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TO AMEND THE NATIONAL AERONAUTICS  
AND SPACE ACT OF 1958

**CASE FILE  
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HEARINGS  
BEFORE THE  
COMMITTEE ON  
SCIENCE AND ASTRONAUTICS  
AND THE SPECIAL SUBCOMMITTEE ON  
INDEMNIFICATION  
U.S. HOUSE OF REPRESENTATIVES

EIGHTY-SEVENTH CONGRESS

FIRST SESSION

ON

**H.R. 7115 and H.R. 8095**

JUNE 5, 6, 12, 13, JULY 10, 11, AND 13, 1961

[No. 15]

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TO AMEND THE NATIONAL AERONAUTICS  
AND SPACE ACT OF 1958  
CASE FILE  
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# TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

MONDAY, JUNE 5, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
Washington, D.C.

The committee met at 10 a.m., in room 214-B, New House Office Building, Hon. Olin E. Teague presiding.

Mr. TEAGUE. The committee will come to order.

The committee is meeting this morning to begin hearings on H.R. 7115, the title of which is to amend the National Aeronautics and Space Act of 1958, as amended, and for other purposes.

This is an administration bill, approved by the Bureau of the Budget.

All the older members will recall that this committee considered and the House passed H.R. 12049, 86th Congress, which was another administration bill, and which had for its purpose the amendment of the National Space Act.

That bill was not considered in the Senate and died with the adjournment of the 86th Congress.

The bill before us today is somewhat different than the space amendments bill we passed last year. For one thing, the patent revisions are not included. This does not mean that the committee will not consider certain patent amendments to the Space Act. As a matter of fact, Mr. Daddario is chairman of a special subcommittee to study the patent provisions of the act and make recommendations to the full committee for any changes in the law. There are other differences between this year's bill and the bill that passed the House last year.

If you will note, the staff has prepared a comparative analysis which shows, in parallel columns, the act, the bill we passed last year and the present legislation. This will be of help to the members as we proceed in these hearings.

(The text of H.R. 7115 follows:)

[H.R. 7115, 87th Cong., 1st sess.]

A BILL To amend the National Aeronautics and Space Act of 1958, as amended, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the National Aeronautics and Space Act of 1958, as amended, is amended as follows:

(a) Section 203 is amended—

(i) by striking out "to lease to others such real and personal property;" in paragraph (b) (3) and inserting in lieu thereof the following: "to lease to others such real and personal property, and any such lease may provide, notwithstanding section 321 of the Act of June 30, 1932 (40 U.S.C. 303b),

or any other provision of law, for the maintenance, protection, repair, or restoration, by the lessee, of the property leased, or of the entire unit or installation where a substantial part of it is leased as part or all of the consideration for the lease;";

(ii) by striking out "and" at the end of paragraph (12) of subsection (b), by striking out the period at the end of paragraph (13) of such subsection and inserting in lieu thereof, "; and", and by adding at the end of such subsection the following new paragraph:

"(14) to acquire releases, before suit is brought, for past infringement of patents."

(b) Section 204 is repealed.

(c) Section 205 is redesignated as section 204.

(d) Section 206 is redesignated as section 205, and such section as so redesignated is amended by striking out "semiannually" in subsection (a) and by inserting in lieu thereof "once a year".

(e) Section 304 is amended by striking out "certified by the Council or the Administrator, as the case may be," in the first sentence of subdivision (b) and inserting in lieu thereof "certified by the Council or the Administrator or designee thereof, as the case may be,".

(f) Title III is further amended by adding at the end thereof the following new section:

"INDEMNIFICATION

"SEC. 308. (a) With the approval of the Administrator or his designee, any contract of the Administration for research or development, or both, may provide that the United States will indemnify the contractor against either or both of the following, but only to the extent that they arise out of the direct performance of the contract and to the extent not compensated by insurance or otherwise:

"(1) Claims (including reasonable expenses of litigation or settlement) by third persons, including employees of the contractor, for death, bodily injury, or loss of or damage to property, from a risk that the contract defines as unusually hazardous.

"(2) Loss of or damage to property of the contractor from a risk that the contract defines as unusually hazardous.

"(b) A contract that provides for indemnification in accordance with subsection (a) must also provide for—

"(1) notice to the United States of any claim or suit against the contractor for death, bodily injury, or loss of or damage to property; and

"(2) control of or assistance in the defense by the United States, at its election, of that suit or claim.

"(c) No payment may be made under subsection (a) unless the Administrator, or his designee, certifies that the amount is just and reasonable.

"(d) Upon approval by the Administrator, payments under subsection (a) may be made from—

"(1) funds obligated for the performance of the contract concerned;

"(2) funds available for research or development, or both, and not otherwise obligated; or

"(3) funds appropriated for those payments."

SEC. 2. The Act of April 29, 1941, as amended (40 U.S.C. 270e), is amended (1) by striking out "or the Secretary of the Treasury" and inserting in lieu thereof "the Secretary of the Treasury or the Administrator of the National Aeronautics and Space Administration", and (2) by striking out "or Coast Guard" and inserting in lieu thereof "Coast Guard, or National Aeronautics and Space Administration".

SEC. 3. Section 2302 of title 10 of the United States Code is amended by striking out "or the Administrator of the National Aeronautics and Space Administration." and inserting in lieu thereof "or the Administrator or Deputy Administrator of the National Aeronautics and Space Administration."

MR. TEAGUE. Our first witness this morning is the Honorable James E. Webb, Administrator of NASA, and I believe you have with you Mr. John A. Johnson?

MR. WEBB. That is right, our General Counsel.

MR. TEAGUE. Will you proceed?

**STATEMENT OF HON. JAMES E. WEBB, ADMINISTRATOR, NASA,  
ACCOMPANIED BY JOHN A. JOHNSON, GENERAL COUNSEL, NASA**

Mr. WEBB. The bill before the committee, H.R. 7115, contains NASA's legislative recommendations for the current year, except, of course, those recommendations that will appear in the annual authorization and appropriation bills.

H.R. 7115 would accomplish the following objectives:

(1) It would repeal the statutory requirement for a Civilian-Military Liaison Committee.

(2) It would grant NASA statutory authority to indemnify contractors against unusually hazardous risks, to settle patent infringement claims, to waive performance and payment bonds in cost-type construction contracts, and to lease Government property for a non-monetary consideration. The military departments presently have statutory authority in each of these areas.

(3) It would clarify existing law in several respects.

The recommendations contained in H.R. 7115, with the exception of section 1(d) relating to the semiannual reporting requirement and section 3, a clarifying amendment, were before this committee last year in H.R. 12049, 86th Congress. As you know, H.R. 12049 passed the House on June 9, 1960. Hence, in the main, the authority we are now seeking in H.R. 7115 was acted on favorably last year by this committee and by the House. However, with respect to section 1(f) of H.R. 7115, which deals with the subject of indemnification and is identical to last year's indemnification request, we have some revisions to recommend to the committee.

With this brief introduction, I would like to turn to a discussion of each of the objectives sought by NASA under H.R. 7115.

**ELIMINATION OF THE CIVILIAN-MILITARY LIAISON COMMITTEE**

Section 1(b) of H.R. 7115 would repeal section 204 of the National Aeronautics and Space Act of 1958, thereby abolishing the Civilian-Military Liaison Committee. The effective functioning of the Aeronautics and Astronautics Coordinating Board removes any need for the Liaison Committee.

Section 204 of the 1958 act provided for a committee to be headed by a chairman appointed by the President and with additional members representing the Department of Defense and the military departments on the one hand and NASA on the other. Under the law, the Chairman is not an official of either NASA or the Department of Defense and has no duty other than to chair the Committee. The only statutory function assigned to the Committee is to provide a channel for advice, consultation, and the exchange of information between NASA and the Department of Defense. No planning, operating, or supervisory responsibilities have been vested in the Committee or its Chairman.

Experience has led both NASA and the Department of Defense to conclude that such an organization is not the most effective means of achieving coordination of their respective programs and activities. After much consideration of the problem by both agencies, we have established, by joint action, an Aeronautics and Astronautics Coordi-

nating Board which is performing a number of valuable functions, including all of the functions originally entrusted to the Civilian-Military Liaison Committee.

The Aeronautics and Astronautics Coordinating Board has proved more effective than the Liaison Committee because it is cochaired by the Deputy Administrator of NASA and the Director of Defense Research and Engineering of the Department of Defense and has additional members appointed jointly by the Administrator of NASA and the Department of Defense. By its terms of reference, the Board is responsible for facilitating (1) the planning of activities by NASA and the Department of Defense to avoid undesirable duplication and to achieve efficient utilization of available resources; (2) the coordination of activities in areas of common interest to NASA and the Department of Defense; (3) the identification of problems requiring solution by either NASA or the Department of Defense; and (4) the exchange of information between NASA and the Department of Defense. The Board carries out its functions largely through panels chaired by top management personnel of NASA and the Department of Defense. At present, panels have been established for the following areas: manned space flight; spacecraft; launch vehicles; space flight ground environment; supporting space research and technology; and aeronautics.

Existing legal authority has been found adequate for the establishment of the Aeronautics and Astronautics Coordinating Board by administrative means, and specific statutory authorization is not desired. The Secretary of Defense and I are in close personal touch on interagency issues, and we meet frequently. It is important that we retain maximum flexibility to establish whatever means prove most useful to effect prompt decisions as well as thoroughgoing coordination and liaison at all levels of our organization.

#### ADDITIONAL LEGAL AUTHORITY

Section 1(f) of H.R. 7115 contains the most significant grant of additional authority to NASA being requested in the bill. This subsection would add a new section 308 to the 1958 act which would provide NASA with authority to indemnify research and development contractors similar to that which has been available to the military for a number of years. We would like, however, to propose certain revisions to this section, as it presently appears in H.R. 7115, which changes, we feel, would significantly improve the bill. Of course, as a result of these revisions, section 1(f) would no longer be identical to the provisions of 10 U.S.C. 2354, which grants similar authority to the military departments. I would like to discuss section 1(f) and the revisions recommended by NASA in considerable detail.

As was explained to this committee last year, NASA requires indemnification authority for the same reasons that it was given to the military. For example, in the development of advanced methods of propulsion, NASA contractors and subcontractors may be confronted with risks of such a magnitude that only a small portion of the potential liability can be covered by available insurance. Therefore, such unusually hazardous risks must be borne in large part by industry since, without express statutory authority, NASA cannot indemnify its contractors to cover satisfactorily these kinds of risks



over and above the limited protection available through insurance. This lack of authority poses a serious problem for NASA which can only grow more intense as research and development into propulsion methods, fuels, launch vehicles, and similar work continues into the future. Moreover, in fields where both NASA and the military are placing large contracts, ordinarily with the same industry, NASA's lack of authority comparable to that possessed by the military departments creates difficulties and misunderstanding.

Turning now to the revisions which NASA proposes be made in section 1(f) of H.R. 7115, we have supplied the committee with a draft setting forth these revisions. Deletions from the present section 1(f) are indicated by brackets; the additions by underlining. Most of the revisions are modeled substantially after the indemnification provisions of the Atomic Energy Act (42 U.S.C. 2210).

The first revision consists of adding words to subsection (a) of the proposed indemnification provision to make it clear that not all contracts for research and development, but only those that involve risks of an unusually hazardous nature, are intended to be covered. Although we had interpreted subsection (a) of the earlier draft to be limited to such contracts, and the military departments have so interpreted and administered the provisions of 10 U.S.C. 2354, the addition of this new language would resolve any doubts that might exist.

The second change is found in subsection (a) (1), where you will see that the words "liability" and "to" have been added, and the words "claims" and "by" deleted. This revision is intended to make clear that this grant of legislative authority would not create rights and liabilities that would not otherwise exist but for the enactment of the proposed section 308 into law. Although the military departments do not interpret the provisions of 10 U.S.C. 2354 any differently, nevertheless, deletion of the words "claims by" and substitution of "liability to" would appear to make the intent of the bill clearer and, thus, to constitute a language improvement. In addition, we propose adding a new subsection (h) to the earlier draft which would specifically limit the effect of the proposed section 308 to providing indemnification to contractors and not creating any new rights in third persons.

The third revision further amends subsection (a) (1) to make it clear that, to the extent that liability to employees of contractors arises out of State or Federal workmen's compensation acts, the remedy provided in such statutes would be exclusive. Such liability would, therefore, be excluded from any indemnification coverage authorized under subsection (a) (1).

The fourth revision, which modifies subsection (b) (2), would limit the rights of the United States to participate in the defense of suits or claims against contractors to those suits or claims for which indemnification is provided. This would be consistent with existing practice in the case of suits and claims arising under Government contracts and avoids the incongruous result of the United States participating in litigation where the claims in question fall entirely within available insurance coverage.

The fifth revision relates to the procedures for making payments to contractors for claims arising out of incidents that fall within the indemnification coverage of NASA contracts. We propose deleting

subsection (d) in its entirety and substituting a new subsection. You will observe that this revised subsection would permit payment to be made from funds obligated for the performance of the contract concerned or from funds available for research and development, and not otherwise obligated, where the total amount of claims arising out of a single incident does not exceed \$100,000. However, in such cases, a full and complete report concerning the amount of claims and the basis for payment would be required to be made to this committee and to its counterpart in the Senate. The details of this procedure are spelled out in subsection (d) (2). With respect to claims totaling more than \$100,000, subsection (d) (1) would require a specific appropriation by the Congress before payments could be made.

We also recommend the addition of five new subsections. Subsection (e) is patterned generally after section 170b. of the Atomic Energy Act (42 U.S.C. 2210(b)). It would require contractors of NASA to acquire financial protection from private sources of such types and in such amounts as NASA would require. The amount of financial protection would be the maximum amount of insurance available from private sources, except that NASA could establish a lesser amount taking into consideration the cost and terms of private insurance. By adding this subsection to the bill, it would be made clear that NASA has no intention of acting as an insurer where commercial insurance is reasonably available. Although no different result has been intended under the earlier version of this indemnification provision, we feel it is desirable to make clear our intention in this manner.

The next new provision, subsection (f), is patterned after section 170d. of the Atomic Energy Act (42 U.S.C. 2210(d) and limits the total liability to be assumed by the Government to \$500 million, the same figure as appears in the Atomic Energy Act. The effect of subsection (f) would be not only to limit the potential liability of the Government in connection with any single incident but also to limit the liability to third parties of indemnified contractors and subcontractors.

Subsection (g) would require NASA to use the facilities and services of private insurance organizations to the maximum extent practicable in administering the provisions of section 308. This provision, too, is identical to its counterpart in the Atomic Energy Act.

Finally, we believe that a definition of "contractor" should be added to make it clear that indemnification coverage may be extended to subcontractors on the same basis and to the same extent that it is available to prime contractors. At the present time, the Department of the Air Force interprets and administers the provisions of 10 U.S.C. 2354 so as to embrace subcontractors. It is desirable to clarify this matter beyond doubt because subsection (f), which serves to limit the liability of "contractors," must be made clearly to apply to subcontractors as well if it is to have the effect intended.

In summary, the revisions we have proposed be made in the indemnification provisions of H.R. 7115 do not change the nature of the authority that we are requesting this year from last year's request. However, we feel that this revised indemnification proposal constitutes an improvement over the language in last year's bill.

I would like now to move on to three other areas where we are requesting legal authority comparable to that which the Congress has

already seen fit to vest in the military departments and on which the House of Representatives acted favorably last year.

Section 2 of H.R. 7115 would amend the so-called Miller Act (40 U.S.C. 270a-270e) to provide NASA with authority, in the case of cost-type construction contracts, to waive performance and payment bonds otherwise required of Government contractors on such work. The proposed amendment would give NASA authority to waive these bonds identical to that now available to the military departments and the Coast Guard under 40 U.S.C. 270e. This requested authority would have been useful, for example, in a cost-type contract that NASA made with a large responsible company calling for the construction of tracking facilities. Whereas a military department would have been able to waive performance and payment bonds under such a contract due to the express statutory authority available to it, NASA could not. In this case, the financial responsibility of the contractor and the form of contract involved would have assured ample protection for the laborers and materialmen who were intended to be protected by the Miller Act. Thus, if the requested authority had been available to NASA, the Government would have saved a sizable sum that would appear to have been a needless expense under the circumstances. Repetitions of this situation may be expected.

Section 1(a)(i) of H.R. 7115 would amend section 203(b) of the 1958 act to provide NASA with greater flexibility in the leasing of Government property under its jurisdiction. Unlike the military departments, NASA is presently required by law to make leases of Government property "for a money consideration only" (40 U.S.C. 303b). Instances have arisen where it would have been advantageous to the Government for NASA to have leased property for a use which would not interfere with NASA's mission in return for the rendering of certain valuable services by the lessee in connection with the leased property. The proposed use of the property by the lessee, however, would have made it uneconomical to pay a money consideration for its use, although the service to be performed by the lessee would have resulted in a net benefit to the Government. The proposed amendment follows the language of 10 U.S.C. 2667(b)(5) and would give NASA the authority now enjoyed by the military departments under that statutory provision to permit a lessee to undertake the maintenance, protection, repair, or restoration of leased property as part or all of the consideration for the lease.

Section 1(a)(ii) of the bill would amend section 203(b) of the 1958 act by adding a new paragraph granting NASA authority to settle claims against the Government for past infringement of patents arising out of its activities. The military departments now enjoy the authority to settle such claims without imposing upon the claimant the necessity of litigation (10 U.S.C. 2386). NASA has no comparable authority. Section 203(b)(3) of the 1958 act, authorizing the purchase of patent rights, cannot be utilized by NASA to effect a settlement for past infringement of a patent if no subsequent use of the patent is contemplated. Since its mission traverses a broad spectrum of technology involving innumerable areas in which patents are held by private parties, it is inevitable that claims for patent infringement will be asserted against NASA; and it is most desirable that NASA have adequate authority to settle such claims adminis-

tratively. The proposed amendment would provide authority identical to that presently available to the military departments.

