In less emphatic words, Lt. General James H. Doolittle supported the Administration's outer space plan and sought to discourage military efforts to curb the control which this plan would give to civilians.<sup>24</sup>

On balance, civilian testimony before the committee seems to have favored the Administration's outer space agency. There were, however, important exceptions. Dr. James A. Van Allen, who directs all U. S. satellite experiments, urged that the national space agency be given dominant jurisdiction over all agencies, including Defense, in "matters pertaining to space research, developments and operations. This would best serve the long-range national interest. The military will fight it. But the bulk of the scientific community feels as I do."<sup>25</sup> Dr. Simon Ramo, head of the Ramo-Wooldridge Corporation, which supplies the technical direction for the Air Force ballistic missile program, also supported the Administration's plan. In operating the space agency, however, he would limit it strictly to research; ninety per cent of national space projects should be handled by the Department of Defense. If this is not done, he stated, the transfer of defense projects to the civilian agency will lead to new rivalries over jurisdiction.<sup>26</sup>

b. *New Weapons and Weapons Technology*.—The Select Committee heard much testimony which indicated that we are only at the doorstep to the "Buck Rogers era." The future implications and significance of much of this testimony is as yet very hazy. But there appears to be little question that constant vigilance and concentrated

<sup>22</sup> *Id.* at 1163, 1521.

<sup>23</sup> *Id.* at 221.

<sup>24</sup> *Id.* at 927.

<sup>25</sup> *Id.* at 864.

<sup>26</sup> *Id.* at 472.

effort will be required from the government if the United States is to cope successfully with national security programs in the space age.

On April 15, Dr. Wernher von Braun, the Army's missile expert, told the Select Committee that the Army is making plans to put troops inside rockets and shoot them over long distances—such as across one of the oceans. Von Braun also said the Army is now ready to shoot a man 150 miles into the air in the nose of a Redstone missile.<sup>27</sup> The next day, Lt. General Donald L. Putt, chief of Air Force development, revealed that within two or three years the Air Force would be ready to catapult a man around the world in the nose of an intercontinental missile.<sup>28</sup> The worth-whileness of such projects has not gone unchallenged, however. Hugh Dryden, director of the National Advisory Committee for Aeronautics, commented that von Braun's troop-bearing rocket idea was a "circus stunt, in the same class as shooting a man out of a cannon."<sup>29</sup>

Satellites, too, had their "day" before the committee. Major General Schriever disclosed that the development of a military reconnaissance satellite has been given top national priority, and that this project, called Pied Piper, has equal urgency with the development of long-range ballistic missiles.<sup>30</sup> Both Lt. General James M. Gavin (ret.) and Major General John B. Medaris, chief of the Army Ordnance Missile Command, supported plans for getting a "seeing eye" satellite at an early date.

Some testimony revealed the viewpoint that perhaps even "Buck Rogers" ideas are obsolete. General Putt observed that it was reasonably certain that present day concepts and weapons will not be married to space-type vehicles.

"In fact," he continued, "it is quite possible that the nuclear warheads of today will be totally obsolete."

"It is even possible," he speculated, "that some fantastic new device might enable manned space craft to neutralize an aggressor without loss of life or destruction of property." Conceding that he was dealing with "imaginary possibility," he said he "could only counsel against the negative approach lest we parallel the 1903 prophets who could see no military use for the airplane, or those

<sup>27</sup> *Id.* at 16, 61.

<sup>28</sup> *Id.* at 99.

<sup>29</sup> *Id.* at 401, 927.

<sup>30</sup> *Id.* at 647.

<sup>31</sup> *Id.* at 182, 137.

in 1941 who refused to believe the power of the atom could be harnessed in a bomb."<sup>32</sup>

General Putt's testimony disputed to a degree the opinion of President Eisenhower's Science Advisory Committee, chaired by Dr. James R. Killian, the President's science adviser. In this committee's study, *Introduction to Outer Space*, which was printed by the Select Committee, "novel possibilities were not ruled out for the future, but the committee left the clear impression that it felt much of the talk of bombing from satellites, space vehicles, or moon bases was much too fanciful for now."<sup>33</sup>

c. *Space Law and Internationalization of Outer Space*.—At several points the Select Committee found itself deeply involved in problems of space law. These have not been academic matters, but of great practical importance. For example, if a Soviet "seeing eye" satellite spies on the United States, would our Government have the right to shoot it down? Most if not all of the Army and Air Force generals considered the space over a nation within its sovereign limits. Some military leaders have reported that it might be necessary to shoot down a Soviet reconnaissance satellite, but Deputy Secretary of Defense Quarles stated that the Defense Department would not object to Russian satellites' taking pictures of the United States.<sup>34</sup>

Questions of this type have brought forth several different responses. Dr. John P. Hagen, head of the Vanguard Project, called for an international conference to establish by treaty the limitations under which satellites can be put into space. Krafft Ehrlicke, the space expert of Convair-Astronautics, testified that international space co-operation is necessary because bases are essential at the equator for launching complex space vehicles, and observatories are needed in the far north and south for tracking such vehicles. He repeated before the committee a suggestion to organize an International Astrophysical Decade, somewhat like the International Geophysical Year, which would concern itself with the Interplanetary environment and the preparation of manned space flight.<sup>35</sup>

d. *Constructive Criticism of National Space Policy*.—The Select Committee heard much testimony about and concerned itself with

<sup>32</sup> *Id.* at 99.

<sup>33</sup> *Christian Science Monitor*, April 16, 1958, p. 6.

<sup>34</sup> *Hearings Before the Select Committee on Astronautics and Space Exploration* (85th Cong., 2d Sess.), p. 1102.

<sup>35</sup> *Id.* at 307.

general criticisms of our national space programs, administrative inefficiencies, and a whole range of other problems that bear upon space policy.