#### CLARIFYING AND OTHER MINOR AMENDMENTS

Section 1(e) of H.R. 7115 would amend section 304(b) of the 1958 act to correct what appears to have been an unintentional omission. The proposed amendment adds the phrase "or designee thereof" after the reference to "the Administrator" in connection with authorizing access to restricted data relating to aeronautical and space activities on condition that such access is required in the performance of duty and so certified by the Administrator. The making of these certifications is a function which, in the interest of efficient administration, should be delegable by the Administrator.

Section 3 of the bill would amend title 10, United States Code, section 2302, to make it clear that the Deputy Administrator of NASA, like the Under Secretaries and Assistant Secretaries of the military departments, may perform certain nondelegable procurement functions under chapter 137 of title 10. Title 10, United States Code, section 2311 requires that certain determinations and decisions involved in the procurement process be performed by the head of an agency. At present, only the Administrator of NASA is specifically mentioned in the definition of "head of an agency" in title 10 United States Code, section 2302. NASA has construed section 202(b) of the 1958 act, which provides that the Deputy Administrator "shall perform such duties and exercise such powers as the Administrator may prescribe," as authorizing performance by the Deputy Administrator of any function vested by law in the Administrator, including functions which may not legally be delegated to subordinate personnel. Although this authority appears broad enough to include the performance by the Deputy Administrator of nondelegable functions under chapter 137 of title 10, it would be desirable to remove all doubt by amending the definition of "head of an agency" in title 10, United States Code, section 2302, to include the Deputy Administrator. Such an amendment would eliminate any possible misunderstanding of the Deputy Administrator's authority by contractors dealing with NASA.

Section 1(d) of the bill would amend section 206(a) of the 1958 act to require that NASA submit an annual report, in place of the present semiannual one, to the President for transmittal to the Congress. Enactment of this amendment would reduce expenditures slightly; but more importantly, it would provide Congress with a more meaningful report once a year. The present semiannual reports take a considerable amount of time and manpower to prepare and cover too short a period to reflect significant advances.

Mr. TEAGUE. Thank you, Mr. Administrator.

Are there questions by the members of the committee?

Mr. Anfuso.

Mr. ANFUSO. First of all, I wish to compliment you, Mr. Webb, on this very excellent statement and to congratulate your very able counsel, Mr. Johnson. I think he has shown great ability in developing these revisions.

All that you are seeking to do, as I understand, is to follow existing law followed by the Atomic Energy Commission and the Defense Department as to similar situations, is that correct?

Mr. WEBB. That is correct.

Mr. ANFUSO. In any respect, are you proposing anything new?

Mr. WEBB. In no respect are we suggesting anything different than the Defense Department now has, as modified by the experience of the Atomic Energy Commission. The basic authority sought is the same.

Mr. ANFUSO. Have these proposals caused any dispute with other agencies?

Mr. WEBB. I don't think so, Mr. Anfuso. There are, of course, varying opinions about exactly how such legislation is to be administered. There is a long line of precedent in these matters. We were relying largely on this long line of precedent as administered by the military to clarify the specific language, and we originally thought that the simplest thing to do was to have identical language in both cases, since we are dealing in many cases with the same contractors. However, we have found there are some questions about the broadness of the language. So we have suggested these amendments to pin the matter down and make it very clear.

I would like to add one last thing:

There are certain specific policy statements in this legislation that are not in the military legislation, namely, that we will utilize any commercially available insurance as the base before a Government assumption of indemnification of these hazardous risks.

Mr. ANFUSO. Is that an improvement?

Mr. WEBB. I believe it is.

Mr. ANFUSO. This further question of Mr. Ducander:

Has the Chairman appointed a Subcommittee on Patents?

Mr. DUCANDER. Yes.

Mr. ANFUSO. This subcommittee has not completed its report?

Mr. DUCANDER. No.

Mr. ANFUSO. What functions will this subcommittee have with respect to the proposals now made by Mr. Webb?

Mr. DUCANDER. None that are proposed by Mr. Webb. Last year the patent provisions were in the bill that passed the House. The bill that was sent up by the administration does not have any patent provisions. Therefore the committee appointed a special subcommittee under Mr. Daddario to look into the matter and report back to the full committee on any changes that should be made in the law. The subcommittee is working on that.

Mr. ANFUSO. There is no conflict as to any action that we may take with this subcommittee?

Mr. DUCANDER. No.

Mr. HECHLER. Mr. Webb, under the free enterprise system, private industry takes certain risks and frequently is able to achieve and receive profits as a result of taking those risks.

What concerns me about these proposals that you have made here is that in essence, you are putting in a floor to indemnify against losses. Would you also recommend that there be any kind of a ceiling so that unreasonable profits would not be reaped? As long as you are protecting them against losses, don't you think we ought to curb excessive profits at the same time?

Mr. WEBB. Mr. Hechler, actually what we are doing here is recognizing that in the enlarged program of NASA we are going to be doing more hazardous things. Larger rockets, such as Saturn and those to follow, Nova, are going to be very large vehicles, involving greater risks on launching than we have heretofore encountered. As you know, contractors are used in the launching process to some extent.

Further than that, we are engaging in the most advanced application of technology where there are extrahazardous risks.

Mr. HECHLER. Hazardous financially?

Mr. WEBB. Yes. The hazard does not relate to the profit of the company. It relates to the contractor's liability to third parties. The main purpose here is to avoid a situation in which a contractor, which should in the interest of the program take on a contract that has very large risks by virtue of the fact that a catastrophe of some kind would involve the general public and he would be subjected to very large claims, to put in the contract a provision that once he has taken all the insurance that he can get against that hazard, the Government will indemnify him against those catastrophic losses which would wipe him out otherwise completely.

Since the Morrow Board in 1925 or 1926, there have been many, many items of legislation. There has been a long series of precedents, and by and large I think the profits of industry under the present system of procurement are very definitely limited.

Mr. HECHLER. I think with respect to such things as solid fuels, now that we are getting into that phase of development, and in other phases of the space program, I certainly know you share the feeling that we don't want to create any kind of "gravity train" here.

Mr. WEBB. No, nor do we want unconscionable profits by anyone working for the Government.

My previous examination of these questions led me to feel there were very strong controls on the possibility of unreasonable profits.

Have there been any provisions in those changes?

Mr. Johnson tells me that the Renegotiation Act is an overall limiting feature of our contracts over and above the specific limitations that go into the contract at the time it is written.

Mr. HECHLER. I hope NASA will give continuing attention to this problem.

Mr. WEBB. I will look into that a little more closely, Mr. Hechler, to come up to date on it.

Mr. HECHLER. Shifting to the earlier part of your testimony, how many meetings has the Aeronautics and Astronautics Coordinating Board actually held?

Mr. WEBB. They have had a total of eight meetings since the organizational meeting in June of 1960.

I think you might want to bear in mind that these meetings take place about once a month. Sometimes, perhaps, there is an interval as much as 6 weeks for the large meeting. However, the members of the panels are almost constantly at work on the problems that are within their jurisdiction and assigned to them.

Mr. HECHLER. You conclude that this Board has been successful and has been able to remove some of the difficulties experienced by CMLC.

Mr. WEBB. I do. I have met personally with Mr. Brown and Dr. Dryden and other principals to discuss the work of this Board and satisfied myself it is a functioning instrument of coordination and control.

I would like to say that in another part of my statement I mentioned the fact that Mr. McNamara and I have been in the closest working relationship on our common problems. In this atmosphere all of these mechanisms seem to work a little better.

Mr. HECHLER. Does the Coordinating Board report to the President?

Mr. WEBB. No, it is set up by our two agencies, NASA and the Department of Defense. In each case the principal person involved with the work works as cochairman, Dr. Dryden or Dr. Brown. At one meeting Dr. Dryden presides and at the other Dr. Brown. Each of these men has broad authority in his own agency, which means the decisions they reach get implemented.

Mr. BASS. Mr. Webb, does the Defense Department and the three military services—Air Force, Navy, and Army—have this same authority to indemnify contractors which you are requesting for NASA?

Mr. WEBB. I am not sure what the Defense Department has, but the services who do the procurement do have this identical language, except the amendments I am suggesting modify and clarify the language. They have modified and clarified their operation under it over a long period under this general language. But our legislation spells out some of the things that we will do under the legislation, and I think it is a clearer piece of legislation on its face.

Mr. BASS. In what way does the authority that you are requesting differ from the authority which the three services now actually exert?

Mr. WEBB. Basically, there is no difference.

Mr. BASS. How about the Atomic Energy Commission?

Mr. WEBB. Their situation is somewhat different in that they are concerned, of course, primarily with one type of hazard, which is related to radioactive materials. They have some different provisions, but they do have basically the same authority, spelled out in a different way and more limited than we have here. I think that is a fair statement, isn't it, John—more limited in substance but with respect to that substance it is the same basically.

Mr. BASS. Thank you, Mr. Chairman.

Mr. TEAGUE. Are there further questions by members of the committee?

Mr. CORMAN.

Mr. CORMAN. On page 11, subsection (g), you indicate that NASA is to use the services of private insurance organizations.

Would you require the private companies to use the private insurance agencies or will NASA use the coverage?

Mr. WEBB. No, they will obtain their own insurance through private sources.

Mr. CORMAN. They would be self-insurers; is that correct?

Mr. WEBB. That is right.

I would like to say there are some occasions where the company itself may need to be the self-insurer or want to be the self-insurer. The general rule is as you have stated.

Mr. CORMAN. The Federal Government would never be——

Mr. WEBB. That is right.

Mr. TEAGUE. Are there any other questions?

Mr. Roudebush.

Mr. ROUDEBUSH. I would like to return to the field of hazardous nuclear risks which must be borne by industry under the present statutes.

Can you give us any examples where this has delayed contracts or caused hardships on the part of NASA?

Mr. WEBB. No, there have been none up to this time.

The contractors have been unhappy about this provision. We have been concerned about giving them contracts to do things which involve some risk, even though it may be remote, of a catastrophe that could happen that would wipe the company out. This is the kind of risk that the corporate officials feel concerned about taking. Up to now there has been no case where a contractor has refused to take a contract on account of the lack of this ability.

I might point out we did earlier in NASA, before I arrived, put in some of these contracts an indemnification clause, subject to appropriations by the Congress. This was discontinued because it appeared to have some substance when it didn't have any.

There is a limitation here in that the maximum amount we can pay out in any single incident is \$100,000. You still have to come back to Congress and have an expression by the Congress that this is a fair and proper thing for the Government to do.

Mr. ROUDEBUSH. Do you feel this problem will become more intense as we advance in the field?

Mr. WEBB. Yes. I think the quality of the extrahazardous risk will become very much greater, although in each case the safety features which will be inserted will make the risk remote.

Mr. HECHLER. I was wondering, if no contractor had refused on account of existing legislation, on account of the existing risks, who asked for these amendments?

Mr. WEBB. We are asking for them in NASA because we feel that these risks are there. We feel that they are inherent in the program which the Government is conducting. We think insurance is not available for a very large catastrophic risk. We feel the general public itself needs this protection.

Mr. HECHLER. In other words, private industry has not itself suggested that this be done?

Mr. WEBB. Yes, private industry has been very unhappy that the Defense Department could protect them from this kind of catastrophic risk but NASA has not been able to do so.

Mr. TEAGUE. Are there any other questions from members of the committee?

Mr. Webb, I believe Mr. Hechler asked whether there was any opposition to these amendments within the Government.

Mr. WEBB. None in the Government.

Mr. TEAGUE. You are sure?

Mr. WEBB. There are a few differences of opinion about precise items in this legislation, but I know of no real opposition.

Mr. TEAGUE. I understand we will probably have some tomorrow by the General Accounting Office that might be in opposition to——



Mr. WEBB. I haven't been aware of that.

Have you know about this, John?

Mr. JOHNSON. No, sir; I know in the past they have submitted some memorandums to the committee dealing with certain individual aspects of previous bills. They have not commented on the current proposal to us. I did not understand that they were in opposition to it.

Mr. DUCANDER. They will appear tomorrow, Mr. Chairman, to ask for clarifying language in the matter of indemnification. The General Counsel will be here tomorrow morning.

Mr. TEAGUE. What has been the history of this provision in the Atomic Energy Commission?

Mr. JOHNSON. Mr. Chairman, so far as I know, the Atomic Energy Commission has not yet had occasion to pay out sums under the indemnity authority. I am not positive about that, but that is my understanding.

On the other hand, they have been using the authority quite widely in their agreements with licensees and contractors.

Incidentally, NASA itself is a licensee of the Atomic Energy Commission. We have an indemnity agreement with the Atomic Energy Commission, and insofar as this subject matter is concerned, we are able to provide indemnification coverage to our contractors by utilizing the AEC's existing authority.

Mr. WEBB. I would like to say one thing to be completely responsive to your question, as I have thought about it.

While I have known of no opposition in the Government itself, there have been a number of questions raised, some of them before the Senate committee, with respect to the application of this provision to cover risks beyond the territorial borders of the United States. There have been some questions as to whether this was a wise policy. Those questions have been answered on the record over there. We believe that this risk should also be covered in the legislation. But we are not prepared, in view of the remoteness of the risk at this time, certainly, to make a great issue over it.

Mr. TEAGUE. Any other questions?

Mr. Administrator, Mr. McCormack has some questions, and he will be back in a moment.

We had bill H.R. 12049 last year. We come back this year with H.R. 7115. There are a considerable number of amendments of considerable magnitude. I wonder if you have gone through this thing closely enough so that you won't be back next year with another bill changing many of these same provisions.

Mr. WEBB. Mr. Chairman, I think you recognize that with the very large increase in the program this year and the very large amount of work that your committee has to undertake with us to see that this program is given adequate study and consideration of decisions made by the Nation, as the President suggested was the proper process, we have tried to eliminate any items that would increase that workload this year.

The patent provisions that have been referred to here were in that category. We have found, through another year of operation, that a good many matters that were of some concern to industry, for in-

stance in the field of patents, have been so administered that some of their concerns are no longer so acute.

In essence, we have not presented you a bill that incorporates every item that would clear up the legislative docket so far as we believe it should be cleared up, but rather have presented those things which we thought were essential to go forward.

I do not think we will have additional legislation in this session of Congress along this line, but I think it is entirely possible in the next session there will be some additional consideration of the matter.

Mr. TEAGUE. Mr. McCormack.

Mr. McCORMACK. Mr. Webb, I noticed that you asked for the repeal of the statutory requirement for the Civilian-Military Liaison Committee.

You don't offer anything in dispute therefor?

Mr. WEBB. That is right, Mr. McCormack.

I think it is fair to say that when the Space Act was passed, there was a provision for a Space Council, and there was a provision for the Civilian-Military Liaison Committee. The Space Council was not in effective operation at the time this administration took office, nor was the Civilian-Military Liaison Committee. In the meantime, last September, the Department of Defense and the Administrator of NASA brought into being by administrative action the Aeronautics and Astronautics Coordinating Board. In other words, they looked at the problem of how they would work together and brought into being an organization that would carry on all that was needed in this field. So when this administration took office, Secretary of Defense McNamara and I found that there was in being an effective organization doing the work. It seemed to us logical that the previous legislation requiring the Civilian-Military Liaison Committee should be repealed because we had an effective substitute for it.

Mr. McCORMACK. Was it not established by administrative decree?

Mr. WEBB. Yes, sir.

Mr. McCORMACK. We know the history of the Civilian-Military Liaison Committee under Mr. Holaday and his embarrassing experiences. You are aware of that?

Mr. WEBB. Yes, sir; I am aware of some of it, and aware of the fact that it had not met for sometime, and no chairman had been found to replace Mr. Holaday.

Mr. McCORMACK. You know, we instituted the Aeronautics and Astronautics Coordinating Board?

Mr. WEBB. Yes, sir.

Mr. McCORMACK. What is the objection of that being incorporated in the bill?

Mr. WEBB. Mr. McCormack, we have here a very complex on-going stream of activity that involves the military departments, the Department of Defense, the NASA, and also the Atomic Energy Commission in connection with the nuclear rocket. It has seemed to those of us who have studied this question that with responsible top-level attention by Dr. Seaborg, Mr. McNamara, and myself, with the administrative arrangements we have in being and with the flexibility to change those as required, we would be better off than to freeze any particular administrative arrangement into law. We find that these things do change as we go along. We have a new change in the pro-

gram now, in that the Department of Defense will do the solid propellant venture of Nova. These things change as time goes on. And the ultimate language, the ultimate recourse for settling any controversy that cannot be settled at the lower levels is the President even under the legislation which had the Civilian-Military Liaison Committee in being; the ultimate resort is to the President. We still have that resort at all times. It seemed to us if we could have flexibility to work out these matters, it would be better than to have legislation for the particular arrangement we have in being at the moment.

Mr. McCORMACK. Even with legislation they nullify it to a great extent. How do we know that without legislation even the ineffective efforts of Congress to achieve direct action will be effectively carried out?

Mr. WEBB. We have a very effective monitoring system, Mr. McCormack, I believe, in this committee and the committee in the Senate. I certainly haven't found that the staff of this committee was anything but diligent in keeping up with what was going on. I believe you will find that these arrangements are working effectively, and I think you will know if they go wrong.

Mr. McCORMACK. Of course, some of us have experience with coordination at times between the executive and the legislative. Sometimes it is pleasant and sometimes it is not.

Do you see any objections to that language being put in the bill?

Mr. WEBB. Yes, sir; I would prefer it not be put in.

Mr. McCORMACK. You use the word "prefer." Do you object to it?

Mr. WEBB. I do not think it is necessary.

Mr. McCORMACK. My question is: Would you object to it? You say you think it would not be necessary.

Mr. WEBB. I would recommend against it. As to whether I would object—

Mr. McCORMACK. If the committee puts it in, you could live with it?

Mr. WEBB. I think we might have to come back to ask you for modifications from time to time, and I think it is an unnecessary requirement on your time and mine.

Mr. McCORMACK. Isn't that life? We find we have to modify from time to time? We meet with certain conditions as time passes and we have to accommodate ourselves to them.

Mr. WEBB. That is right. You and I both have had experience in the foreign affairs field on how we get things done and the relations between departments. It doesn't seem logical to have a \$20,000 chairman of a liaison committee enacted into law for me and Mr. McNamara to work together. I think it is a fifth wheel and in some ways seems to provide for liaison without any real effective way of policing it.

Mr. McCORMACK. Of course, the original NASA team didn't like the Civilian-Military Liaison Committee, did it?

Mr. WEBB. I don't know about that.

Mr. McCORMACK. Come to section 204. I think I understand your intentions. You want complete flexibility in this field?

Mr. WEBB. I want to get the work done.

Mr. McCORMACK. I am not impugning anything you say at all. We might disagree. I don't say we do, and I'm not impugning anyone's motives.

Section 204 was in last year's bill. The committee has very strong feelings on that, exceedingly strong feelings. As a matter of fact, I proposed the amendment. It is on page 6 of the comparative analysis, at the bottom.

Mr. WEBB. I am not sure I understand your question.

Mr. McCORMACK. What are your views on that?

Mr. WEBB. Page 6 of the comparative amendments? Or are you referring—

Mr. McCORMACK. H.R. 12049 as passed by the House in the 86th Congress.

Mr. WEBB. Section 204(a) you are not referring to; it is 204(b), is that right?

Mr. McCORMACK (reading):

The Department of Defense shall undertake such activities in space and such research and development connected therewith as may be necessary for the defense of the United States.

Mr. WEBB. I agree with that completely. That is in effect at this time.

Mr. McCORMACK. Is that—

Mr. WEBB. Mr. Johnson says there is a technical point there. Would you mind hearing him on that?

Mr. McCORMACK. No.

Mr. JOHNSON. You may recall that last year the bill submitted by the Administration proposed a revision of section 102; 102(b) is the portion of the National Aeronautics and Space Act of 1958 that spells out the responsibility of the Department of Defense in aeronautical and space activities. That all would have been eliminated from the act; and therefore my recollection of the history of last year's bill is that that was one of the provisions that came in for the purpose of taking care of the subject matter being omitted from section 102(b). This year the Administration is not proposing any change in section 102(b). So the provision as originally written by the Congress in 1958 concerning the responsibilities of the Department of Defense remains untouched. Therefore, there is no occasion to be putting the new section 204 in.

Mr. McCORMACK. Unless the committee feels this provision might be a better one than what is in the law now, 102(b).

Mr. JOHNSON. Yes, sir.

I am explaining the history of it—why we did not make a proposal.

Mr. McCORMACK. You refresh my memory on that.

In other words, if the committee decided to put in this in lieu of 102(b), would there be any objection?

Mr. WEBB. I don't think we would, Mr. McCormack.

I am looking at the fact that 102(b) does have a rather long paragraph here. I wanted to see what else was in it. Would you mind if I comment on each sentence in it?

Mr. McCORMACK. Don't commit yourself, now. You have my thought.

Mr. WEBB. Generally, I am in agreement with this statement of policy and how it goes into the law is a question that might be looked at if it is already in the law.

Mr. McCORMACK. That is all.

Mr. TEAGUE. Mr. Fulton.

Mr. FULTON. I would join with the majority leader on his questions and on his approach. I think it is a good approach.

In section 204 of the act of 1958, when it provided for the Committee to be headed by a Chairman appointed by the President, with additional members representing the Department of Defense and the military departments, on the one hand, and NASA, on the other, I am sure we on the committee felt that we were trying to establish good liaison between the DOD and NASA.

There is one point I think should be brought out and that is, the Chairman appointed by the President has the power to help prevent overlapping and duplication. Likewise, he can clear up jurisdictional matters that cannot quickly be made clear by the members of the respective agencies.

I can see your point. Maybe it might be a saving to eliminate the \$20,000-a-year salary of the CMLC Chairman. But when we look at the elimination of duplication, we can look on page 4 of your statement and read:

By its terms of reference, the Board is responsible for facilitating (1) the planning of activities by NASA and the Department of Defense to avoid undesirable duplication and to achieve efficient utilization of available resources; (2) the coordination of activities in areas of common interest to NASA and the Department of Defense; (3) the identification of problems requiring solution by either NASA or the Department of Defense; and (4) the exchange of information between NASA and the Department of Defense.

Isn't there a gray area between NASA, on the civilian side, and the DOD, on the military side, where you can't really tell what it is, whether it is a civilian activity in space or a military activity in space?

When we first created this statutory authority, we wanted to make sure that the civilian and the military activities were kept informed on the most important research developments contributing to each agencies' programs. We, under no circumstances, wanted the DOD people to be held back by a decision of ours if they felt it was necessary, in a certain field, to have a program for the whole United States.

Would you comment on those points in relation to your recommendations here? There is no doubt the committee, under the leadership of Mr. McCormack, then had a strong desire to make sure the security of the United States was preserved through the Department of Defense, but likewise to keep a field that was for research and development and exploration for the benefit and progress of science, a civilian one.

Mr. WEBB. Yes, I would be glad to comment, Mr. Fulton.

No. 1, with respect to section 204(b), which stated the actual responsibilities of the Civilian-Military Liaison Committee, it states here:

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, shall keep each other currently and fully informed with respect to such activities.

That, basically, is the duty of the Chairman, to see that this consultation takes place.

We have found that to have a person not in the line of authority in either agency responsible for such a function is not the most effective way to carry it out.

With respect to the other matter you raised, namely, the effort to compartmentalize and narrow the areas as between civilian and military, there are some problems that perhaps you best solve by ignoring. At the moment we are working on a national space effort in which we have looked at the resources of the country both in the Department of Defense and in NASA and indeed also in the Atomic Energy Commission, and instead of trying to precisely determine exactly what is military, exactly what is civilian, have said that the main thrust of a large number of programs is civilian, they are in NASA; that there is very great competence in the solid propellant fuel rocket technology in the Department of Defense, whereas, that no one can be certain precisely what military requirement may result from the possession of a very large, solid-propelled rocket or indeed a very large liquid-propelled rocket. And since the Air Force has this tremendous capability developed largely through Minuteman, it is logical that this particular part of the NASA space effort should be done in the Air Force where the capability rests.

With respect to the nuclear rocket, we have looked at the atomic nuclear capability of the Atomic Energy Commission, have looked at the capability of NASA in the engine field, have worked out a joint office, as you well know, which is managing the totality of this effort by drawing on the resources.

I think the 2½ years experience with NASA and the splitting off from the military departments of some of these resources, such as those run by Dr. von Braun, indicates the more effective work can be done by determining what needs to be done and then finding the best place to get it done than by an effort to precisely draw the jurisdictional line.

Maybe at some time in the future we will need to do more along that line, but at the moment I have found no real difficulty in planning and presenting the main new program that the President is recommending to the Congress.

Mr. FULTON. What arrangement would you suggest administratively to establish a means of monitoring both the Department of Defense and NASA to make sure there is no overlapping and duplication? For example, in the life sciences you are not working on the same—

Mr. WEBB. I think, first of all, your reliance must be on a well-managed executive branch under the direction of the President. I think you have a secondary area where these matters are explored under the direction of the Vice President in the Space Council. I think, thirdly, you have each of these programs presented to the Congress every year in considerable detail, and the basic principle being followed in connection with the life sciences is a very good illustration. Here the Department of Defense has a very great capability in the field of life sciences, particularly with respect to manned flight. But, nevertheless, NASA has the mission responsibility for manned flight in most of its aspects at this time. Therefore, we are not du-

plicating what the military has, but we are creating a sufficient capability in NASA so that this organization can discharge its responsibility for the accomplishment of the mission which has been assigned to it. After all, if we are to ask the Department of Defense to do work for us or a contractor to do work for us or a university—I was yesterday at Notre Dame and looked at the germ-free animal research there. Whether it is university or private or industrial contractor or the Department of Defense, we must write the contracts. We must see that we get our money's worth. We must see that the results fit into the accomplishment of the mission.

There is no way that I have found that you could delegate completely and fully a major segment of a mission responsibility to some other organization and then have it interface properly with all the other requirements to accomplish the mission.

Mr. FULTON. In your comment you do not mean the Space Council has any administrative authority?

Mr. WEBB. That is right.

Mr. FULTON. It is recommendatory?

Mr. WEBB. That is right.

Mr. FULTON. On page 5 of your statement you say:

Existing legal authority has been found adequate for the establishment of the Aeronautics and Astronautics Coordinating Board by administrative means, and specific statutory authorization is not desired.

My question is along the lines that Congressman McCormack has been developing.

You were simply stating there that through the decisions of the DOD and NASA administrative authorities a working method of correlation and liaison has been worked out.

Why don't we codify that for you, without changing it too much, but nevertheless adding on a few of the jobs that the old committee had been given and specifically instruct you to do those things that are contained on page 4, beginning with (1)?

Mr. WEBB. First of all, the situation will change. It has changed in the past. And I think your main reliance is on the responsibility of persons, like Mr. McNamara and myself, to furnish the leadership to get the work done.

Further, I think you will find that as you monitor the work of these agencies and this organization you will be able to tell quite easily whether or not there is an effective on-going, working relationship. I think if you try to foresee all difficulties, you tend to freeze things in such a way as to make it more difficult to accomplish the work.

Mr. TEAGUE. Are there other questions by the members of the committee?

Mr. ANFUSO. Mr. Webb, do you feel that because of the efficient functioning of the Aeronautics and Astronautics Coordinating Board that section 204 (b) is unnecessary?

Mr. WEBB. That is right. I feel, further, Mr. Anfuso, any time there is a need in this Coordinating Board for change, Mr. McNamara and I will make that change.

Mr. HECHLER. In the very last sentence of your statement, Mr. Administrator, you said, and I think properly so, that the semiannual reports take too much time in manpower to prepare.

I am certain, in fact—I am very confident that you will report significant advances within 6 months, in any event?

Mr. WEBB. Absolutely. We are entering a new period. As a matter of fact, tomorrow we are going to have a full report by all the people, including Commander Shepard, in the MR-3 flight. This is going to be in a scientific meeting sponsored by the National Institutes of Health, the National Academy of Sciences, and NASA. It will be held in the State Department auditorium. And the press will be there; television, if they want it. So we are entering a period when in each of these significant events we are going to report in a timely way for the world not only to see the event take place but also to see the results that were accomplished.

Mr. HECHLER. There is no implication that you won't have significant advances not only every 6 months but every day, every week, and every month.

Mr. WEBB. That is right. There will be a continual stream of reporting, and I hope—

(Discussion off the record.)

Mr. McCORMACK. We have now—pursuing the unobjected questions that I did ask about section 203—the Aeronautics and Astronautics Coordinating Board. The Civilian-Military Liaison Committee still exists in law, doesn't it?

Mr. WEBB. Yes, sir.

Mr. McCORMACK. It is in existence?

Mr. WEBB. No, sir.

Mr. McCORMACK. The statute says, "There shall be."

Mr. WEBB. The previous President did not appoint a replacement for the former Chairman, nor has this President.

Mr. McCORMACK. You have a Board administratively appointed?

Mr. WEBB. That is right, by agreement between the Secretary of Defense and myself.

Mr. McCORMACK. I was just curious.

Mr. TEAGUE. The committee stands adjourned until tomorrow morning.

(Whereupon, at 11:10 a.m., the committee adjourned, to reconvene at 10 a.m., Tuesday, June 6, 1961.)



# TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

TUESDAY, JUNE 6, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
*Washington, D.C.*

The committee met at 10 a.m., pursuant to adjournment, in room 214-B, New House Office Building, Hon. Overton Brooks (chairman) presiding.

The CHAIRMAN. The committee will come to order.

This morning we continue the hearings on H.R. 7115, amendments to the Space Act.

We have as the first witness Mr. John A. Johnson, General Counsel, National Aeronautics and Space Administration.

We have a second witness, Mr. Robert Keller, General Counsel, General Accounting Office.

We will take them up in the order in which listed here. Mr. John A. Johnson.

It is suggested that we have as the first witness, Mr. Robert Keller, of the General Accounting Office. Will you step forward, sir, and have a seat?

You have someone with you. For the purpose of the record, will you give his name and title?

Mr. KELLER. I am Mr. Robert Keller, General Counsel of the General Accounting Office. With me is Mr. Wayne Smith, who is an attorney in the office of the General Counsel of the General Accounting Office.

The CHAIRMAN. Do you have a prepared statement?

Mr. KELLER. Yes, sir; I do, Mr. Chairman.

The CHAIRMAN. Will you proceed with it?

Mr. McCORMACK. I might say, Mr. Chairman, that Mr. Keller is one of our dedicated public officials, a man who has the profound respect and admiration of the Congress. He has been before many committees. He has throughout the years rendered invaluable service to our Government. I know, in all modesty, he would not want me to say that, but I welcome this opportunity.

Mr. KELLER. Thank you very much.

Mr. RIEHLMAN. I concur in the majority leader's statement. It has been my privilege, during the past 14 years that I have served here, to have many contacts with Mr. Keller and his department. I concur in what the majority leader has to say about his service, interest, and dedication to good government.

The CHAIRMAN. That just about makes it unanimous.

Mr. KELLER. Thank you Mr. Riehlman and you, Mr. Chairman.

The CHAIRMAN. We are happy to have you, sir.  
Will you proceed?

Mr. KELLER. If I may, Mr. Chairman, I would like to proceed with my prepared statement, which is not too long, and then we will be glad to answer any questions.

**STATEMENT OF ROBERT KELLER, GENERAL COUNSEL, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY WAYNE SMITH, ATTORNEY, GENERAL COUNSEL'S OFFICE, GENERAL ACCOUNTING OFFICE**

Mr. KELLER. As you know, Mr. Chairman, we are appearing at your request to discuss the indemnification provisions of H.R. 7115, 87th Congress, which are presently under consideration by your committee.

Section 1(f) of H.R. 7115 would amend title III of the National Aeronautics and Space Act of 1958 by providing a new section 308 entitled "Indemnification." The language of proposed section is identical to the language of subsection (15) of H.R. 12049, 86th Congress, which was favorably reported by your committee last year and passed by the House on June 9, 1960. In a report to your committee of March 29, 1960, on H.R. 9675, 86th Congress, a predecessor bill to H.R. 12049, the Comptroller General made certain comments with respect to the indemnification provisions. These provisions were identical to those included in H.R. 12049.

The language of section 1(f) of H.R. 7115 is almost identical with that of 10 U.S.C. 2354 granting indemnification authority to the military departments. The legislative history of the provisions of 10 U.S.C. 2354 which are derived from Public Law 557 approved July 16, 1952, 66 Stat. 726 (5 U.S.C. 1952 ed., 235f, 475k, and 628f), discloses a congressional intention and purpose to unify the procedures of all components of the Department of Defense in the handling of indemnification under research and development contracts. The legislation grew out of representations by the military departments that considerable difficulty had been experienced in obtaining responsible contractors in cases where the work involved unusually hazardous risks and the possibility that disastrous incidents might occur resulting in huge liability claims and possible bankruptcy; that in some instances there had been no insurance coverage available and, in others, the exorbitant premiums charged had made coverage prohibitive.

Last year in making our report to your committee we received advice from the Office of the Secretary of Defense that uniform procedures prescribing the policies and criteria and the contract provisions for utilization of the authority granted by 10 U.S.C. 2354 have not been adopted by the Department. Furthermore, the statutory provisions are not as clear as they might be, which we understand has given rise to some uncertainty as to the coverage and the extent of obligation intended.

Under subsection (a) of section 308, as under 10 U.S.C. 2354, coverage is authorized for research and development contracts, and the clause "but only to the extent they arise out of the direct performance of the contract" indicates that a limitation on the coverage authorized is intended. However, there could be a question as to whether the language is intended to include "product liability" arising

after completion of a contract covering the initial research and development of an item. It seems clear the language does not include subsequent production contracts of the item although the same or similar "unusually hazardous" risks might be involved. On the other hand, the language could reasonably be construed as authorizing indemnification for a liability which may arise long after the research and development contract has ended, that is, where the liability is attributed to an act or omission which may have occurred during the direct performance of the research and development contract, such as a latent defect in an item delivered thereunder. In addition, the provisions of the bill do not specify any limits of liability or limitations of time for the filing of claims, giving rise to the further question of whether claims barred by State statutes of limitations may be administratively considered for settlement thereafter. It is suggested that consideration be given to specifying that liability will be limited to that determined in accordance with the law of the place where the incident occurred, thereby making it clear that applicable local statutory limitations relating to the amounts of recovery in individual cases and limitations as to the time for the filing of claims or bringing suits will be applicable. In addition, it is suggested the word "contractor" be defined, expressly stating whether major subcontractors and their various tier subcontractors may be covered. Also, it is suggested that consideration be given to placing a limitation on the aggregate amount of indemnification to be provided by the Government. This was done in the case of the Atomic Energy Commission. (See 42 U.S.C. 2210, subsec. (c) (d) (e).)

Your committee also may wish to give consideration as to placing a limit on the amount of a claim which may be settled administratively without a prior determination of liability by a court of competent jurisdiction, or possibly concurrence by the Attorney General.