General Medaris, for example, told the committee that in his opinion "we just haven't got into development" of advanced devices that our space programs will need within five years.<sup>36</sup> Herbert York, chief scientist of the Defense Department's Advanced Research Projects Agency, charged that a major American space policy weakness is failure to initiate development programs until the need for them is well defined. The Soviets, on the other hand, carry out developments they know will eventually be needed.<sup>37</sup> Admiral Rickover offered another criticism, which was that the "most pressing problem" for our nation today is not space exploration but better education for our youth.<sup>38</sup>

The range of problems presented before the Select Committee is well illustrated by Dr. Hagen's expressed fear of the consequences stemming from the fact that it is impossible at present to distinguish between an earth satellite and an approaching intercontinental ballistic missile.<sup>39</sup>

The hearings held in the House and in the Senate revealed the painful truth that space problems come easy; and answers to them hard. Therefore a basic problem was to create agencies and to establish government procedures which would allow the widest latitude for the development of theories and practices as yet uncharted.

4. *The Senate and House Bills.*—Both the Senate bill (S. 3609) which passed unanimously June 16, 1958, and the House bill (H. R. 12575) which passed unanimously June 2, 1958, addressed themselves to this problem. A number of major differences existed between the two bills, though both agreed on the essentiality of civilian control and the importance of protecting the jurisdiction of the Department of Defense in relation to military developments necessary to national protection.<sup>40</sup>

a. *Major Differences between the Senate and House Bills: (I)*

<sup>36</sup> *Id.* at 137.

<sup>37</sup> *Id.* at 47, 716, 1521.

<sup>38</sup> *Id.* at 221.

<sup>39</sup> *Id.* at 307.

<sup>40</sup> Excellently conceived reports accompanied the bills. See Report of the Select Committee on Astronautics and Space Exploration to Accompany H. R. 12575 (H. Rep. 1770, 85th Cong., 2d Sess.); Report of the Special Committee on Space and Astronautics on S. 3609 (S. Rep. No. 1701, 85th Cong., 2d Sess.).

The Senate bill provided a National Aeronautics and Space Board, in the Executive Office of the President, for the planning and coordinating of the space program. The House gave comprehensive policy-making and planning functions to the National Aeronautics and Space Administration which was to cooperate with the Defense Department and the Atomic Energy Commission through liaison committees. Inter-agency disputes that could not be settled in these committees were to be referred to the President. Thus, in the Senate bill policy planning both for Government and intra-Government cooperation were provided for at the inter-departmental and inter-agency level. The Senate's National Aeronautics and Space Agency was an operating agency. In the House bill, the operating agency, the National Aeronautics and Space Administration, also formulated aeronautical and astronautical policy for the Government and carried it out by cooperating with other agencies and departments through formally constituted liaison committees.

(II) The House bill set up an Aeronautics and Space Advisory Committee of 17 members appointed by the President. The Senate bill gave to the National Aeronautics and Space Agency the power "to appoint such advisory committees as may be appropriate for purposes of consultation and advice to the Agency in performance of its functions."

(III) The House bill set up Military and Atomic Energy Liaison Committees, whereas in the Senate version the Space Agency was empowered to appoint liaison committees.

(IV) Functions and powers granted by the Senate bill to the National Aeronautics and Space Agency were given in the House version to the National Aeronautics and Space Administration.

(V) The House bill provided for the transfer of functions from federal departments and agencies to the Space Agency. Such transfers could possibly change markedly the original composition of the Agency. The Senate version contained no transfer provisions.

(VI) Both bills provided for international cooperation, but differed as to procedure. The Senate bill stated that the Space Agency may engage in international cooperation under the foreign policy guidance of the State Department "pursuant to agreements made by the President with the advice and consent of the Senate." The House version read that such cooperation shall be "pursuant to agreements negotiated or approved by the Department of State."

(VII) The Senate bill set up within Congress a Joint Committee on Aeronautics and Space. The House bill had no such provision.

(VIII) Both the House and the Senate redrafted the Administration's space agency bill, which granted blanket authorization for appropriation of all funds "without fiscal year limitation." The Senate bill retained this provision for all funds appropriated, except for the payment of salaries or travel and other expenses of officers and employees; it required specific new authorizations for the appropriation of capital funds. The House bill permitted only funds for the construction of facilities or for research and development activities to remain available until expended, and required special authorization for funds to acquire or condemn real property and for all other capital funds for items which exceed \$250,000 in amount.

S. 3609 passed in the Senate on June 16, 1958; H. R. 12575 passed previously in the House on June 2, 1958. The respective bills, because of their differences, were then referred to a House-Senate Conference Committee, whose Report incorporated a bill which passed both houses of Congress unanimously and was enacted into law. The significant features of the Conference Report, which in the main adopted the House bill,<sup>41</sup> are not stated.

b. *The Conference Report.*—Adoption of the National Aeronautics and Space Council in the Conference Report was thus a compromise between the House bill, which provided for an Advisory Committee composed of private and governmental members, and the Senate bill's Policy Board composed of governmental members only.

What emerges from the Conference Report is a cohesive set of agency procedures directed by the Council of which the President is the head, designed to preserve the dominance of civilian control with due regard for the interests and responsibilities of the Defense Department in connection with national defense, and to provide effectively for resolving disputes over jurisdiction between civilian and the military claims. The top-level members of the Council are so preoccupied with other highly important duties that it is doubtful that it is equipped to perform the duties assigned to it on any sustained and systematic basis.

Adopting the House language, the Conference bill established a National Aeronautics and Space Administration headed by an Ad-

<sup>41</sup> Conference Report to Accompany H. R. 12575 (Rep. No. 2116, 85th Cong., 2d Sess.).

ministrator appointed from civilian life by the President with the advice and consent of the Senate. "Under the supervision of the President, the Administrator shall be responsible for the exercise of all powers and the discharge of all duties of the Administration, and shall have authority and control over all personnel and activities thereof."<sup>42</sup>

The Conference Report made the space agency an operating agency and gave responsibility for national space policy formulation and coordination to the President and the National Aeronautics and Space Council. Following the Senate rather than the House bill, functions and powers were given to the national space agency, not to the administrator of the agency. In this respect, however, the Conference bill differed from the Senate bill, in that the former places considerably more emphasis on the role of the President in the formulation, coordination, and direction of national space policy. The President supervises and directs the Administrator, and he also is Chairman of the National Aeronautics and Space Council.