The provisions of 10 U.S.C. 2354 do not specifically cover the question of indemnification against damages or losses resulting from the negligent acts of the contractor and its employees. We understand that some indemnification provisions which have been utilized by the military departments have expressly excluded liabilities which result from willful misconduct or lack of good faith on the part of the contractors, directors, officers, managers, superintendents, or other equivalent representatives, thereby implying that liabilities resulting from the negligent acts or omissions of the contractor and its employees are covered.

The committee may wish to consider if there should be indemnification in all cases whether or not there is negligence on the part of the contractor. We recognize that due to the nature of the work where indemnification would be provided complete coverage may be necessary.

It is understood that revisions of the indemnification provisions have been submitted to your committee by NASA. We have had an opportunity to examine these revisions and offer the following comments:

The suggested revisions to subsection (a) of section 308 would restrict the use of the indemnification authority to research and development contracts "the performance of which involves a risk of an unusually hazardous nature." The authority so granted would be

permissive as to such contract and we believe the quoted language would make it quite clear that only those research and development contracts involving unusually hazardous risks may include the proposed indemnification provisions. We believe this to be a desirable clarification of the proposed contract coverage.

Subsection (a) of the revisions would also change the language "to the extent not compensated by insurance or otherwise" to read "to the extent not covered by the financial protection required under subsection (e)": Under subsection (e) of the revisions each contractor, including any tier subcontractor, under the definition of "contractor" contained in subsection (i) of the revisions, would be required to provide financial protection to the maximum amount of insurance available from private sources except that a lesser amount might be provided as determined by the administration taking into consideration the cost and terms of private insurance. The term "financial protection" is defined by this subsection to—

include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures.

It appears that these provisions would permit wide latitude in the selection of appropriate financial protection by the contractor and would also permit Government self-insurance by means of indemnification agreements to the extent financial protection is not available to or is not required of the contractor. With particular reference to the amount of financial protection required of the contractor which apparently would be fixed by this subsection as "the maximum amount of insurance available from private sources," the committee may wish to give consideration to modifying this subsection so as to provide for determination by the administration of the amount of private source financial protection required of the contractor to be based on a consideration of all the facts and circumstances pertaining to the particular contractual activity rather than primarily on the cost and terms of available private insurance. This would permit a greater flexibility in dealing with both contractors and subcontractors. See the provisions applicable to the Atomic Energy Commission under 42 U.S.C. 2210(b) and 2310(d).

Under subsection (a) (1) of the revisions, the language would be changed to read "Liability (including reasonable expenses of litigation or settlement) to third persons" instead of "Claims (including reasonable expenses of litigation or settlement) by third persons" but the manner in which such liability would be determined is not specified. We believe it would be desirable that the basis for determining liability be spelled out in the bill. As previously indicated, consideration might be given to specifying that such liability will be limited to that determined in accordance with the law of the place where the incident occurred, thereby making applicable local statutory limitations relating to the amounts of recovery in individual cases and fixing the period for filing claims or bringing suits, and to placing a limit on administrative settlements without a prior court determination of liability, or concurrence by the Attorney General.

The revisions would also strike the language of subsection (a) (1) reading:

including employees of the contractor—  
and would substitute—

except liability under State or Federal workmen's compensation acts to employees of the contractor employed at the site of and in connection with the contract for which indemnification is granted.

This would apparently exclude indemnification for liability of the contractor to its employees to the extent covered by State and Federal compensation acts, but would not exclude any other liability to such employees. This appears to be a desirable clarification.

The proposed revisions would substitute a new subsection (d) for that contained in the bill relating to the availability of funds from which payments may be made. It is provided by the revised subsection (d) that where the total amount of claims arising out of a single incident and certified under subsection (c) exceeds \$100,000 "payments may be made from funds specifically appropriated therefor" and that if such amount does not exceed \$100,000—

payments may be made from (i) funds obligated for the performance of the contract concerned, or (ii) funds available for research or development, or both, and not otherwise obligated, provided that no payment shall be made until the expiration of 30 calendar days of a regular session of Congress after the Administrator or his designee has transmitted to the Committee on Science and Astronautics of the House of Representatives and to the Committee on Aeronautical and Space Sciences of the Senate a full and complete report concerning the amount and the basis for payment.

The Administration would be authorized to make indemnification payments from appropriated funds within what seems to be a reasonable limit and all indemnification payments under the bill would be subject to review by the appropriate committees of the Congress. This revision we feel would enable the Congress to have current knowledge of the expenditure of funds under the indemnification authority.

Subsection (f) of the revisions would provide a limit of \$500 million on the aggregate liability for a single incident of a contractor indemnified, together with the amount of financial protection required of the contractor pursuant to subsection (e), and would provide for application to appropriate district courts of the United States for such orders as might be necessary for enforcing this limitation. The specified limit and the prescribed method of enforcement are the same as provided under the indemnification provisions applicable to the Atomic Energy Commission, 42 U.S.C. 2210(e). The specification of a limit as to the maximum amount for which the United States may be obligated for a single incident is desirable.

Subsection (g) contains provisions requiring the use of facilities and services of private insurance organizations to the maximum extent practicable in administering the proposed indemnification section and would authorize contracts by the Administration for such services. These provisions are almost identical with the provisions applicable to the indemnification authority granted the Atomic Energy Commission, 42 U.S.C. 2210(g). It is suggested that consideration might

be given to the advisability of making it permissive for NASA to use the facilities and services of private insurance organizations, rather than to the maximum extent practicable. The provisions of this subsection authorizing contracts with private insurance organizations, without regard to the provisions of 41 U.S.C. 5, and providing for advance payments seem unnecessary since these exceptions to general statutory requirements have been extended to NASA under the provisions of the Armed Services Procurement Act, 10 U.S.C. 2301-2314. See particularly sections 2304 and 2307.

We have some doubt as to whether the provisions of subsection (h) of the revisions to the effect that the authority to indemnify contractors under this section "does not create any rights in third persons which would not otherwise exist by law" are necessary. However, we see no objection to inclusion of the provisions in the bill.

I wish to say that the Comptroller General has no objection to indemnification of NASA contractors engaged in the performance of contracts involving risks of unusually hazardous nature. The comments we have made are for the purpose of assisting the committee in considering the proposed legislation.

Mr. Chairman, that concludes our statement. We will be glad to answer any questions you may have to the best of our ability.

The CHAIRMAN. Thank you very much, sir.

Mr. Keller, does this provision cover both tort and contract claims?

Mr. KELLER. The legislation would cover indemnification in any case of where the contractor has been found liable to a third party, or for property of his which has been damaged as a result of an unusually hazardous risk.

The CHAIRMAN. Couldn't it be under contract, too?

Mr. KELLER. Perhaps it could, but I don't think of a case where it would be.

The CHAIRMAN. You think it is almost entirely tort, then?

Mr. KELLER. Yes, sir.

The CHAIRMAN. An injured workman, after presenting his case to the employer, could collect from the employer and then the employer could present his claim to the United States?

Mr. KELLER. That is the way it would work in principle. Under the bill the Government would have the right to step in and assist the contractor in defense of a claim or in otherwise handling a claim.

The CHAIRMAN. Wouldn't it be better to provide that claims due to injuries of the employees should be settled under the employees compensation statutes?

Mr. KELLER. The claims, Mr. Chairman, would be claims of employees of the contractor.

The CHAIRMAN. I am referring to employees of the contractor. Would they be covered by State compensation laws?

Mr. KELLER. Ordinarily, they would.

The CHAIRMAN. Normally, they would look to the insurance provided by compensation law. Over and above that, we would give them further protection by providing that the Government should indemnify the employer, even though it is the workmen's compensation or the employee's liability claim?

Mr. KELLER. I wish to point out that under the revisions, claims of the contractor's employees under the workmen's compensation acts, would be excluded from indemnification.

The CHAIRMAN. Up to the extent of the law provided by the several States?

Mr. KELLER. Yes. If it was something over and above that, and if the contractor was required to pay, I think under the indemnification provisions—

The CHAIRMAN. Some States allow one to go to the Federal courts with certain types of cases, where the recovery might not be under the State compensation laws. In that case the Government would indemnify the contractor.

Mr. KELLER. If the contractor was held liable or if it was decided administratively that the contractor was liable.

The CHAIRMAN. You recommend we provide for the exclusion of willful negligence or willful actions.

What about acts of God?

Mr. KELLER. Mr. Chairman, we have not made a recommendation on the question of negligence. We want to bring the question to the attention of the committee. Under the language of the bill, unless NASA in writing the indemnification provisions in the contract excluded indemnification for acts resulting from the contractor's negligence, then the contractor would be indemnified.

Assume we have an incident involving an unusually hazardous risk, and perhaps it is the result of negligence on the part of the contractor or negligence on the part of one of the contractor's employees. I think it is only fair to state that the purpose of the legislation is to indemnify the contractor against a loss which he cannot cover by insurance. So you might want to consider this question of negligence on the part of the contractor in the same light as our automobile liability insurance. We are insured against claims of third parties whether we are negligent or not.

The CHAIRMAN. What do you recommend?

Mr. KELLER. I think, Mr. Chairman, that probably we should indemnify the contractor even though there is negligence on his part. However, on the question of a willful act on the part of the contractor, then I would draw the line.

The CHAIRMAN. Would you give him a superior protection to what would be given the employee under the State compensation laws?

Mr. KELLER. Perhaps.

The CHAIRMAN. Mr. McCormack.

Mr. McCORMACK. If a man is protected under the Workmen's Compensation Act, that would prevent him from suing a person, as I understand it?

Mr. KELLER. I think he might still go ahead and sue. The revisions, Mr. McCormack, would exclude indemnification up to the extent the employee is covered under the Workmen's Compensation Act.

Mr. McCORMACK. If an employee is covered under the Workmen's Compensation Act and sustains an injury from the reckless disregard of someone else, he can bring a suit against that party.

If he prevails, he will be reimbursed.

Mr. KELLER. A suit against another employee or a third employee rather than the contractor?

Mr. McCORMACK. Well, begin with a third party. The mere fact that he claims his right under the Workmen's Compensation Act does not take away from him whatever other rights he has under the General Tort Act, or that which is covered by tort?

Mr. KELLER. I am not sure that I follow you.

We are talking about the claim of an employee of a contractor, for example, and he is injured as a result of an incident—

Mr. McCORMACK. I am not sufficiently versed with the Compensation Act to discuss it at this time. But if I am employed by you and I am driving a truck, and some other vehicle operated negligently runs into the truck I am driving and I am injured, I can go ahead and claim my rights under the Workmen's Compensation Act and sue also the third party.

Mr. KELLER. I think that is right. But if this third party is another employee, for example, I don't think indemnification of the contractor would become involved because here the bill proposes to indemnify the contractor against anything he has to pay. If the employee collected workmen's compensation and then sued the contractor for something over and above that then we have another question. But as to the suit of the employee against the third party, I don't think it would be involved in this legislation, because the Government is saying, "Mr. Contractor, we will indemnify you for what you are liable for." The contractor may not be liable to the third party. If not the Government would not be liable.

Mr. McCORMACK. On page 5, the last paragraph, section (a) (1), it reads "liability" instead of "claims." A claim of some kind or another may or may not become a liability.

Mr. KELLER. That is correct.

Mr. McCORMACK. Does that word "liability" restrict the power to make a settlement of the case?

Mr. KELLER. I don't believe it does.

Mr. McCORMACK. Oftentimes, as you know, a claim is made where the other side doesn't admit liability but for many reasons might make a settlement.

Mr. KELLER. Mr. McCormack, as I would understand the legislation, the Government would not indemnify unless it was satisfied there was a liability on the part of the contractor. The liability would be determined by either a judgment against the contractor or the Government would be satisfied that if litigation did occur, the contractor would have a judgment against him.

Mr. McCORMACK. Suppose a suit is brought in the court under the word "liability," could that of itself be construed as liability for the purposes of settlement?

Wouldn't liability come only after a jury or judge has rendered a verdict?

Mr. KELLER. I do not construe the word "liability" to require a court determination. I don't think a suit would even have to be filed.

Mr. McCORMACK. If you have a legislative committee breathing down your neck, you might.

Mr. KELLER. In some cases, perhaps.

Mr. McCORMACK. I am talking now practically. There is a clear distinction in my mind between the word "liability" and "claim."

Mr. KELLER. I think liability is a much stronger term.

Mr. McCORMACK. It limits—

Mr. KELLER. But it does not mean it has to be processed to a judgment.



Mr. McCORMACK. Now you agree with me. In other words, there will be a finding in favor of the plaintiff.

Mr. KELLER. That is right.

Mr. McCORMACK. That means by either a jury or judge.

Mr. KELLER. I think it could also be determined administratively.

The CHAIRMAN. Under this suggested amendment?

Mr. KELLER. Or under the original language, Mr. Chairman.

I would put it in the same light as if I have an automobile accident and my insurance company has agreed by my insurance contract to take care of my liabilities. The company may very well and probably will settle without court action if it is satisfied that my act created a liability on my part to a third party.

I would visualize that the NASA would be in the same situation. We have an incident resulting from an unusually hazardous risk. The Government might well come to the conclusion that the contractor is liable and would authorize indemnification without a judgment against the contractor.

Perhaps NASA can explain the change they have suggested from "claims" to "liability" better than I.

Mr. McCORMACK. I don't say they couldn't explain it as well, but I don't think they could explain it better than you could.

Mr. KELLER. Thank you. I think one of the purposes was to make it clear that there would be no claims by third parties against the Government. In other words, we have the contractor as a buffer between the third parties and the Government. So we are talking about liabilities of the contractor to third parties. I feel that the term "liability" adequately covers what is trying to be done.

The CHAIRMAN. Will the gentleman yield?

In the amendment proposed by NASA, however, it goes beyond that to cover liability to third persons and loss of or damage to the contractor's property.

Mr. KELLER. That is correct, sir.

The CHAIRMAN. The latter would be a contract case, wouldn't it?

Mr. KELLER. It would cover damage to the contractor's property.

The CHAIRMAN. It might be a contractual action?

Mr. KELLER. It could be. I think what we are talking about here is a liability which goes further than what we usually think of as a tort action. Normally, we think of some negligence, some act, some omission on the part of a person which makes him liable. Here we could be dealing with a situation where, due to the very nature of the work being performed, a court would hold the contractor liable whether or not there is any tortious act on the part of the contractor. The contractor may be working with materials which, in and of themselves, are unusually hazardous.

Mr. McCORMACK. When an insurance company settles a case, that doesn't necessarily admit a liability on their part, does it?

Mr. KELLER. I would hope—

Mr. McCORMACK. I have had experience with quite a few of them.

Mr. KELLER. I would think that under this legislation, Mr. McCormack, the Government would operate differently than an insurance company. You and I both know that on occasion they pay off where liability may be questionable. But I would think in this case there would only be indemnification where the contractor has been held

liable by court or where the administration is satisfied that he would be held liable if he was sued.

Mr. McCORMACK. Now you are getting into two fields. I can see where the court makes a finding on a case that is argued before a jury or a single judge who would make a finding. That is a different proposition. When a process of settlement is involved, first, a claim is filed.

Mr. KELLER. That is right.

Mr. McCORMACK. And then, through discussion and negotiation, settlement is sought under satisfactory conditions. Sometimes cases might be settled on their nuisance value where liability may not be very clear. A settlement, however, could be made in instances when there wouldn't be any more involved than the actual court cost, if the defendant went into court and contested the case. There are many practical factors that enter into the process of settling a case. There may be a substantial case where—when we talk of liability, we mean negligence, due care, and so forth—there might be an honest difference of opinion. There might be a meeting of the minds pretty much on liability, but there might not be a meeting of minds as far as the defendant is concerned, and there might not be a meeting of minds as far as the amount.

Mr. KELLER. That is correct.

Mr. McCORMACK. There is a broad field there.

I would think that, considering the problems associated with liability, the agency would hesitate to settle any cases in the absence of a court finding.

Mr. KELLER. The agency would be best equipped to speak on this.

I would think, however, that if it was required that every case be processed to a final judgment, we would be creating a tremendous amount of litigation.

We have suggested, as I mentioned in my statement, that the committee might wish to consider that before payment of indemnification above a certain amount, that a judgment be obtained, or there be concurrence by the Attorney General.

Mr. McCORMACK. I note the statement including reasonable expenses of litigation or settlement." That might give a little broader interpretation to the word "liability" than it ordinarily would have by itself. Liability ordinarily means something fixed, that is, fixed by competent authority.

Mr. KELLER. That is right.

Mr. McCORMACK. In the final analysis, I could see where an agency or anybody in an administrative position might feel that liability is established only when court action has been taken and a court decision has been made.

Mr. KELLER. I can see your point, and yet you have a number of agencies of the Government we authorized settle claims where there is a liability of the United States. The General Accounting Office, itself, has quite a claims activity. We do not get into tort claims because by law they are settled by the head of the department up to a certain amount, and above that are required to go to court. But in every case that we handle a determination has to be made as to whether there is a liability of the United States or not.

You pointed out a little while ago that sometimes you might have a congressional committee breathing down your neck. I think that

is something that the agency has to make up its mind on and then "stick to its guns" if it thinks it is right.

Mr. McCORMACK. I have no further questions.

The CHAIRMAN. May I ask you, in reference to this matter, if this covers subcontractors, too?

Mr. KELLER. Under the revisions, indemnification would be authorized for subcontractors.

The CHAIRMAN. What revision is that?

Mr. KELLER. The revisions submitted by NASA, informally, as I understand it, to the committee.

The CHAIRMAN. In reading that amendment, it refers specifically to the contractor and does not refer to the subcontractor.

Mr. KELLER. There is a definition under the revisions. Under subsection (i) which reads:

As used in this section, the term "contractor" includes subcontractors of any tier under a contract in which indemnification provisions pursuant to subsection (a) is contained.

If the committee adopted the revisions, it would clearly cover sub-sub, right on down the line.