The House bill provided for a Military Liaison Committee, whereas the Senate bill was silent on this matter. The Conference substitute established a Civil-Military Liaison Committee consisting of a chairman, appointed by the President and serving at his pleasure; one or more representatives from the Department of Defense; one or more representatives from each of the departments of the Army, Navy and Air Force, to be assigned by the Secretary of Defense; and representatives from the National Aeronautics and Space Administration, to be assigned by the Administrator, and equal in number to the aforementioned Defense representatives. Through the Liaison Committee the Administration and the Department of Defense are to advise and consult with each other on matters within their jurisdictions pertaining to space matters, will keep each other informed, and will try to resolve differences which might arise between them. Differences which cannot be settled by either the Committee or the Secretary of Defense and the Administrator can be referred to the President by either the Secretary of Defense or the Administrator. In reaching a decision, the President acts under the authority vested in him as Chairman of the National Aeronautics and Space Council.

The Atomic Energy Liaison Committee, which was established by the House bill as a parallel to the Military Liaison Committee,

<sup>42</sup> Conference Report, at p. 4.



was dropped by the Conferees. They felt that the Administrator would, in carrying out his functions, cooperate with the AEC, and that other provisions in the bill gave him sufficient authority to do so.<sup>43</sup>

In the Conference Report the Space Administration is authorized to engage in a program of international cooperation under the foreign policy guidance of the President pursuant to agreements made by the President with the advice and consent of the Senate. In this matter, therefore, the provisions of the Senate Bill were accepted.

The Conference substitute combined elements of both the House and Senate provisions for the expiration of the National Advisory Committee for Aeronautics. As a result, the NACA is to expire and the new Aeronautics and Space Administration is to come into operation when the Administrator so announces in the Federal Register, but not later than 90 days after the enactment of the Act.

The Conferees rejected the Senate bill's provision for establishing a joint congressional committee on aeronautics and space. This has been followed, as stated at the outset of this article, by the creation of standing committees both in the House and in the Senate. The view is often expressed in the Congress, and is more strongly subscribed to by the House leadership, that joint Senate-House Committees are not entirely suited to the task of legislating and interferes with the independence of the legislative processes in each chamber. Under this view joint congressional committees are reserved for study or watchdog purposes.

### III. CONCLUSION

A SIGNIFICANT contribution to the nation's future security was made by the 85th Congress in its adoption of the National Aeronautics and Space Act of 1958, the Concurrent Resolution for encouraging international agreements for peaceful exploration of outer space, and the creation of standing committees on outer space in the House and the Senate.

Space is a frontier, a concept deeply identified with our national history. But we cannot pursue the space frontier with the leisure of the pace which has developed the West. There is a special urgency, and the laws and procedures of the 85th Congress will not suffice if we do not also pursue the space potential aggressively.

A new language of space technology is in the making, important

<sup>43</sup> *Id.* at 21.

not for theory alone but having vast consequences in the nation's security, and massive repercussions in the nation's economy. The development of greater understanding of weather, for example, may affect our agricultural resources with consequent huge savings. As we move from one advance to another, substituting knowledge for ideas which we now take on faith, the whole range of our government institutions may be altered. Space exploration and the new science and technology of astronautics are pressing national imperatives.

The defense posture of the nation has been strengthened by the 85th Congress, but the escape from the earth's atmosphere may have such terrible implications that peace may be compelled.

## APPENDIX I

### PRESIDENT'S STATEMENT ON SPACE AGENCY

*Following is the text of President Eisenhower's statement on the space agency bill:*

I HAVE today [July 29, 1958] signed H. R. 12575, the National Aeronautics and Space Act of 1958.

The enactment of this legislation is an historic step, further equipping the United States for leadership in the space age. I wish to commend the Congress for the promptness with which it has created the organization and provided the authority needed for an effective national effort in the fields of aeronautics and space exploration.

The new act contains one provision that requires comment. Section 205 authorizes cooperation with other nations and groups of nations in work done pursuant to the act in the peaceful application of the results of such work, pursuant to international agreements entered into by the President with the advice and consent of the Senate. I regard this section merely as recognizing that international treaties may be made in this field, and as not precluding, in appropriate cases, less formal arrangements for cooperation. To construe the section otherwise would raise substantial constitutional questions.

The present National Advisory Committee for Aeronautics, with its large and competent staff and well-equipped laboratories, will provide the nucleus of the N. A. S. A. The N. A. C. A. has an established record of research performance and of cooperation with the armed services. The combination of space exploration responsibilities with the N. A. C. A.'s traditional aeronautical research functions is a natural evolution.

The enactment of the law establishing the N. A. C. A. in 1915 proved a decisive step in the advancement of our civil and military aviation. The Aeronautics and Space Act of 1958 should have an even greater impact on our future.

## APPENDIX II

NATIONAL AERONAUTICS AND SPACE ACT OF 1958  
(Public Law 85-386, July 29, 1958, 85th Cong. 2d Sess.)TITLE I—SHORT TITLE, DECLARATION OF POLICY, AND  
DEFINITIONS

## SHORT TITLE

Sec. 101. *This Act may be cited as the "National Aeronautics and Space Act of 1958".*

## DECLARATION OF POLICY AND PURPOSE

Sec. 102. (a) *The Congress hereby declares that it is the policy of the United States that activities in space should be devoted to peaceful purposes for the benefit of all mankind.*

(b) *The Congress declares that the general welfare and security of the United States require that adequate provision be made for aeronautical and space activities. The Congress further declares that such activities shall be the responsibility of, and shall be directed by, a civilian agency exercising control over aeronautical and space activities sponsored by the United States, except that activities peculiar to or primarily associated with the development of weapons systems, military operations, or the defense of the United States (including the research and development necessary to make effective provision for the defense of the United States) shall be the responsibility of, and shall be directed by, the Department of Defense; and that determination as to which such agency has responsibility for and direction of any such activity shall be made by the President in conformity with section 201 (e).*

(c) *The aeronautical and space activities of the United States shall be conducted so as to contribute materially to one or more of the following objectives:*

(1) *The expansion of human knowledge of phenomena in the atmosphere and space;*

(2) *The improvement of the usefulness, performance, speed, safety, and efficiency of aeronautical and space vehicles;*

(3) *The development and operation of vehicles capable of carrying instruments, equipment, supplies, and living organisms through space;*

(4) *The establishment of long-range studies of the potential benefits to be gained from, the opportunities for, and the problems involved in the utilization of aeronautical and space activities for peaceful and scientific purposes;*

(5) *The preservation of the role of the United States as a leader in aeronautical and space science and technology and in the application thereof to the conduct of peaceful activities within and outside the atmosphere;*

(6) *The making available to agencies directly concerned with national defense of discoveries that have military value or significance, and the furnishing by such agencies, to the civilian agency established to direct and control nonmilitary aeronautical and space activities, of information as to discoveries which have value or significance to that agency;*

(7) *Cooperation by the United States with other nations and groups of nations in work done pursuant to this Act and in the peaceful application of the results thereof; and*

(8) *The most effective utilization of the scientific and engineering resources of the United States, with close cooperation among all interested agencies of the United States in order to avoid unnecessary duplication of effort, facilities, and equipment.*

(d) *It is the purpose of this Act to carry out and effectuate the policies declared in subsections (a), (b), and (c).*

#### DEFINITIONS

*Sec. 103. As used in this Act—*

(1) *the term "aeronautical and space activities" means (A) research into, and the solution of, problems of flight within and outside the earth's atmosphere, (B) the development, construction, testing, and operation for research purposes of aeronautical and space vehicles, and (C) such other activities as may be required for the exploration of space; and*

(2) *the term "aeronautical and space vehicles" means aircraft, missiles, satellites, and other space vehicles, manned and unmanned, together with related equipment, devices, components, and parts.*

### TITLE II—COORDINATION OF AERONAUTICAL AND SPACE ACTIVITIES

#### NATIONAL AERONAUTICS AND SPACE COUNCIL

*Sec. 201. (a) There is hereby established the National Aeronautics and Space Council (hereinafter called the "Council") which shall be composed of—*

(1) *the President (who shall preside over meetings of the Council);*

(2) *the Secretary of State;*

(3) *the Secretary of Defense;*

(4) *the Administrator of the National Aeronautics and Space Administration;*

(5) *the Chairman of the Atomic Energy Commission;*

(6) *not more than one additional member appointed by the President from the departments and agencies of the Federal Government; and*

(7) *not more than three other members appointed by the President, solely on the basis of established records of distinguished achievement, from among individuals in private life who are eminent in science, engineering, technology, education, administration, or public affairs.*

(b) *Each member of the Council from a department or agency of the Federal Government may designate another officer of his department or agency to serve on the Council as his alternate in his unavoidable absence.*

(c) *Each member of the Council appointed or designated under paragraphs (6) and (7) of subsection (a), and each alternate member designated under subsection (b), shall be appointed or designated to serve as such by and with the advice and consent of the Senate, unless at the time of such appointment or designation he holds an office in the Federal Government to which he was appointed by and with the advice and consent of the Senate.*

(d) *It shall be the function of the Council to advise the President with respect to the performance of the duties prescribed in subsection (e) of this section.*

(e) *In conformity with the provisions of section 102 of this Act, it shall be the duty of the President to—*

(1) *survey all significant aeronautical and space activities, including the policies, plans, programs, and accomplishments of all agencies of the United States engaged in such activities;*

(2) *develop a comprehensive program of aeronautical and space activities to be conducted by agencies of the United States;*

(3) *designate and fix responsibility for the direction of major aeronautical and space activities;*

(4) *provide for effective cooperation between the National Aeronautics and Space Administration and the Department of Defense in all such activities, and specify which of such activities may be carried on concurrently by both such agencies notwithstanding the assignment of primary responsibility therefor to one or the other of such agencies; and*

(5) *resolve differences arising among departments and agencies of the United States with respect to aeronautical and space activities under this Act, including differences as to whether a particular project is an aeronautical and space activity.*

(f) *The Council may employ a staff to be headed by a civilian executive secretary who shall be appointed by the President by and with the advice and consent of the Senate and shall receive compensation at the rate of \$20,000 a year. The executive secretary, subject to the direction of the Council, is authorized to appoint and fix the compensation of such personnel, including not more than three persons who may be appointed without regard to the civil service laws or the Classification Act of 1949 and compensated at the rate of not more than \$19,000 a year, as may be necessary to perform such duties as may be prescribed by the Council in connection with the performance of its functions. Each appointment under this subsection shall be subject to the same security requirements as those established for personnel of the National Aeronautics and Space Administration appointed under section 203 (b) (2) of this Act.*

(g) *Members of the Council appointed from private life under subsection (a) (7) may be compensated at a rate not to exceed \$100 per diem, and may be paid travel expenses and per diem in lieu of subsistence in accordance with the provisions of section 5 of the Administrative Expenses Act of 1946 (5 U. S. C. 73b-2) relating to persons serving without compensation.*

#### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Sec. 202. (a) *There is hereby established the National Aeronautics and Space Administration (hereinafter called the "Administration"). The Administration shall be headed by an Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate, and shall receive compensation at the rate of \$22,500 per annum. Under the supervision and direction of the President, the Administrator shall be responsible for the exercise of all powers and the discharge of all*

duties of the Administration, and shall have authority and control over all personnel and activities thereof.