The CHAIRMAN. Sub-subcontractors, too?

Mr. KELLER. Yes, sir.

The CHAIRMAN. Mr. Corman.

Mr. CORMAN. In this matter of liability, I am equally concerned with the majority leader about the kinds of claims in which the Government might become involved. Yet it would seem to me, under the practical application of this legislation, that the contractor will be required to carry insurance of a certain amount. I would think that only in extreme cases would contractors and claimants go above that coverage in their efforts to settle cases. To me, it would seem a good limitation to have the word "liability" instead of "claim." I had never understood liability as arising only as a result of a judicial determination. I had thought that one could stipulate liability in a sense in settlements. I would think that Government liability would not be involved in indemnification until contractors had exhausted their settling ability under the law required.

Yesterday, Mr. Webb seemed to be clear in the fact that the Government itself did not have the capacity, under the proposed legislation, to underwrite its own liability with insurance provisions between the Government and an insurance company. I take it from your statement here that you anticipate they could do this? In other words, aside from the kind of insurance we require the contractor to carry—and we are assuming liability for things above that—do you anticipate under this legislation the Government could enter into an insurance agreement with a private company to insure the Government against that loss?

Mr. KELLER. No, sir. There is a subsection of the revisions which gives the administration authority to utilize the services and facilities of a private insurance organization for the purpose of settling claims, and so forth.

Mr. CORMAN. You would hire their services, and it would come out of general tax funds. In that sense we would be self-insurers.

Mr. KELLER. Yes. The insurance organizations would perform an administrative function only.

Mr. McCORMACK. I didn't go as far as you said I went in my question. I was exploring. Exploration is a very important part of the legislative history. We have had a few instances of that, haven't we?

Mr. KELLER. Yes.

Mr. McCORMACK. On the President's pension bill, was it not?

Mr. KELLER. That is correct.

Mr. McCORMACK. That is of recent origin.

Mr. KELLER. Yes, sir.

Mr. McCORMACK. Not showing legislative intent in the committee or on the floor. It is well to look into these things. They appear later in connection with construction. They indicate what the legislative intent was.

The legislative intent, from your angle, is that liability is not confined to final court action. It can be in the agency itself.

Mr. KELLER. That is my position.

Mr. McCORMACK. As I remember, when I was practicing law, the State of Massachusetts and the State of New York, often had independent doctrines covering liability. Would there be a difference in recovery, for instance, under this bill, of one contractor over another one?

Mr. KELLER. There could be, depending on where the incident happened.

The CHAIRMAN. Is that a good thing?

Mr. KELLER. I don't know of any other way to do it, Mr. Chairman. Here we are going to indemnify the contractor for his liability. If he is operating in the State of New York and the incident occurs in the State of New York, he is sued in the State of New York by a third person. The contractor's liability is going to be determined under the laws and precedents of the State of New York. It is entirely conceivable that third party in New York would get more or less than one in Massachusetts under almost identical circumstances.

The CHAIRMAN. Do I note in this particular suggested amendment given to us that the venue of the suit is not necessarily the location of the tort or the claim but it is the bankruptcy court in the area where the contractor resides? Isn't that it?

Mr. KELLER. I do not understand the language, Mr. Chairman, which I believe is in subsection (f) of the revisions, as setting the venue for the suit for the liability. This subsection would come into play where the claims exceed the limit of liability, and then the Federal court could be brought in to help in disposition of the matter. I think your individual determinations of liability would still be in your State courts.

The CHAIRMAN. Isn't the venue in the area served by the Federal bankruptcy court over the contractor?

Mr. KELLER. Yes, but I do not believe (f) gives the court authority to make the determinations of liability, but only to preside over the funeral, so to speak.

The CHAIRMAN. You mean in a case where the contractor is wiped out because of an accident?

Mr. KELLER. Yes.

The CHAIRMAN. Then otherwise the claim should be filed where it is created?

Mr. KELLER. That is correct, sir.

We have suggested that perhaps it would be a good idea to spell that out in the legislation, that the law of the locality where the incident takes place will be the controlling law.

The CHAIRMAN. Where would you put such a change as that?

Mr. KELLER. I have thought of a particular place where it could be worked in, but it could be done very easily. I am sure the Space Agency would feel they have no other method to follow because we are indemnifying the contractor for his liability, and his liability would be determined under the State law. Perhaps I am a little cautious because I would like to see it spelled out as to how this liability will be determined, because many of these cases are never going to be processed to a final judgment against the contractor. The Administration, working with the contractor will effect settlements. I think it would be a good idea to tie it down in the legislation as to the law which will control in the indemnification of the contractors.

This follows a theory of the Federal Tort Claims Act, which of course is different because in that act there is a direct liability of the Government to a third person. But the Tort Claims Act specifies that or that the local law will govern and determine the liability of the Government.

The CHAIRMAN. You would leave the situs of the suit or claim as in subsection (f) of the proposed amendment for the benefit of the contractor, but for the third person you would set up a stipulation that the suit might be filed where the accident occurred or the liability developed?

Mr. KELLER. We would say the determination of liability of the Government would in accordance with the law of the place where the incident occurred.

The CHAIRMAN. Not limit the suit to that place?

Mr. KELLER. I think the suit would have to be brought there, Mr. Chairman.

The CHAIRMAN. That was my idea, too.

Mr. DAVIS. Mr. Chairman, I would simply like to ask the witness this:

Why worry about the venue? We have laws which determine that. Why does it make much difference whether it is specified in this statute or not? The venue generally, for example, is that of the residence of the defendant. If you had a corporate defendant, he might have a residence in another country than that in which the accident happened. I don't see why it is necessary to concern ourselves about that. The law would take care of itself.

Mr. KELLER. It may be. But don't forget that in many cases you are going to have administrative settlements where no suit is going to be filed. This would make clear to NASA that they are to pay off only when there is a liability on the part of the contractor under the law of the place where the incident took place.

Mr. DAVIS. If they had competent counsel, they wouldn't pay off unless there was liability.

Mr. KELLER. I am sure they have competent counsel.

Mr. DAVIS. It would be a matter of receiving competent legal advice.

Mr. KELLER. That is correct.

Mr. DAVIS. I wanted to comment further on what you said awhile ago that in dealing with agencies engaged in exceedingly dangerous operations that perhaps the ordinary negligence laws might not apply.

I wanted to simply point out that I think you are entirely correct in that statement.

It just happened that I, last year, was involved in quite a number of blasting cases. In the course of that experience I found that where a person, for example, operates a rock quarry, quite a number of States apply the law of trespass and not the law of negligence. If you are dealing with a dangerous agency, and if you set in motion an explosion or blast, then quite a number of States hold you are liable in direct trespass, which is not a matter of negligence at all but a matter of an intentional act.

I want to subscribe to your view. I doubt very seriously that the ordinary laws of negligence would be applied to this particular situation. I believe that perhaps the laws of trespass would come into play.

Mr. KELLER. I think that is right.

One problem that we all have in this area of indemnification is, that experience has been very limited, for which we are all thankful. I don't think any of us know exactly—if we did have an incident of large magnitude—just how it would turn out.

The CHAIRMAN. Would this proposed amendment cover cases where a satellite fell on foreign soil and damaged property?

Mr. KELLER. I think it would, Mr. Chairman. Assuming that a contractor was involved and he was determined to be liable. It might have to be subject to some international negotiations. But the bill, as drawn, and as revised, would cover him. I see no exclusion in that area.

The CHAIRMAN. Suppose you didn't have a contractor, would it cover jurisdiction of that sort?

Mr. KELLER. No, sir. This provides for indemnification of a contractor of NASA only.

The CHAIRMAN. That is what I wanted to bring out.

Any further questions?

Mr. Casey.

Mr. CASEY. Do you foresee that this would allow or open the gate for additional recovery over and above the normal workmen's compensation which is carried by a contractor?

Mr. KELLER. Frankly, Mr. Casey, this legislation would not authorize additional recoveries.

I think I would have to look at the State laws to see if payment under workmen's compensation is a bar to further recovery. I think it is conceivable, but I am sorry I don't know the exact answer. If the contractor was liable, then indemnification would be authorized.

Mr. CASEY. Of course, our State—and I assume it is similar to the other States, where a contractor is more or less compelled to carry workmen's compensation, the defenses are available to him and the employee has no recourse other than the workmen's compensation when the contractor carries it; if he fails to carry it, he is wide open to the negligence of fellow employees and everything of that nature to where he is just forced for his own protection to carry the workmen's compensation—there is a ceiling on the amount that may be recovered which is pretty well set on each type of claim, including death benefits.

Mr. KELLER. Unless the law of the particular State under the workmen's compensation is a complete bar from further recovery, then it is conceivable that an employee could recover over and above the amount provided by workmen's compensation. This legislation, itself, does not give an employee any additional rights. I think it boils down to the proposition that the Government would indemnify if the contractor is held liable for additional amounts.

Mr. CASEY. Well—

Mr. KELLER. I don't understand this legislation to give any additional rights to third parties against the contractors.

Mr. CASEY. When you say "third parties," that includes employees, is that right?

Mr. KELLER. Yes, sir.

Mr. CASEY. Isn't the actual types of damages, loss of property and liability that a contractor might be subjected to that could not be covered by insurance rather limited?

Mr. KELLER. I have had no direct experience on this, but I am sure the Space Agency has.

The purpose of this legislation is to protect a contractor against unusually hazardous risks which cannot be covered by insurance, or the premiums are so high as to make it prohibitive. I understand that they just cannot get insurance above a certain amount.

Mr. CASEY. One thing I wanted to see here was sufficient protection in instances when the contractor would not seek insurance. In other words—

Mr. KELLER. Do you mean perhaps there should be 100 percent indemnification?

Mr. CASEY. No. If we are going to agree to indemnify the contractor for any and all liability, he could say, "Well, I am not going to carry the insurance or workmen's compensation insurance." He will waive the restrictions there, and leave it wide open for the amount of recovery. He could say, "I am not going to carry any insurance on my property because this is a hazardous job, and if something blows up and I lose a lot of equipment, the Government is going to pay me back, so why pay the insurance premiums?"

Mr. KELLER. The legislation would require that he carry insurance to the maximum extent possible. And the Government steps in, over and above that.

Mr. CASEY. Where does it say that?

Mr. KELLER. It is in the revisions under subsection (e), reading:

Each contractor which is a party to an indemnification agreement under subsection (a) shall have and maintain financial protection of such type and in such amounts as the Administration will require to cover liability to third persons—

Mr. DAVIS. What page is that?

Mr. KELLER. Page 3 of the revisions.

and loss and damage to the contractor's property in the amount of financial protection shall be the maximum amount of insurance available from private sources, except that the Administration may establish a lesser amount, taking into consideration the cost in terms of private insurance.

Mr. CASEY. Most of this will be worked out in your contract with the contractor, will it not?

Mr. KELLER. That is correct.

Mr. KARTH. Would the gentleman yield?

Mr. CASEY. Surely.

Mr. KARTH. What if NASA doesn't choose to put this kind of language in a contract, then in effect what Mr. Casey is saying is true, isn't it?

Mr. KELLER. It would be.

But if law required NASA to take these factors into consideration—

Mr. KARTH. They are allowed under the law to use their own judgment, aren't they? What, if in their judgment, the maximum the company should carry is, say, \$100,000 or \$200,000, and you have an accident that involves a half a billion dollars, then what Mr. Casey says is true. The small amount of insurance required by NASA covers only a small portion of the liability that befalls the U.S. Government.

Mr. KELLER. That is right.

Then you are dealing with a question of administration, as to how NASA will administer it.

The revisions would spell out that insurance should be carried to the maximum extent possible. I would certainly think that NASA would follow the direction of the Congress in that respect.

Mr. KARTH. What does that mean, "to the maximum extent possible"?

Mr. KELLER. The legislation says "to the maximum extent possible, taking into consideration cost in terms of private insurance." It leaves the final determination up to NASA.

Mr. KARTH. Let's consider a million-dollar contract. Insurance to cover every conceivable liability that might develop as a result of the work being done would be of such nature that it would cost more than the contract is worth. Under those terms, of course, NASA could not say "You have to carry a million dollars worth of insurance or insurance sufficient so that the premium would cost you a million dollars," because the insurance would cost more than the contract is worth.

What Mr. Casey is saying, under these conditions, is true.

Mr. KELLER. We are dealing here with unusually hazardous risk. The contractor would be required to carry his ordinary insurance. Then we move into the area of unusually hazardous risk, and the contractor would be required to obtain insurance to the maximum extent possible, and then the Government indemnifies over and above that.

I certainly would not visualize that the contractor gives up his workmen's compensation, his ordinary liability insurance, and so forth.

We suggested that perhaps even the terms "to the maximum extent possible" might be too much of direction by Congress and perhaps there should be more flexibility for NASA to make determinations as to the amount of private insurance that would be required.

Mr. KARTH. If the gentleman will yield further.

We are going to be letting contracts on solid propellants, for example. Some of these contracts might be in the neighborhood of a million dollars. This might be a very hazardous situation. As a result of an explosion, an unforeseen possibility, to be sure, but as a result of this hazardous condition an explosion could occur that



would wipe out the benefit of the contract—the total amount in dollars and cents. The contractor would not be insured under this language to that extent. So it would befall the U.S. Government, and it would be its responsibility.

Mr. KELLER. I think it is entirely possible if this legislation was enacted you could have a million dollar contract and you might end up with a liability of \$200 million.

The CHAIRMAN. Will the gentleman yield?

The Defense Department has a little different rule from that which is proposed here.

My understanding is, the ruling of the Defense Department, certainly the Department of the Navy, is that in construction contracts the contractor in many instances retains the property until the construction is completed. He is liable for all injuries to the property and all damages unto that point.

That is your understanding generally of the Defense views?

Mr. KELLER. I think that is right in some cases.

The CHAIRMAN. This, then, would give us a different type of liability from what they have in the Defense Department?

Mr. KELLER. I don't think so, Mr. Chairman, because I think the rule you are talking about is in your regular contracts—

The CHAIRMAN. These are all R. & D. contracts.

Mr. KELLER. I didn't understand that rule to be followed in cases involving unusually hazardous risks.

The CHAIRMAN. Why, for instance, should we cover a contractor who is engaged in constructing a plant under this extrahazardous insurance?

Mr. KELLER. I don't think you should. This would be limited to research and development contracts. It would not cover any other type of contract. I think it would be a very rare occasion where you would have any plant construction going on under a research and development contract. It might be incidental to it.

The CHAIRMAN. It is provided in the bill which we put through the House the other day, that in certain instances the construction can be done under R. & D. contracts.

Mr. KELLER. Mr. Chairman, don't we come back to the same principle, that if in the undertaking the contractor has an unusually hazardous risk for which he cannot be insured, shouldn't he be indemnified by the Government?

The CHAIRMAN. Then we would change this a little bit where we refer to the approval of the Administrator: "Any contract for research and development," and cover also construction contracts?

Mr. KELLER. No, sir, I would not recommend that. If construction happens to be a part of the research and development—

The CHAIRMAN. Incidental to the research and development?

Mr. KELLER. Yes.

The CHAIRMAN. Mr. Casey—

Mr. KARTH. Will you yield just a moment, to pursue the chairman's point?

Under those conditions the liability would be established by the contractor if the contract was let by NASA?

Mr. KELLER. Yes.

Mr. KARTH. Under those conditions, I assume NASA would not allow this liability?

Mr. KELLER. Under the whole premise of the bill and the revisions, the individual determinations, such as what would be an unusually hazardous risk and the amount of private insurance that would be required, would be determined in the contract of indemnification between NASA and the contractor.

Mr. CASEY. Another consideration I would like to explore is that since the U.S. Government is going to indemnify over and above any insurance coverage, it would seem to me that lawsuits would be encouraged. A manufacturer's smart attorney will look at the insurance coverage and will go after the maximum amount, of course. If he sees an unlimited amount, he is going to stop at the coverage of the insurance companies. The contractor is going to be in court many times.

Mr. KELLER. I think that is entirely possible.

Mr. CASEY. As a practical matter, I have seen too many of such clever lawyers operate. They are going to get into court just as fast as they can get in there when you have no more ceiling than \$500 million.

Mr. KELLER. The \$500 million was adopted by Congress for the Atomic Energy Commission. I do not know the thoughts that went into that. I don't think there is any doubt that where you have an indemnification by, or an ultimate liability of the Government, it encourages claims and suits.

Mr. CASEY. Do you have any solution to maybe minimize that or to discourage litigation?

Mr. KELLER. I don't know of any way to do it, Mr. Casey. In other words, you can't get in the field and keep out of it.

Mr. CASEY. I don't think the Government should indemnify or agree to indemnify any contractor except where it is impossible for him to get personal insurance. When he cannot get insurance to cover it, why, then he is going to require some coverage. Do the contracts include the cost of the insurance?

Mr. KELLER. The Government pays the insurance cost one way or the other.

Mr. CASEY. Then what this legislation does is to make the Government an underwriter, with no limitation.

Mr. KELLER. \$500 million.

Mr. CASEY. \$500 million. The Government is an insurance underwriter.

Mr. KELLER. The Government becomes an indemnifier of the contractor.

Mr. CASEY. That is what an insurance company does.

Mr. FULTON. Mr. Casey, would you yield for a question?

Mr. CASEY. Sure.

Mr. FULTON. When there are no norms, no previous history, and no underwriters' methods available, and the Government officials feel that the insurance rate is exorbitant, would you still require contractors to go to private industry?

Mr. CASEY. How are you going to determine whether it is exorbitant or not?

Mr. FULTON. If in the opinion of the Government officials, with their experience, that the rates are more than the Government should pay for this type of risk coverage, do you still say they should, nevertheless, still contract with private industry?

Mr. CASEY. Then, alternatively, I think the Government should put a limitation in each contract as to the extent of their liability. I wouldn't just leave it wide open. No insurance company will do that.

Mr. FULTON. I do think the Government has no limit on its own liability in a tort case other than that set when it wants to.

But in dealing with a contractor, I would feel that the limits are generally set according to the subsections that are pointed out to us.

Mr. CASEY. Of course, the Government, you know, can't be sued unless it consents to be sued. Here we are not only consenting to be sued but we are also saying that the Government will indemnify not for a contractor's own acts but also for a contractor's employees' acts and his negligence.

Mr. FULTON. How are we going to get firms to do work involving hazardous risks under this type of contract unless we do give adequate indemnity authority? Because a calamitous accident would wipe a contractor right out, or wipe out a community.

Mr. CASEY. I would indemnify the contractor where he cannot get coverage. But I wouldn't make the U.S. Government an open-end insurance company and indemnify that contractor for every act.

Mr. DAVIS. Isn't this basically true since the Government is immune from suit? Of course, this whole program is a matter of largesse; it is the same thing as disaster relief. It is the same thing as if there was a big flood, resulting in hardship. The underlying theory is that it is not right to expose the public to disasters of this kind without any hope for remuneration.

Mr. CASEY. And the Congress has never refused to offer redress by special legislation. But here you are putting in the law an encouragement for every manufacturer's attorney in the country to sue to the limit.

Mr. DAVIS. I have to agree with that.

Mr. KELLER. Plaintiffs would be limited, Mr. Casey. The liability would be—

Mr. CASEY. To the \$500 million.

Mr. KELLER. And to the contractor's liability under the State law.

Mr. CASEY. The only limitation to a contractor under State law is workmen's compensation.

Mr. KELLER. You do have some, in death cases.

Mr. CASEY. There could be a contractor who has a corporation with a very small capital structure. Injured parties could sue him and get everything he has and then come to the Treasury for the balance.

Mr. KELLER. That is correct, if they pursued a case involving an unusually hazardous risk, the Government would have to pick up the check.

Mr. CASEY. I think when contractors cannot get insurance, to encourage the contractors to take a contract, we should step in and agree to some degree of liability.

Mr. KELLER. There comes a point, though, of obtaining insurance at a normal cost or a little above normal. In other words, we can get insurance for pretty near anything—

Mr. CASEY. Do you want to have authority to pay an unlimited premium? That is what it is. You would have an abnormal cost—

Mr. KELLER. I was thinking of Lloyds of London, who, I understand, will insure almost anything. But the premium may be very, very high.

Mr. CASEY. Until underwriters get experience, the premium will be very high. But you are not opening the door to the Treasury and encouraging lawsuits.

The CHAIRMAN. Mr. Corman.

Mr. CORMAN. I just wanted to observe in defense of this legislation that I think it is very important, to point out that, in a real sense, the taxpayer is also the insurance premium payer. If we are going to require contractors to take insurance at any premium, that is just going to increase the cost of the total program substantially. Obviously, the contractor is going to make a profit over and above all this cost, including insurance.

Further, I realize there is always argument between manufacturers' and defendants' attorneys about the reasonableness of claims. We would like to avoid encouraging lawsuits. I would anticipate that firms are going to have a substantial amount of coverage under normal insurance contracts. There is a wide latitude for settlement. If a disaster involves damages beyond that point, it seems to me the Government will save much money in the long run by being its own insurer in that field. It seems to me that the phraseology leaving NASA some little discretion but requiring strict limitations on the amount of insurance that must be obtained is a very healthy approach to the problem. I would not like to see us write legislation to compel NASA to go to the extremely high insurance rates. Beyond that, this kind of protection makes it possible for many more contractors to bid on these contracts. Bidding will not be limited to a few extremely large corporations which would have perhaps a better capacity for obtaining insurance. It has always seemed to me that when governmental bodies become self-insurers, they tend to be extremely frugal of the taxpayers' money in settlements. Usually a manufacturer's attorney will take a more realistic attitude in his suit against a governmental body than he does against an insurance company, because the Government doesn't have to buy goodwill as maybe an automobile insurance company does.

It seems to me it has been worked out extremely well.

Mr. CASEY. I have never seen an insurance company wanting to buy goodwill in settling a case.

As far as a manufacturer's attorney being moderate with any governmental agency, I have to disagree with you there. That is when they think the sky is the limit. You will find juries saying, "Well, shoot, it doesn't come out of Joe's pocket."

The CHAIRMAN. Before you leave, we have one more witness.

Mr. CASEY. I have a phone call waiting. I will be right back.

Mr. FULTON. Before you go may I say, you do have a point that the Government should not be competing with legitimate private insurance companies on types of insurance just in order to get the premiums down. The Government shouldn't be competing with private insurance companies. I would agree with you on that.

Mr. Riehlman and I have been talking here. This is a system that was set up under the Atomic Energy Commission and is working. Why wouldn't the same thing work for NASA?

Mr. CASEY. Well, I think this: I think we ought to have a limitation. If we are going to indemnify contractors we ought to have a limitation in each contract. Otherwise, we are going to encourage litigation.

The CHAIRMAN. Let's hear the witness we have and we can discuss it later on.

Any further questions?

We have had this witness here an hour and 30 minutes. We want to thank you very much for coming here. We have one more witness this morning, Mr. John A. Johnson, General Counsel of the NASA.

Mr. Johnson.

Mr. Keller, will you stand by? It is 30 minutes before recess. We might call on you later.

Mr. Johnson, you are General Counsel for NASA. You submitted to us a proposed amendment to the bill, which you sent down earlier.

Why wasn't the amendment included in the bill that you sent down to us?

#### STATEMENT OF JOHN A. JOHNSON, GENERAL COUNSEL, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Mr. JOHNSON. Mr. Chairman, the bill that was sent down originally was the same bill which this committee reported out favorably last year, and the House passed.

It is a bill modeled precisely after the indemnification provisions in title 10 of the United States Code, presently available to the military departments.

We appeared on that bill before the Senate committee several weeks ago, and a number of questions were raised which we thought deserved clarification.

At that committee's request, we engaged in a thorough revision of the bill as originally submitted. And in this case we think we have selected the most desirable features of the indemnification legislation that is applicable to the military departments and the Atomic Energy Commission.

I might say that the military department legislation was passed in 1952 and the Atomic Energy Commission's in 1957. So it represents a later and perhaps deeper consideration by the Congress of the subject. Therefore, it is a much fuller treatment of the subject. We feel that by incorporating these additional provisions we have clarified the authority we are requesting. We have not basically changed the nature of the authority. I think we have made it less ambiguous in certain respects.

There is one substantive change, and that is the overall imposition of the \$500 million liability, and there are certain procedural changes in this revision. As a result of this, we did then resubmit this bill to the Senate committee and at the same time resubmitted it to this committee.

Yesterday, when the Administrator of NASA, Mr. Webb, and I appeared before this committee, Mr. Webb's statement not only dealt

with the original proposal, but dealt in detail with the proposed revisions which, as I have said, are largely based upon the indemnification provisions of the Atomic Energy Act.

I would like to say that NASA needs this authority very badly. Of the five large contracting agencies engaged in research and development work of an ultrahazardous nature, the Army, the Navy, the Air Force, the Atomic Energy Commission, and NASA, NASA is the only one of these agencies not presently possessing this kind of authority.

It was considered by the Congress at the time the National Aeronautics and Space Act was passed in 1958. It was recognized then to be a complicated matter, and it was removed at the very end of legislative consideration of that bill, with the particular statement, as I recall, that this was something which should be taken up in the near future, for separate consideration. It was considered last year, favorably acted on by this committee and passed by the House, but unfortunately did not get a hearing in the Senate. We are back again this year repeating our request.

The CHAIRMAN. Is this a Senate version?

Mr. JOHNSON. No, Mr. Chairman, this is a NASA revision. The Senate has taken no responsibility for it. They have not yet reported out any bill.

The CHAIRMAN. You recommended it as presented to the committee?

Mr. JOHNSON. Yes, Mr. Chairman. It has been cleared by the Bureau of the Budget now for formal presentation to the committee as the revised Administration proposal.

The CHAIRMAN. Do you have a general statement that you wish to make?

Mr. JOHNSON. No, sir; our general statement was made yesterday before this committee. I am here at the request of the committee to respond to questions, particularly in light of Mr. Keller's testimony.

If I may, I would like to say that I was personally very pleased with Mr. Keller's statement. You may recall that last year he submitted quite a critical statement of the earlier proposal, and then in turn I submitted to the committee a point-by-point answer to Mr. Keller's criticisms. His statement today dropped many of the points that had been raised before. It is confined to a relatively few points.

As I understand his statement, he is saying that the revisions which we have submitted are all to the good and do answer several points that have earlier been raised.

The CHAIRMAN. That being the case, do you think it is wise at this time to apply for indemnification for liability that might be incurred by a missile going off course and doing damage, or a satellite falling in the wrong spot, perhaps overseas, causing damage? Do you think that should be attempted in this version?

Mr. JOHNSON. Yes, Mr. Chairman. I think it is essential that we understand here that what we are proposing is that the Government merely stand in the place of an insurer in relation to the contractor with respect to those risks for which insurance is not reasonably available. We are not attempting to create, and we do not think we create, any new rights or liabilities in relation to third parties which the law does not already permit. Just as, if I take out liability insurance, it does not create any additional right of a third party

against me but protects me in relation to the claims of that third party, similarly here we are not attempting to create, nor do we think this legislation would create, any new rights in the injured parties, whether they be in this country or abroad. But if, as a result of such an incident as you described, the contractor or one of the subcontractors should be liable as the result of the application of the existing law to that situation, then the indemnification authority would be available, just as insurance would be available—bearing in mind, of course, that this is only indemnification for liability which extends above and beyond that financial protection which the contractor is required under the statute to obtain, namely, the available amount of insurance unless because of peculiar circumstances, it may be thought that a lesser amount is desirable.

I could go into that subject to some length, if you wish, but I think perhaps I had better just be responsive to questions.

The CHAIRMAN. Suppose NASA puts up a weather satellite and some accident occurs, is it contemplated that is going to be handled by a contractor in all cases?

Mr. JOHNSON. Mr. Chairman, this legislation doesn't contemplate that a contractor would have any more liability than he would have in the absence of this legislation. Only to the extent that the law imposes a liability upon the contractor independent of this legislation would this legislation be operative to permit the Government to indemnify that contractor. It doesn't contemplate that the contractor would be liable where he would not otherwise be liable, nor does it create any rights in third parties to sue a contractor.

The CHAIRMAN. Suppose a third party is injured and there is no contractor, does this govern his rights against the United States?

Mr. JOHNSON. No, sir.

The CHAIRMAN. He would come under the general tort claims act, wouldn't he?

Mr. JOHNSON. Yes, sir. It might also be that the conditions of that particular operation excepted it from the Federal Tort Claims Act, in which case the only relief might be a private bill.

This does not cover direct claims of third parties against the United States.

The CHAIRMAN. Why shouldn't we include that in this particular amendment, if we are going into it?

Mr. JOHNSON. Mr. Chairman, I think it would be extraneous to this subject matter. We are talking here about the procurement process and the problems that arise in relation to the contracts we place and the burdens we may be placing upon the contractor. The general question of what the limit of tort liability on behalf of the U.S. Government against injured parties directly might be is a problem that goes far beyond the purview of this legislation and gets into the whole question of what the extent of the Federal Tort Claims Act should be.

The CHAIRMAN. I can see that it would be generic, that is true, but if you are going to take care of a contractor, why wouldn't you take care of the American citizen who is injured too?

Mr. JOHNSON. In a sense we do.

There are several justifications for this legislation. One is protection of the injured citizen. But only insofar as that injury imposes a liability upon the contractor or subcontractor. Let us say that the

limit of third-party liability insurance is \$20 million. That is not a hypothetical figure. Typically, our contractors have found this is the limit of public liability coverage at anything like normal rates. If we should have a catastrophic loss that involved injuries to persons and property amounting to \$100 million, and their only remedy was against the contractor which had assets through insurance of only \$20 million, those injured parties would be left virtually without any effective remedy. This would really permit us to enlarge the effective amount of insurance which that contractor has and would permit those injured parties to present claims for which—if, upon examination, they were claims for which the contractor was liable—the Government indemnity would provide a source of compensation.

In that respect, it is a bill which takes into consideration the interests of private parties, but only insofar as they are manifested through the liability of a contractor.

The CHAIRMAN. Any questions?

Mr. FULTON. When you are determining whether there would be liability, would you be determining that for the Government on ordinary negligence principles or would you be determining it on *res ipso loquitur*, the situation or the event speaks for itself and that the burden of proof was then on the Government or contractor to show that there was no negligence? How do you approach it?

Mr. JOHNSON. Mr. Fulton, there is no easy answer to that because it would depend upon the particular events which occurred. It is quite possible that the tort law in some of these areas may develop along rules of strict or absolute liability where considerations of negligence would play a very small part.

I think Mr. Davis mentioned this earlier in connection with blasting cases, for example.

We have quite a line of cases stemming from *Rylands v. Fletcher*, which hold under certain circumstances that a person who sets an action in motion is liable whether or not negligence can be proven. This may go beyond the *res ipso loquitur* situation. We would have to examine all the circumstances and do the best we could to predict the course of the law in the applicable jurisdiction to that situation. It may be necessary in some cases, which might be landmarks, to permit them to go through litigation and judgments to be rendered, simply to clarify the development of the law on the subject. I think that if we had reasonable guidance in court decisions, it would not be desirable to compel us to litigate every case. This is no more desirable here than in other areas. As insurance companies would, we would hope the responsible Government agency would seek to effect settlements that would take into consideration all of the applicable principles of tort liability.

Mr. FULTON. So that you really are putting it in the area of reference of tort liability and not in the reference of disaster relief to help a community or an area that has had widespread damage? You are nevertheless going on an individual tort basis?

Mr. JOHNSON. That is correct, so far as third-party liability is concerned. Insofar as the contractor's own property is concerned, there the indemnification agreement would be a contractual obligation to the contractor directly. As far as third-party liability is concerned,



it would be handled in a manner very analogous to that of third-party liability insurance.

Mr. FULTON. What would disturb me would be opening the U.S. Treasury to claims of absolute liability of the U.S. Government in large amount that, in sum-total, amount to disaster relief as distinguished from individual tort liability as far as the contractor is concerned.

I think that you must have some reason for distinguishing those cases, so that in this legislation we make it clear we are not going to open up the U.S. Treasury for total claims when there is no negligence and when the security of the country has a legitimate interest in doing this very action in that very place.

The CHAIRMAN. Will the gentleman yield?

That was along the line I was approaching there.

You will indemnify the contractor in all his liabilities, but unless your claim can be worked through a contractor or subcontractor, there is no obligation.

Mr. JOHNSON. Yes. I think I understand your concern, Mr. Fulton.

I believe the wording of the present bill, if we look at it carefully, reflects that precisely. It does not deal with the liability of the Government directly to third parties in any sense.

On the other hand, it does provide indemnification for the liability of the contractors to third parties. Here I think we must realize that liability might go beyond the traditional rules of negligence. And if it did, then we should not be precluded from indemnifying the contractor. If the law develops in such a way that a contractor, under certain circumstances—and I emphasize the contractor and not the Government—is held absolutely liable without proof of negligence, then that liability could be just as disastrous to the contractor as if it attached under the more traditional rules of tort liability. In such a case just as if the contractor had insurance it would be covered against that liability, so should the indemnification cover the contractor.

The important thing is a distinction between the liability of the contractor, as such, and the liability of the Government directly. The bill does not deal with the latter.

Mr. FULTON. I don't want in any way for space research to be equated to the building of a dam on one's properties or the blasting in a certain area, where the person doing it is held to an absolute liability, regardless of negligence.

I can see it might go as far as a public carrier or public utility, where the burden was on the contractor to explain the incident. But I would vote against this going in, if this provision was simply going to open the Treasury to claims through the agency of a contractor to people who are trying to enforce absolute responsibility on the Government or contractor, regardless of negligence. I don't think space research is that kind of a field. I hope to limit it.

Mr. JOHNSON. Mr. Fulton, I think many of us would join you in that hope. But if the law so develops—and the courts will have the last word, I think, on this, in a variety of jurisdictions—if the law so develops as it did in the early days of aviation, and I think that is quite a useful precedent, so as to affix absolute liability under cer-

tain circumstances, without proof of negligence, then I think it would be a great mistake and quite unjust to exclude that, because I don't think any one of us would want an insurance policy that excluded a certain possible liability which the courts might find.

Mr. FULTON. I think we have to exclude from our thinking operations that are in the aircraft field that are commercial in nature, because that does not occur at this point in space development, does it?

Mr. JOHNSON. No, sir.

Mr. FULTON. I don't want to be bound by some of those precedents that are set in the development of the aircraft industry on the development of our space industry through Government operation. This is the American people speaking. It is research and development and exploration and also for security.

Mr. JOHNSON. The U.S. Government must work through the contractors. As you know, contractors have not only been given the responsibility for building many things, putting all sorts of components in them that might not function properly, but they actually are conducting the launch operation itself under contract.

I would hope myself that we would not have a rule of absolute liability that went too far. I would hesitate to be too confident as a lawyer that it will not develop that way, regardless of what our hopes may be.

The CHAIRMAN. Mr. Riehlman?

Mr. RIEHLMAN. No questions.

The CHAIRMAN. Mr. Casey?

Mr. CASEY. Is there a similar indemnity authority in any other governmental agency now?

Mr. JOHNSON. All of the others that I mentioned, Army, Navy, Air Force, and the Atomic Energy Commission.

Mr. CASEY. I noticed in here, reading a little more carefully, that the amendment contemplates that the contract, itself, shall define the risk that you indemnify.