(b) There shall be in the Administration a Deputy Administrator, who shall be appointed from civilian life by the President by and with the advice and consent of the Senate, shall receive compensation at the rate of \$21,500 per annum, and shall perform such duties and exercise such powers as the Administrator may prescribe. The Deputy Administrator shall act for, and exercise the powers of, the Administrator during his absence or disability.

(c) The Administrator and the Deputy Administrator shall not engage in any other business, vocation, or employment while serving as such.

#### FUNCTIONS OF THE ADMINISTRATION

Sec. 203. (a) The Administration, in order to carry out the purpose of this Act, shall—

(1) plan, direct, and conduct aeronautical and space activities;

(2) arrange for participation by the scientific community in planning scientific measurements and observations to be made through use of aeronautical and space vehicles, and conduct or arrange for the conduct of such measurements and observations; and

(3) provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof.

(b) In the performance of its functions the Administration is authorized—

(1) to make, promulgate, issue, rescind, and amend rules and regulations governing the manner of its operations and the exercise of the powers vested in it by law;

(2) to appoint and fix the compensation of such officers and employees as may be necessary to carry out such functions. Such officers and employees shall be appointed in accordance with the civil-service laws and their compensation fixed in accordance with the Classification Act of 1949, except that (A) to the extent the Administrator deems such action necessary to the discharge of his responsibilities, he may appoint and fix the compensation (up to a limit of \$19,000 a year, or up to a limit of \$21,000 a year for a maximum of ten positions) of not more than two hundred and sixty of the scientific, engineering, and administrative personnel of the Administration without regard to such laws, and (B) to the extent the Administrator deems such action necessary to recruit specially qualified scientific and engineering talent, he may establish the entrance grade for scientific and engineering personnel without previous service in the Federal Government at a level up to two grades higher than the grade provided for such personnel under the General Schedule established by the Classification Act of 1949, and fix their compensation accordingly;

(3) to acquire (by purchase, lease, condemnation, or otherwise), construct, improve, repair, operate, and maintain laboratories, research and testing sites and facilities, aeronautical and space vehicles, quarters and related accommodations for employees and dependents of employees of the Administration, and such other real and personal property (including patents), or any interest therein, as the Administration deems necessary within and outside the continental United States; to lease to others such real and personal property; to sell and otherwise dispose of real and personal property (including patents and rights thereunder) in

accordance with the provisions of the Federal Property and Administrative Services Act of 1949, as amended (40 U. S. C. 471 et seq.); and to provide by contract or otherwise for cafeterias and other necessary facilities for the welfare of employees of the Administration at its installations and purchase and maintain equipment therefor;

(4) to accept unconditional gifts or donations of services, money, or property, real, personal, or mixed, tangible or intangible;

(5) without regard to section 3648 of the Revised Statutes, as amended (31 U. S. C. 529), to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State, Territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution. To the maximum extent practicable and consistent with the accomplishment of the purpose of this Act, such contracts, leases, agreements, and other transactions shall be allocated by the Administrator in a manner which will enable small-business concerns to participate equitably and proportionately in the conduct of the work of the Administration;

(6) to use, with their consent, the services, equipment, personnel, and facilities of Federal and other agencies with or without reimbursement, and on a similar basis to cooperate with other public and private agencies and instrumentalities in the use of services, equipment, and facilities. Each department and agency of the Federal Government shall cooperate fully with the Administration in making its services, equipment, personnel, and facilities available to the Administration, and any such department or agency is authorized, notwithstanding any other provision of law, to transfer to or to receive from the Administration, without reimbursement, aeronautical and space vehicles, and supplies and equipment other than administrative supplies or equipment;

(7) to appoint such advisory committees as may be appropriate for purposes of consultation and advice to the Administration in the performance of its functions;

(8) to establish within the Administration such offices and procedures as may be appropriate to provide for the greatest possible coordination of its activities under this Act with related scientific and other activities being carried on by other public and private agencies and organizations;

(9) to obtain services as authorized by section 15 of the Act of August 2, 1946 (5 U. S. C. 55a), at rates not to exceed \$100 per diem for individuals;

(10) when determined by the Administrator to be necessary, and subject to such security investigations as he may determine to be appropriate, to employ aliens without regard to statutory provisions prohibiting payment of compensation to aliens;

(11) to employ retired commissioned officers of the armed forces of the United States and compensate them at the rate established for the positions occupied by them within the Administration, subject only to the limitations in pay set forth in section 212 of the Act of June 30, 1932, as amended (5 U. S. C. 59a);

(12) *with the approval of the President, to enter into cooperative agreements under which members of the Army, Navy, Air Force, and Marine Corps may be detailed by the appropriate Secretary for services in the performance of functions under this Act to the same extent as that to which they might be lawfully assigned in the Department of Defense; and*

(13) (A) *to consider, ascertain, adjust, determine, settle, and pay, on behalf of the United States, in full satisfaction thereof, any claim for \$5,000 or less against the United States for bodily injury, death, or damage to or loss of real or personal property resulting from the conduct of the Administration's functions as specified in subsection (a) of this section, where such claim is presented to the Administration in writing within two years after the accident or incident out of which the claim arises; and*

(B) *if the Administration considers that a claim in excess of \$5,000 is meritorious and would otherwise be covered by this paragraph, to report the facts and circumstances thereof to the Congress for its consideration.*

#### CIVILIAN-MILITARY LIAISON COMMITTEE

Sec. 204. (a) *There shall be a Civilian-Military Liaison Committee consisting of—*

(1) *a Chairman, who shall be the head thereof and who shall be appointed by the President, shall serve at the pleasure of the President, and shall receive compensation (in the manner provided in subsection (d)) at the rate of \$20,000 per annum;*

(2) *one or more representatives from the Department of Defense, and one or more representatives from each of the Departments of the Army, Navy, and Air Force, to be assigned by the Secretary of Defense to serve on the Committee without additional compensation; and*

(3) *representatives from the Administration, to be assigned by the Administrator to serve on the Committee without additional compensation, equal in number to the number of representatives assigned to serve on the Committee under paragraph (2).*

(b) *The Administration and the Department of Defense, through the Liaison Committee, shall advise and consult with each other on all matters within their respective jurisdictions relating to aeronautical and space activities and shall keep each other fully and currently informed with respect to such activities.*

(c) *If the Secretary of Defense concludes that any request, action, proposed action, or failure to act on the part of the Administrator is adverse to the responsibilities of the Department of Defense, or the Administrator concludes that any request, action, proposed action, or failure to act on the part of the Department of Defense is adverse to the responsibilities of the Administration, and the Administrator and the Secretary of Defense are unable to reach an agreement with respect thereto, either the Administrator or the Secretary of Defense may refer the matter to the President for his decision (which shall be final) as provided in section 201(e).*

(d) *Notwithstanding the provisions of any other law, any active or retired officer of the Army, Navy, or Air Force may serve as Chairman of the Liaison Committee without prejudice to his active or retired status as*



such officer. The compensation received by any such officer for his service as Chairman of the Liaison Committee shall be equal to the amount (if any) by which the compensation fixed by subsection (a) (1) for such Chairman exceeds his pay and allowances (including special and incentive pays) as an active officer, or his retired pay.

#### INTERNATIONAL COOPERATION

Sec. 205. *The Administration, under the foreign policy guidance of the President, may engage in a program of international cooperation in work done pursuant to this Act, and in the peaceful application of the results thereof, pursuant to agreements made by the President with the advice and consent of the Senate.*

#### REPORTS TO THE CONGRESS

Sec. 206. (a) *The Administration shall submit to the President for transmittal to the Congress, semiannually and at such other times as it deems desirable, a report of its activities and accomplishments.*

(b) *The President shall transmit to the Congress in January of each year a report, which shall include (1) a comprehensive description of the programmed activities and the accomplishments of all agencies of the United States in the field of aeronautics and space activities during the preceding calendar year, and (2) an evaluation of such activities and accomplishments in terms of the attainment of, or the failure to attain, the objectives described in section 102 (c) of this Act.*

(c) *Any report made under this section shall contain such recommendations for additional legislation as the Administrator or the President may consider necessary or desirable for the attainment of the objectives described in section 102 (c) of this Act.*

(d) *No information which has been classified for reasons of national security shall be included in any report made under this section, unless such information has been declassified by, or pursuant to authorization given by, the President.*

#### TITLE III—MISCELLANEOUS

##### NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

Sec. 301. (a) *The National Advisory Committee for Aeronautics, on the effective date of this section, shall cease to exist. On such date all functions, powers, duties, and obligations, and all real and personal property, personnel (other than members of the Committee), funds, and records of that organization, shall be transferred to the Administration.*

(b) *Section 2302 of title 10 of the United States Code is amended by striking out "or the Executive Secretary of the National Advisory Committee for Aeronautics" and inserting in lieu thereof "The National Aeronautics and Space Administration".*

(c) *The first section of the Act of August 26, 1950 (5 U. S. C. 22-1), is amended by striking out "the Director, National Advisory Committee for Aeronautics" and inserting in lieu thereof "the Administrator of the National Aeronautics and Space Administration", and by striking out "or National Advisory Committee for Aeronautics" and inserting in lieu thereof "or National Aeronautics and Space Administration".*

(d) *The Unitary Wind Tunnel Plan Act of 1949 (50 U. S. C. 511-515)*

is amended (1) by striking out "The National Advisory Committee for Aeronautics (hereinafter referred to as the 'Committee')"; and inserting in lieu thereof "The Administrator of the National Aeronautics and Space Administration (hereinafter referred to as the 'Administrator')"; (2) by striking out "Committee" or "Committee's" wherever they appear and inserting in lieu thereof "Administrator" and "Administrator's", respectively; and (3) by striking out "its" wherever it appears and inserting in lieu thereof "his".

(e) This section shall take effect ninety days after the date of the enactment of this Act, or on any earlier date on which the Administrator shall determine, and announce by proclamation published in the Federal Register that the Administration has been organized and is prepared to discharge the duties and exercise the powers conferred upon it by this Act.

#### TRANSFER OF RELATED FUNCTIONS

Sec. 302. (a) Subject to the provisions of this section, the President, for a period of four years after the date of enactment of this Act, may transfer to the Administration any functions (including powers, duties, activities, facilities, and parts of functions) of any other department or agency of the United States, or of any officer or organizational entity thereof, which relate primarily to the functions, powers, and duties of the Administration as prescribed by section 203 of this Act. In connection with any such transfer, the President may, under this section or other applicable authority, provide for appropriate transfers of records, property, civilian personnel, and funds.

(b) Whenever any such transfer is made before January 1, 1959, the President shall transmit to the Speaker of the House of Representatives and the President pro tempore of the Senate a full and complete report concerning the nature and effect of such transfer.

(c) After December 31, 1958, no transfer shall be made under this section until (1) a full and complete report concerning the nature and effect of such proposed transfer has been transmitted by the President to the Congress, and (2) the first period of sixty calendar days of regular session of the Congress following the date of receipt of such report by the Congress has expired without the adoption by the Congress of a concurrent resolution stating that the Congress does not favor such transfer.

#### ACCESS TO INFORMATION

Sec. 303. Information obtained or developed by the Administrator in the performance of his functions under this Act shall be made available for public inspection, except (A) information authorized or required by Federal statute to be withheld, and (B) information classified to protect the national security: Provided, that nothing in this Act shall authorize the withholding of information by the Administrator from the duly authorized committees of the Congress.