Mr. JOHNSON. Yes, sir.

Mr. CASEY. It says "damage or property from a risk that the contractor finds unusually hazardous."

Mr. JOHNSON. Yes, sir.

Mr. CASEY. Is that clause in the other legislation, or something similar to it?

Mr. JOHNSON. Those words "the performance of which involves the risk of an unusually hazardous nature," are one of the additions we submitted after the first hearing on the Senate side for the purpose of clarification.

We think it is only clarification, because the present law applicable to Army, Navy, and Air Force from which this was patterned, reads this way.

You see subparagraph (1). It reads:

Claims (including reasonable expenses of litigation or settlement) by third persons, including employees of the contractor, for death, bodily injury or loss of or damage to property, from a risk that the contract defines as unusually hazardous.

It was in that portion of the law. We put it up here in the beginning to make this quite clear, at the risk of duplication, that that was involved.

That comes out of the law that the military departments are presently using, which has been on the books for the last 9 years.

Mr. CASEY. Do you contemplate there would be a strict enumeration of the types of hazards that would be covered?

Mr. JOHNSON. It would be a fairly broad definition in any particular contract. The real question is determining what contracts this will go into.

For instance, let us suppose we had a contract for building and launching a new type of launch vehicle, which, let us say, had liquid hydrogen, nuclear fuel, and various other types of things in it, which had explosive and other—

Mr. FULTON. The Rover project.

Mr. JOHNSON. Undoubtedly in that particular case we would define the risk broadly as including all of the liability that might flow from the actual launching of that vehicle.

But now I do want to bear down on the fact that it only covers liability from that risk insofar as it exceeds the financial protection available to the contractor, which in most cases today runs about \$20 million.

Mr. CASEY. That is all.

The CHAIRMAN. Mr. Corman, do you have any questions?

Mr. CORMAN. One final comment, and that is the point Mr. Fulton is touching on. We have to make a decision as to whether or not the total taxpayers absorb an unforeseen injury or whether you are going to require it to be absorbed by the person injured.

It seems to me it is best left in the hands of the court to ascertain in any specific instance whether a person injured is entitled to recovery. If he is, it is healthier for the program if it is spread among all the people who benefit from the program than to say we will let the person who is injured absorb the loss.

Mr. FULTON. The point is that in the making of the decision by the Government officials on the damage, they should not allow themselves in that method of decision to be influenced by the idea that they are giving disaster relief.

Mr. CORMAN. Yes, sir.

Mr. FULTON. It must be based, just as you are saying—and I agree with you—on where the liability actually rests. If we limit it to that, then I think Mr. Riehlman and I have a feeling that it should not get over into this generic part that the chairman speaks about.

Isn't that right?

Mr. RIEHLMAN. Yes.

The CHAIRMAN. Do you have further questions?

Mr. CORMAN. No.

The CHAIRMAN. If there are no further questions, the Chair would like to say that I have in mind appointing a subcommittee to work this out much more carefully than the full committee has done. I have in mind a subcommittee of five members from this committee. I feel that all of them should be lawyers. At this time I will not announce them, but—

Mr. FULTON. Should or should not?

The CHAIRMAN. Should be lawyers. I have in mind that all of them should be lawyers.

Mr. CORMAN. May I suggest that the plaintiff and defendant attorneys be equally represented on this body?

The CHAIRMAN. If there is no objection, then, the committee will stand adjourned, subject to the call of the Chair.

(Whereupon, at 11:57 a.m., the committee adjourned, subject to the call of the Chair.)

For instance, let us suppose we had a contract for building and launching a new type of launch vehicle, which, let us say, had liquid hydrogen, nuclear fuel, and various other types of things in it, which had a life of 100 days.

Mr. FULTON. I am merely making a point, but I would like to know the risk broadly as including all of the facilities that might flow from the actual launching of that vehicle.

Mr. FULTON. That is all. I am merely making a point, but I would like to know the risk broadly as including all of the facilities that might flow from the actual launching of that vehicle.

Mr. FULTON. The point is that in the matter of the decision by the Government officials on the damage, they should not allow themselves in that method of decision to be influenced by the fact that they are making their report.

Mr. FULTON. It must be based just as you are saying—and I agree with you—on where the liability actually rests. It is hard to say then I think Mr. RUSHMAN had I have a feeling that it should not get over into this general part that the chairman speaks about.

The CHAIRMAN. If there are no further questions, the Chair would like to say that I have in mind appointing a subcommittee to work this out much more carefully than the full committee has done. I have in mind a subcommittee of five members from this committee. I feel that all of them should be lawyers. At this time I will not announce them but—

## TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

MONDAY, JUNE 12, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
SPECIAL SUBCOMMITTEE ON INDEMNIFICATION,  
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to notice, in room 214-B, New House Office Building, Hon. David S. King (chairman of the subcommittee) presiding.

Mr. KING. The subcommittee appointed to investigate the indemnification features of the proposed NASA reorganization bill will come to order.

This special subcommittee is meeting this morning to look into a very important aspect of the Space Act of 1958, the provision defining NASA's responsibility in indemnifying damages incurred in the performance of hazardous contracts. The question of indemnification, in view of the scope of NASA's research and development, is a very broad one indeed. When one considers the catastrophic effects of an accidental nuclear explosion that could result in the development of a nuclear-powered rocket, or a rocket going astray and impacting in an urban area, either in the United States or in a foreign country, then the need for massive protection against such economically disastrous results becomes apparent.

The present language incorporated in the NASA Space Act is the subject of our investigation today. Does the Space Act provide enough flexibility to take care of all contingencies? Is the language definite enough? Should more cogent definitions be inserted into the act? Should there be a limit to liability? What should be the mechanisms through which proper and reasonable indemnification be administered? These and many other questions need to be raised and answered at this time.

It is the intention of this subcommittee to look at this problem from a rational and pragmatic viewpoint.

Appearing before us today are Mr. John A. Johnson, General Counsel of the National Aeronautics and Space Administration, and Mr. Robert Keller, General Counsel of the General Accounting Office. I might add that these distinguished gentlemen have appeared previously before the full committee specifically to testify on this provision which interests us this morning.

I understand, therefore, that neither of you come with a prepared statement but you come ready to discuss and answer questions; is that correct?

Mr. JOHNSON. Yes, sir.

Mr. KELLER. Yes, sir.

Mr. KING. It was the intention, as I understand it, of Chairman Brooks in establishing this subcommittee to instruct us to go into the matter in greater detail than would be possible at general hearings before the entire committee. This morning we will try to probe this provision a little more deeply than would be otherwise possible. Perhaps we can evolve answers to a few questions that, in the general discussion of the other hearing, we were not able to develop.

I have a question or two that I should like to present, and this might perhaps establish the general mood for our discussion this morning.

First of all, the question of the scope of indemnification arises. The bill has no limit on amount; am I correct on that? There has been some talk about a \$500 million limit. However, I see no such limit stated in the language of the bill as it is now before us. So there is that question as to the scope of coverage.

Then there is also the question of whether the indemnification provision should cover not only R. & D. operations but also should cover everything—the actual manufacture, the production, testing, and the like; everything that is done in the name of the National Aeronautics and Space Administration. If a particular company is engaged in producing a particular type of rocket on an assembly line production basis, and if there is an explosion in the plant, causing serious damage and loss of life, then should that be subject to the same type of coverage that is provided under the R. & D. provision of the act as now drawn?

Mr. JOHNSON, would you like to start by discussing first this matter of coverage, both as to whether there should be an upper ceiling—\$500 million—which does not appear in the bill, and then, secondly, whether it should include production as well as research and development?

**STATEMENTS OF JOHN A. JOHNSON, GENERAL COUNSEL, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, AND ROBERT KELLER, GENERAL COUNSEL OF THE GENERAL ACCOUNTING OFFICE**

Mr. JOHNSON. Yes, Mr. Chairman.

May I make a general preliminary statement to put my later remarks in perspective?

Mr. KING. Yes, I would appreciate it if you would.

Mr. JOHNSON. There is presently no authority in the National Aeronautics and Space Act of 1958 to indemnify contractors against unusually hazardous risks. The Army, Navy, and Air Force all have such authority with respect to research and development contracts in 10 U.S.C. 2354. The Atomic Energy Commission has such authority with respect to liability that might arise out of nuclear activities in 41 U.S.C. 2210. Therefore the National Aeronautics and Space Administration is the only agency of the Government carrying out a major research and development program involving unusually hazardous risks and great potentialities of liability to third parties which does not possess this authority at the present time to indemnify contractors against the consequences of these unusually hazardous activities.

When the act was passed in 1958, this matter was considered and was in the bill until quite close to the time of enactment. I do not recall at the moment whether it came out in conference or just when it came out, but it was decided that the matter was too complex at that time to include it in the act, since Congress had so many other matters of the first impression to deal with in that short time.

The report indicated that this was a matter that Congress should give its attention to as soon as possible after the act was passed. As a consequence of that, NASA has submitted this proposal before to the Congress, and last year it was acted on favorably by the Committee on Science and Astronautics of the House and was passed by the House as part of our omnibus legislation during the last session of Congress.

So its inclusion in our present proposal, which is in H.R. 7115, is in effect a resubmission of a proposal which this committee and the House previously acted on favorably.

With reference to the specific question of an overall limit on liability, I think we should direct our attention not only to the provisions which are in H.R. 7115 but the additional revisions to that section which we submitted 2 weeks ago to the committee and on which Mr. Webb, the Administrator of NASA, testified a week ago.

Mr. Keller's statement of last Tuesday also makes reference to the revisions which we have submitted which take care of many of the points previously raised by the General Accounting Office and which were reiterated in the early portion of Mr. Keller's statement of last Tuesday.

In the revisions we propose an overall \$500 million limit on liability from any single incident. So I think, if we are to make progress, that it is desirable that we look particularly at the revisions and not simply at the bill originally submitted.

I should like to give an account of how those revisions came about.

The bill originally submitted was patterned almost word for word, with the necessary changes to make it applicable to NASA, after the provisions found in 10 U.S.C. 2554, which are applicable to the military departments and which were enacted by Congress about 9 years ago.

Since the research and development work being done for NASA most closely resembles that which is being done by the Department of Defense in the field of aeronautical and space activities, since we are primarily a research and development organization, and since the defense legislation is applicable to research and development contracts, we thought that the most desirable way of approaching this problem would be to pattern a bill after the existing legislation. So we did that. That was the form in which it was passed last year by the House, and the form in which it was resubmitted at the beginning of this session.

We appeared before the Senate Space Committee about 4 weeks ago, and in the course of the hearing before that committee a number of questions were raised concerning a desirable clarification of some of the general language that appears in the bill as modeled after the Department of Defense legislation.

The Congress enacted the present indemnification provisions for the Atomic Energy Commission in 1957. Since that was a later look at the

whole problem, we thought it was desirable, in order to achieve maximum clarification, to go to those provisions and in effect pick and choose the best from the Atomic Energy legislation and the Department of Defense legislation.

So we did submit to the Senate committee, at its request, an extensive revision of this provision, which incorporates a number of verbal changes modeled after the Atomic Energy Act, designed to achieve greater specificity and clarification.

That is now what you have before this subcommittee.

One of those provisions is for an overall limit of \$500 million. That appears in the revision in subsection (f), and it is modeled after a comparable provision in the Atomic Energy Act.

Mr. Keller commented on that in his statement a week ago, and indicated that he thought this was a desirable addition. I feel, therefore, there is no difference between us on this point.

Mr. KING. Mr. Johnson, could we now discuss that feature for a moment?

Mr. JOHNSON. Yes, sir.

Mr. KING. Is that a good breaking point in your statement?

Mr. JOHNSON. Surely.

Mr. KING. Immediately the question arises as to why have a limit? If there is equity in paying a claim at all, is there not equity in paying all claims? Say that one claim is equitably presented and another is not. If they all arise out of the same catastrophe and are all on the same legal footing, or in other words, if there is a \$500 million limitation, are you not confronted with the proposition that the vigilant may present their claims immediately and others not quite so vigilant may not? It may not be a question of vigilance; it may be a question of capacity. If a family is wiped out, it may take heirs and interested parties quite a length of time to get their legal documents in order to present the claim. Or maybe there is a matter of atomic fallout that may be felt hundreds or thousands of miles away and the effects may not become known for months, years perhaps.

So are you not confronted with this situation: That those who have an immediate claim and those who are in a position legally to prosecute it immediately—I am talking pragmatically—will be the large companies. They will know their losses immediately, and the next morning, at 9 o'clock, they will have their attorneys filing their claims. So the \$500 million will not be going to those who are not so fortunately disposed. They will find themselves coming to the bag after the bag is empty.

Would you like to discuss that for a minute?

Mr. JOHNSON. Yes, sir.

I would like to say, first of all, that the overall limitation of liability is not something in which NASA is primarily interested. Our original proposal did not contain it. However, the latest expression of congressional policy in this whole area was in the Atomic Energy Act, and it has been retained in that context. But we have no objection to the imposition of such an overall liability.

I think you have raised some serious practical problems, but they are practical problems that are always involved in the prosecution and, for that matter, the settlement of any claims of a substantial sort.



But the legislation that we have proposed does not fail to recognize that problem. It invokes the bankruptcy authority of the Federal courts. It doesn't simply say, "You will pay out the first \$500 million and then anyone else who hasn't been taken care of won't get a cent." It provides, in a very long second sentence of subsection (f), that either NASA or any contractor indemnified may apply to the district court of the United States for the district in which the incident occurred—and then there are special provisions concerning incidents in foreign countries—and upon a showing that the public liability from a single incident will probably exceed the limit of liability imposed by this subsection, shall be entitled to such orders as may be appropriate for enforcement of the provisions of this subsection, including an order limiting the liability of the contractors indemnified, orders staying the payment of claims and the execution of court judgments, orders apportioning the payments to be made to claimants, orders permitting partial payments to be made before final determination of claims, and an order setting aside part of the funds available for latent injuries not discovered until a later date.

The authority is very broad here to take care of the situation that you recognized.

If we had a disaster where it appeared that we were going to have extensive liabilities, possibly exceeding \$500 million—and I think it would very quickly be determined whether it was that kind of a disaster or not—we could go into the Federal district court and invoke this authority and arrange the whole matter in such a way as to take care, equitably and ratably, of the interests of all injured parties. That point is taken care of in this legislation.

This is modeled precisely after the Atomic Energy Act. This provision was the subject of extensive hearings and consideration by the Congress several years ago.

Mr. KING. Every injured party would have to assume the burden of a pro rata diminution of its claim.

Mr. JOHNSON. That presumably would be the way the court would handle it. Either the Administrator or one of the indemnified contractors would go to the court and ask for this kind of limitation of liability. You would have a situation very similar to a bankruptcy situation where assets are limited and legitimate claims exceed the available assets.

Mr. KING. The philosophy underlying this imposition of an upper limitation, then, would be that this partakes of the nature of a national calamity, like a hurricane or flood or tornado, or perhaps an enemy attack. In that case, what the Government does is a matter of largess, a matter of grace rather than a matter of right. Once you get above the \$500 million ceiling, that is a matter of grace rather than a matter of right.

Mr. JOHNSON. I think that is a good philosophical statement.

Mr. KELLER. Could I add something here?

Mr. KING. Before you do, may I say this:

Mr. Corman is here, as are Mr. Hines and Mr. Wilcove of the committee staff. Since there are only the four of us, perhaps we could dispense with the formality of my calling on each one individually. May I invite any one of you to interrupt with your own questions? Perhaps that would be better.

Mr. KELLER. In looking into the legislative history of the indemnification provisions for AEC, where there is a \$500 million limitation, it seemed to me that the \$500 million limitation was arrived at for two reasons: One, the committee seemed to feel that there might be difficulty in having Congress approve legislation with no limit and, two, the committee wanted to reserve the right for Congress to specifically approve any indemnifications which result in liabilities of over \$500 million.

Of course, Congress can change this act at any time after the particular incident. The Joint Committee wanted to be sure that any changes in the act would be considered by it in the light of the particular incident.

I would say that the \$500 million limitation, if the legislation is enacted, would be the legal limitation at the time. But the way would be open, of course, as you pointed out, in case of a major disaster, for Congress to come along and increase the liability in any way it saw fit.

I think the thought was: "Let's reserve the right to Congress before we go any higher than \$500 million on indemnification."

Mr. KING. Congress could still exceed the \$500 million, but just the presence of that figure, in and of itself, would have a sobering influence on those who were getting a little reckless with their claims?

Mr. KELLER. I think that is right.

Mr. KING. This would still, of course, require an act of Congress to appropriate the amount, whatever it would be. It would be by direct appropriation, is that correct?

Mr. KELLER. For claims in excess of \$100,000 under the revisions.

Mr. KING. Are there any questions?

Mr. CORMAN. I take it that if there is a situation where more than \$500 million has been consumed, that you would go into bankruptcy courts, and that the assets of the liable firm would also be in this pot? They are still liable?

Mr. JOHNSON. Yes. The contractors are always principally liable, and the Government is simply indemnifying. The limitation of liability would apply to the contractors in this particular instance. This is actually the effect of the limitation of liability clause. So that the contractors would be saved harmless in that situation.

In effect, the total aggregate liability of the contractors and subcontractors involved would be limited to \$500 million, and the Government indemnity would stand behind them to that extent.

But we don't want to set up a situation that requires that one of our valuable companies—and every one of these companies is valuable to the space and defense effort—has to be wiped out in order to satisfy claims.

I think this is quite clear from subsection (f). It starts out by saying the aggregate liability for a single incident of a contractor indemnified shall not exceed the sum of \$500 million. It follows the general philosophy of the bill, which is simply one of indemnifying contractors against their liability. It therefore gives them the advantage of a court order limiting their liability. Then, with their liability so limited, the indemnification takes over and saves the contractors harmless from having to dissipate the assets of the corporation in order to discharge that liability.