#### SECURITY

Sec. 304. (a) The Administrator shall establish such security requirements, restrictions, and safeguards as he deems necessary in the interest of the national security. The Administrator may arrange with the Civil Service Commission for the conduct of such security or other personnel investigations of the Administration's officers, employees, and consultants, and its con-

tractors and subcontractors and their officers and employees, actual or prospective, as he deems appropriate; and if any such investigation develops any data reflecting that the individual who is the subject thereof is of questionable loyalty the matter shall be referred to the Federal Bureau of Investigation for the conduct of a full field investigation, the results of which shall be furnished to the Administrator.

H. Rept. 2166, 85—2—2

(b) *The Atomic Energy Commission may authorize any of its employees, or employees of any contractor, prospective contractor, licensee, or prospective licensee of the Atomic Energy Commission or any other person authorized to have access to Restricted Data by the Atomic Energy Commission under subsection 145 b. of the Atomic Energy Act of 1954 (42 U. S. C. 2165 (b)), to permit any member, officer, or employee of the Council, or the Administrator, or any officer, employee, member of an advisory committee, contractor, subcontractor, or officer or employee of a contractor or subcontractor of the Administration, to have access to Restricted Data relating to aeronautical and space activities which is required in the performance of his duties and so certified by the Council or the Administrator, as the case may be, but only if (1) the Council or Administrator or designee thereof has determined, in accordance with the established personnel security procedures and standards of the Council or Administration, that permitting such individual to have access to such Restricted Data will not endanger the common defense and security, and (2) the Council or Administrator or designee thereof finds that the established personnel and other security procedures and standards of the Council or Administration are adequate and in reasonable conformity to the standards established by the Atomic Energy Commission under section 145 of the Atomic Energy Act of 1954 (42 U. S. C. 2165). Any individual granted access to such Restricted Data pursuant to this subsection may exchange such Data with any individual who (A) is an officer or employee of the Department of Defense, or any department or agency thereof, or a member of the armed forces, or a contractor or subcontractor of any such department, agency, or armed force, or an officer or employee of any such contractor or subcontractor, and (B) has been authorized to have access to Restricted Data under the provisions of section 143 of the Atomic Energy Act of 1954 (42 U. S. C. 2163).*

(c) *Chapter 37 of title 18 of the United States Code (entitled Espionage and Censorship) is amended by—*

*(1) adding at the end thereof the following new section:*

*"§ 799. Violation of regulations of National Aeronautics and Space Administration*

*"Whoever willfully shall violate, attempt to violate, or conspire to violate any regulation or order promulgated by the Administrator of the National Aeronautics and Space Administration for the protection or security of any laboratory, station, base or other facility, or part thereof, or any aircraft, missile, spacecraft, or similar vehicle, or part thereof, or other property or equipment in the custody of the Administration, or any real or personal property or equipment in the custody of any contractor under any contract with the Administration or any subcontractor of any such contractor, shall be fined not more than \$5,000, or imprisoned not more than one year, or both."*

*(2) adding at the end of the sectional analysis thereof the following new item:*

*"§ 799. Violation of regulations of National Aeronautics and Space Administration."*

(d) Section 1114 of title 18 of the United States Code is amended by inserting immediately before "while engaged in the performance of his official duties" the following: "or any officer or employee of the National Aeronautics and Space Administration directed to guard and protect property of the United States under the administration and control of the National Aeronautics and Space Administration,".

(e) The Administrator may direct such of the officers and employees of the Administration as he deems necessary in the public interest to carry firearms while in the conduct of their official duties. The Administrator may also authorize such of those employees of the contractors and subcontractors of the Administration engaged in the protection of property owned by the United States and located at facilities owned by or contracted to the United States as he deems necessary in the public interest, to carry firearms while in the conduct of their official duties.

#### PROPERTY RIGHTS IN INVENTIONS

Sec. 305. (a) Whenever any invention is made in the performance of any work under any contract of the Administration, and the Administrator determines that—

(1) the person who made the invention was employed or assigned to perform research, development, or exploration work and the invention is related to the work he was employed or assigned to perform, or that it was within the scope of his employment duties, whether or not it was made during working hours, or with a contribution by the Government of the use of Government facilities, equipment, materials, allocated funds, information, proprietary to the Government, or services of Government employees during working hours; or

(2) the person who made the invention was not employed or assigned to perform research, development, or exploration work, but the invention is nevertheless related to the contract, or to the work or duties he was employed or assigned to perform, and was made during working hours, or with a contribution from the Government of the sort referred to in clause (1),

such invention shall be the exclusive property of the United States, and if such invention is patentable a patent therefor shall be issued to the United States upon application made by the Administrator, unless the Administrator waives all or any part of the rights of the United States to such invention in conformity with the provisions of subsection (f) of this section.

(b) Each contract entered into by the Administrator with any party for the performance of any work shall contain effective provisions under which such party shall furnish promptly to the Administrator a written report containing full and complete technical information concerning any invention, discovery, improvement, or innovation which may be made in the performance of any such work.

(c) No patent may be issued to any applicant other than the Administrator for any invention which appears to the Commissioner of Patents to have significant utility in the conduct of aeronautical and space activities unless the applicant files with the Commissioner, with the application or within thirty days after request therefor by the Commissioner, a written statement executed under oath setting forth the full facts concerning the

circumstances under which such invention was made and stating the relationship (if any) of such invention to the performance of any work under any contract of the Administration. Copies of each such statement and the application to which it relates shall be transmitted forthwith by the Commissioner to the Administrator.

(d) Upon any application as to which any such statement has been transmitted to the Administrator, the Commissioner may, if the invention is patentable, issue a patent to the applicant unless the Administrator, within ninety days after receipt of such application and statement, requests that such patent be issued to him on behalf of the United States. If, within such time, the Administrator files such a request with the Commissioner, the Commissioner shall transmit notice thereof to the applicant, and shall issue such patent to the Administrator unless the applicant within thirty days after receipt of such notice requests a hearing before a Board of Patent Interferences on the question whether the Administrator is entitled under this section to receive such patent. The Board may hear and determine, in accordance with rules and procedures established for interference cases, the question so presented, and its determination shall be subject to appeal by the applicant or by the Administrator to the Court of Customs and Patent Appeals in accordance with procedures governing appeals from decisions of the Board of Patent Interferences in other proceedings.

(e) Whenever any patent has been issued to any applicant in conformity with subsection (d), and the Administrator thereafter has reason to believe that the statement filed by the applicant in connection therewith contained any false representation of any material fact, the Administrator within five years after the date of issuance of such patent may file with the Commissioner a request for the transfer to the Administrator of title to such patent on the records of the Commissioner. Notice of any such request shall be transmitted by the Commissioner to the owner of record of such patent, and title to such patent shall be so transferred to the Administrator unless within thirty days after receipt of such notice such owner of record requests a hearing before a Board of Patent Interferences on the question whether any such false representation was contained in such statement. Such question shall be heard and determined, and determination thereof shall be subject to review, in the manner prescribed by subsection (d) for questions arising thereunder. No request made by the Administrator under this subsection for the transfer of title to any patent, and no prosecution for the violation of any criminal statute, shall be barred by any failure of the Administrator to make a request under subsection (d) for the issuance of such patent to him, or by any notice previously given by the Administrator stating that he had no objection to the issuance of such patent to the applicant therefor.

(f) Under such regulations in conformity with this subsection as the Administrator shall prescribe, he may waive all or any part of the rights of the United States under this section with respect to any invention or class of inventions made or which may be made by any person or class of persons in the performance of any work required by any contract of the Administration if the Administrator determines that the interests of the United States will be served thereby. Any such waiver may be made upon such terms and under such conditions as the Administrator shall determine

to be required for the protection of the interests of the United States. Each such waiver made with respect to any invention shall be subject to the reservation by the Administrator, of an irrevocable, nonexclusive, non-transferrable, royalty-free license for the practice of such invention throughout the world by or on behalf of the United States or any foreign government pursuant to any treaty or agreement with the United States. Each proposal for any waiver under this subsection shall be referred to an Inventions and Contributions Board which shall be established by the Administrator within the Administration. Such Board shall accord to each interested party an opportunity for hearing, and shall transmit to the Administrator its findings of fact with respect to such proposal and its recommendations for action to be taken with respect thereto.

(g) The Administrator shall determine, and promulgate regulations specifying, the terms and conditions upon which licenses will be granted by the Administration for the practice by any person (other than an agency of the United States) of any invention for which the Administrator holds a patent on behalf of the United States.

(h) The Administrator is authorized to take all suitable and necessary steps to protect any invention or discovery to which he has title, and to require that contractors or persons who retain title to inventions or discoveries under this section protect the inventions or discoveries to which the Administration has or may acquire a license of use.

(i) The Administration shall be considered a defense agency of the United States for the purpose of chapter 17 of title 35 of the United States Code.

(j) As used in this section—

(1) the term "person" means any individual, partnership, corporation, association, institution, or other entity;

(2) the term "contract" means any actual or proposed contract, agreement, understanding, or other arrangement, and includes any assignment, substitution of parties, or subcontract executed or entered into thereunder; and

(3) the term "made", when used in relation to any invention, means the conception or first actual reduction to practice of such invention.

#### CONTRIBUTIONS AWARDS

Sec. 306. (a) Subject to the provisions of this section, the Administrator is authorized, upon his own initiative or upon application of any person, to make a monetary award, in such amount and upon such terms as he shall determine to be warranted, to any person (as defined by section 305) for any scientific or technical contribution to the Administration which is determined by the Administrator to have significant value in the conduct of aeronautical and space activities. Each application made for any such award shall be referred to the Inventions and Contributions Board established under section 305 of this Act. Such Board shall accord to each such application, and shall transmit to the Administrator its recommendation as to the terms of the award, if any, to be made to such applicant for such contribution. In determining the terms and conditions of any award the Administrator shall take into account—

(1) the value of the contribution to the United States;

(2) the aggregate amount of any sums which have been expended by the applicant for the development of such contribution;

(3) the amount of any compensation (other than salary received for services rendered as an officer or employee of the Government) previously received by the applicant for or on account of the use of such contribution by the United States; and

(4) such other factors as the Administrator shall determine to be material.

(b) If more than one applicant under subsection (a) claims an interest in the same contribution, the Administrator shall ascertain and determine the respective interests of such applicants, and shall apportion any award to be made with respect to such contribution among such applicants in such proportions as he shall determine to be equitable. No award may be made under subsection (a) with respect to any contribution—

(1) unless the applicant surrenders, by such means as the Administrator shall determine to be effective, all claims which such applicant may have to receive any compensation (other than the award made under this section) for the use of such contribution or any element thereof at any time by or on behalf of the United States, or by or on behalf of any foreign government pursuant to any treaty or agreement with the United States, within the United States or at any other place;

(2) in any amount exceeding \$100,000, unless the Administrator has transmitted to the appropriate committees of the Congress a full and complete report concerning the amount and terms of, and the basis for, such proposed award, and thirty calendar days of regular session of the Congress have expired after receipt of such report by such committees.

#### APPROPRIATIONS

Sec. 307. (a) There are hereby authorized to be appropriated such sums as may be necessary to carry out this Act, except that nothing in this Act shall authorize the appropriation of any amount for (1) the acquisition or condemnation of any real property, or (2) any other item of a capital nature (such as plant or facility acquisition, construction, or expansion) which exceeds \$250,000. Sums appropriated pursuant to this subsection for the construction of facilities, or for research and development activities, shall remain available until expended.

(b) Any funds appropriated for the construction of facilities may be used for emergency repairs of existing facilities when such existing facilities are made inoperative by major breakdown, accident, or other circumstances and such repairs are deemed by the Administrator to be of greater urgency than the construction of new facilities.