Mr. CORMAN. Have you changed that tort liability by Federal statutes? This arises out of State law.

Mr. KELLER. May I offer something on this point?

I don't think the authority that Mr. Johnson is talking about will stop the State court from rendering a judgment, but it would give the Federal court the right to withhold execution of that judgment where the amount exceeds the total limitation. What the ultimate outcome of something like that would be, I can't tell. A person might end up with a judgment which he is unable to collect, or collect 10 percent. The State court, I think, would be free to go ahead and render the judgment?

Mr. JOHNSON. Yes.

Mr. KING. What is the basis for the Federal jurisdiction, though? I understand that Federal contracts are governed by Federal law. But, this is a matter of just ordinary tort liability, as the gentleman suggested. How could a Federal court limit a State court in its authority?

Mr. JOHNSON. This is the bankruptcy power, as I understand it, Mr. Chairman. As in the ordinary situation, the reduction of a tort claim to judgment would not deprive the other creditors of their just claims.

Mr. CORMAN. That is when all of the assets of the defendant are absorbed. Can you, by an indemnification statute, change that liability? If you could for a half-billion, why couldn't you for \$50,000, which you obviously cannot do?

Mr. JOHNSON. I am not really prepared to answer that question. I must assume here that Congress did explore this question when they enacted the statute. We are keeping, word for word, this particular section of the Atomic Energy Act.

Mr. CORMAN. It would be a strange set of facts if this should occur. I do not see how the assets of the tortfeasor could be held intact if you are going to submit the \$500 million to bankruptcy court, assuming the claims are a greater amount than that.

Mr. JOHNSON. If they are not to be maintained intact, then this would be an illusory proceeding and nothing would be gained from it, except the—

Mr. CORMAN. Much would be gained until you get to that point where you are over \$500 million.

Mr. JOHNSON. Yes, but as I understand your worry is this: That if you had \$600 million of valid claims presented, and the court order were entered limiting the total liability to \$500 million, this would not be effective unless all of the assets of the indemnified contractors were actually used up, because of the indemnification which stands behind them.

I can see the problem. I don't know the answer. I can only assume that Congress considered this and intended that the limitation of contractors' liability would be a firm one, be limited to \$500 million, and that to the extent they then were liable, the indemnification agreement, assuming it had not other qualifications in it, would be effective to save the contractors harmless.

I can see your problem, and that is that everybody suffers a little bit except the contractor.

Mr. CORMAN. I would think that this \$500 million is not to limit the liability of the contractor but rather the amount of the indemnification the Government will put forth. Either theory, I assume, is good, except if we take yours, I am wondering what are the constitutional grounds. It seems to me the analogy to a bankruptcy court is not completely good. For the protection of the people you are still wiping out the liable person here. You are holding the liable person harmless, possibly at the expense of someone else.

Mr. JOHNSON. I can only say, though, that the existing atomic energy legislation and the provision here in subsection (f), modeled after it, does speak of the indemnified parties. Its effect to limit the liability of the Government to the contractors, because the liability of the Government to the contractors exists only to the extent that the contractors are liable to third parties. That is the way the present law reads in the Atomic Energy Act.

Mr. KING. The problem becomes even more acute, when one considers the international aspects of this. The very nature of what these contractors are going to be doing, becomes an international problem. If an explosion occurs on Mexican soil or somewhere in Africa or Europe, those countries are not bound by the Federal statute on this. They will naturally sue right up to the hilt. They will not be bound by the \$500 million limitation at all, even though our States would be. I still join Mr. Corman in raising the question on what ground they would be. But even though there be some legal justification for limiting the States, I don't see that present in foreign countries at all. You have a real problem there.

Mr. JOHNSON. I assume, Mr. Chairman, you are speaking of suits that might be brought in the foreign countries because the indemnified contractors had assets there?

Mr. KING. Yes.

Mr. JOHNSON. We would not attempt to control that under this provision. But insofar as they were to bring suit in the United States—and this is the place where most of these contractors would have their major assets—then these provisions would be equally operative, regardless of the nationality of the plaintiff.

Mr. KING. Doesn't this rule violate the accepted rules of conflict of laws that have been accepted by all of the great community of nations over the years as to what suits could be brought and honored and respected?

Mr. JOHNSON. I don't understand why this would be violative of the usual conflict-of-rules principles. I may not perceive quite what you have in mind, Mr. Chairman.

Mr. KING. Supposing the situation were reversed, and a British rocket were to drop somewhere in New York, if we were to go to Britain, there would be well-defined rules of conflict of laws that would govern our suit in Britain and would enable us to recover there under British law. But British law would follow the conflict-of-law principle and would honor the suit.

Mr. JOHNSON. They would honor the suit if the suit could be brought—if there weren't some overriding statute that limited the liability. But I don't think a limit of liability in any way conflicts with the application of the usual principles of conflict of laws so far as the choice of law governing liability is concerned. I think those are two entirely different things.

We would have the problem domestically here. We can pose some very interesting hypothetical cases concerning venue and choice of law in a domestic incident. You might have the company with its principal place of business in one State, and performing its manufacturing operations where a defective instrument was turned out in a second State. You might have a launching operation in a third State. You might have an explosion over a fourth State, and the landing of the object in a fifth State. This is not inconceivable.

We would get involved in interesting questions of venue, jurisdiction, and the choice of the applicable substantive law.

When you speak of well established principles—yes, we do have some well established principles, in a broad sense, in torts. But we all know how difficult it is sometimes to arrive at a specific decision in a complicated situation of that kind.

Let's just suppose that suit were brought in State A, which is the principal place of business, and the State where the corporation has its principal assets. Let's suppose in the course of that suit the courts of State A decided that the tort law of State E, the last one that I mentioned, the fifth State, where the debris actually fell and the people were injured, should govern. I don't understand that an overall imposition of liability would interfere at all with that problem. After having decided on the venue and also the applicable substantive law that should govern the imposition of liability, and if you decided that the liability totaled \$600 million, you would still have the separate legal question as to whether that liability could be limited to \$500 million and what the consequences might be so far as the indemnified contractors' assets are concerned. I don't see any conflict.

Mr. CORMAN. Let's get away from the complicated cases into a very simple one.

I still can't understand whether you are trying, by the \$500 million, to limit the indemnity or liability. I don't see how you can limit liability of two parties by Federal statute in a State court action. Maybe you can. I can't quite follow the theory of how you can do it. Because if you can do it, you certainly don't have to start or stop with half a billion dollars. You can stop any place.

Let's suppose in southern California a contractor and citizens have been injured and the amount of injury exceeds the company's contractual obligation plus the \$500 million. And go further and assume that the California courts give judgments in excess of that amount. Would it be your theory under this statute that those judgments could not be collected from that California company by those injured citizens?

Mr. JOHNSON. Yes, Mr. Corman; it would be my conclusion that, if the authority spelled out in the second sentence of subsection (f) were invoked and an appropriate order entered by the U.S. district court having jurisdiction as spelled out in this section limiting liability to less than the total amount of those judgments which exceeded \$500 million, then no greater amount than that could be collected.

I think I must answer your first question categorically that the purpose of this is to limit both the liability of the contractors and subcontractors indemnified and the liability of the Government to those contractors and subcontractors.

As far as the latter is concerned, the liability of the Government would not exceed the liability of the contractor and the subcontractors indemnified.

The language of the section is very plain. It specifically says that the aggregate liability for a single incident of contractors indemnified shall not exceed the sum of \$500 million, together with the amount of financial protection required of the contractor.

So if the contractor had been required to carry \$50 million of public liability insurance, it would be \$550 million.

Then it goes on to make it quite clear that the kind of order which may be issued by the Federal district court is an order limiting the liability of the contractors indemnified, orders staying the payment of claims and the execution of court judgments—that is specific on the point you just raised, Mr. Corman—orders permitting partial payments to be made, and orders setting aside a part of the funds available for possible latent injuries not discovered until a later time.

I feel quite certain knowing the very extensive hearings that were held on the Atomic Energy Act, that this would not have been enacted into law unless the Congress at that time was satisfied that this did not exceed the power of the Federal courts to so limit the execution of judgments.

Mr. KING. Would the gentleman from California permit the Chair to make this one observation?

In order that we not spend a disproportionate amount of time on this one problem—and there are a half dozen others that we want to get into—could the Chair request Mr. Johnson to furnish for the record a suggestion of one or two authorities that would justify the position that NASA is now taking, that there is legal justification for a Federal statute actually limiting tort liability? If that could get into the record, then perhaps that would satisfy us.

Would you be able to do that, Mr. Johnson?

Mr. JOHNSON. Surely, Mr. Chairman.

(The information requested is as follows:)

Since a provision limiting the liability of contractors that is almost identical to the one under consideration by the subcommittee was enacted into law as section 170e of the Atomic Energy Act (42 U.S.C. 2210(e)) after extensive hearings, NASA did not feel that an inquiry into the constitutional basis for such a provision would be necessary.

However, a review of the legislative history of the indemnification provisions of the Atomic Energy Act reveals that the constitutional issue raised by the subcommittee here was discussed in a memorandum prepared by the law firm of Simpson, Thacher & Bartlett, of New York, for the Pennsylvania Power & Light Co., and furnished Senator Anderson by letter dated June 11, 1956 (see hearings before the Joint Committee on Atomic Energy, 84th Cong., 2d sess. on "Government Indemnity for Private Licensees and AEC Contractors Against Reactor Hazards," pp. 385-390). NASA has no reason to differ with the conclusions stated in that memorandum regarding the constitutionality of such a provision limiting liability.

A brief note in the Michigan Law Review, reviewing section 170 of the Atomic Energy Act, arrives at a similar conclusion regarding the constitutionality of this provision limiting liability (56 Michigan Law Review 752, 764-766 (1958)).

It is not felt that any new issues of a constitutional nature are presented by NASA's indemnification proposal that were not before the Congress when it enacted section 170 of the Atomic Energy Act.

Mr. KING. In connection with that, could you also furnish for the record—and I think this is important if this should come up for de-

bate on the floor of the House—something in the record to assure Congress that this will not violate any international treaties?

There are some implications here that frankly concern me. We are on the threshold of working out, we hope, some elaborate rules for space, if we can get together with certain other large countries that are also interested in space. We have made little progress to date, I might add, but we have high expectations that in the near future rules, regulations, and treaties will be formulated which will regulate and define with some preciseness the liabilities and obligations of parties who enter into outer space.

I raise the question:

Is this perhaps committing us to a precedent that may be embarrassing? Are we, in effect, by this proposed statute stating that we will repudiate as a nation any tort liability, even though we may have been the cause for an injury in excess of \$500 million?

If we can peg the figure at \$500 million, then other countries could peg the figure at whatever they wanted to. Perhaps the Soviet Union would arbitrarily peg their limit of liability at \$1 million. If we have the right to peg it at \$500 million, they would have the right to peg it at \$1 million.

Would that get us off to a bad start in this business of trying to work out some space law to define the liabilities and obligations of different countries that go into space and that could cause great damage to other countries?

I just raise that as a question. I would like something in the record to assure this subcommittee and assure Congress that you feel that there are no possible implications here of violating treaties that we may have entered into, or no implication of getting us off on the wrong foot in setting up space law.

Mr. JOHNSON. May I say one thing about that point before we leave it?

Mr. KING. Yes, sir.

Mr. JOHNSON. I think it is very important for us all to keep in mind that this is not a statute that deals with the liability of the U.S. Government to injured parties directly, or the liability of the U.S. Government to other governments, but that it would only give NASA the authority to indemnify its contractors insofar as they have liability as a private party to other third parties.

When we think of catastrophes that might occur in foreign countries, I think it is fair to say that it isn't very likely that there will be many occasions where this authority will have to be utilized.

Typically, if something should go awry and land in a foreign country and cause a catastrophe, it would be more likely that the foreign government would pick up that whole matter as an international claim which would be presented to the United States through diplomatic channels to the State Department, rather than becoming the source of multiple private suits against one of the contractors that happened to be involved.

If that were the case, this statute would simply have no application to the situation. It doesn't deal at all with the settlement of international claims—as such, claims between sovereign nations, and would not therefore deal with a claim presented by a foreign sovereign on behalf of its own citizens whose persons or property might

have been injured in such a catastrophe. It is limited strictly to the authority to indemnify a contractor which might have been held liable to third parties.

Mr. KING. It does seek to limit the liability of the contractor.

Mr. JOHNSON. Yes, it does, but it does not seek to limit the liability of the United States as a matter of international obligation to any foreign governments.

Mr. KING. The liability of the United States would not rise higher than the liability of the contractor. If the liability of the contractor is limited, then the liability of the United States is limited. And if a foreign country came in and presented a claim to us on behalf of a group of its injured citizens, they might be confronted at the outset with this limitation of liability.

Mr. JOHNSON. No, Mr. Chairman, here is where I think I must differ categorically—

Mr. KING. I am only asking a question, Mr. Johnson. I am not making a statement.

Mr. JOHNSON. The liability of the U.S. Government, as such, to any foreign claimant or, for that matter, to a domestic claimant, is not limited by the limitation of liability applicable to a contractor.

Let me pose it this way: Suppose there were an injured party that chose to bring a suit directly against the U.S. Government under the Federal Tort Claims Act instead of suing a contractor that happened to be involved in the manufacture of any of the components of the equipment that was utilized or happened to be involved in the actual launching operations. The Federal Tort Claims Act, itself, has certain limitations on suit, and so it isn't the most satisfactory way of discussing the matter, but in any event, whatever it may be, the liability of the United States under the Federal Tort Claims Act would be completely independent of the liability, or any limitation of liability, that might be imposed upon a contractor which might have manufactured a defective piece of equipment.

Similarly, if country X—I would rather not specify—if country X were to pick up a \$500 million claim on behalf of all of its nationals and presented to the United States as an international claim arising out of the conduct of the U.S. Government in launching a particular space mission that went awry, this would not have to be predicated upon negligence, or any lack of due care for that matter. It would be sufficient to simply identify the cause and the agency, since a governmental agency set the thing in motion.

If that were presented to us, it wouldn't be predicated at all upon the liability of a particular contractor to third parties. It would be predicated simply upon the activity of the U.S. Government. A limitation of liability imposed upon the contractor, and therefore indirectly upon the Government to the contractor by way of indemnification, would not affect the liability of the U.S. Government to a foreign government as a matter of international law.

Mr. KING. If the claim happened to be of the kind that was against the contractor because of the contractor's negligence and that the Federal Government's liability would be purely an imputed liability, then if you limit the one, you limit the other, it would seem to me.

Mr. JOHNSON. Mr. Chairman, if the individual plaintiffs or individual injured parties in the foreign government chose to pursue it



that way, that is, if they chose to assert liability against the contractor and brought suit or threatened suit against the contractor, then conceivably the indemnification would come into play and the limitation of liability would apply. But that would be only if they chose to pursue private rights against private parties. It is not very likely that an international claim would be presented in that guise. It would not be to the advantage of the foreign claimant to do so.

Mr. KING. Not to pursue this much further since we have other subjects, your statement is that you see no possibility of this violating any treaties that we may have at this time?

Mr. JOHNSON. That is correct.

I will check this with the legal advisers over in the State Department and provide you with an answer.

Mr. KING. It might be well to have such a statement in the record. (The information requested is as follows:)

The Office of the Legal Adviser of the Department of State has been consulted and has advised the General Counsel of NASA that it is not aware of any international agreement to which the United States is a party which would be violated by the enactment of subsection (f) of the indemnification provisions proposed by NASA.

Mr. KELLER. If I could point out, under the AEC Act, the Congress did exclude incidents which occurred outside the United States. I think the result was that they preferred to handle that by international notion, the way I would read the act; that foreign claims do not come into play under the Atomic Energy Commission indemnification provisions.

Mr. KING. I might add, Mr. Johnson, any statements which I appear to be making, occupying the position as chairman of this subcommittee, are not to be interpreted as statements but rhetorical questions only. We are here to elicit information, and at this stage I have no opinions at all on this matter.

The Chair recognizes the gentleman from Colorado, Mr. Chenoweth.

Mr. CHENOWETH. Mr. Johnson, I am not quite sure in my mind just why there is so much emphasis being placed on this amendment at this time.

I don't recall hearing last year much about the indemnification provisions. What has caused this sudden precipitous change now in the attitude of NASA that, all at once, you feel now that you need the \$500 million limitation? What has happened? Has there been some change, some event take place our just some natural concern, apprehension that exists?

Mr. JOHNSON. Mr. Chenoweth, I am not sure I understand you completely.

So far as our desire for indemnification legislation is concerned, that has not changed at all. It was in the bill which became the National Aeronautics and Space Act of 1958, 3 years ago, up until its final stages, and then it was reserved for later consideration by the Congress.

Last year we requested this authority. It was favorably acted upon by this committee and the House, and then again this year, since the Senate did not pass it last year, we asked for it again.

We have placed neither greater nor lesser importance on it. I would say that the Congress is placing a little more importance on it at this time, because you are holding hearings on this particular portion of the bill.

As far as NASA is concerned, our posture is as it has been in the past. We feel we need this legislation. As far as the additional provisions are concerned, the \$500 million—

Mr. CHENOWETH. Before you go into the \$500 million, let me ask this:

Do you feel the need is any more imminent or pressing than it was last year?

Mr. JOHNSON. We felt it was very pressing last year, Mr. Chenoweth. We asked for this as one of our top-priority items of legislation. We feel that it is still pressing this year.

I think one can only say that the bigger the program gets, the more pressing it becomes. We know that we are moving on into launch vehicles of much greater propulsive power, with upper stages carrying highly volatile explosive fuels, and upper stages that will in the relatively near future carry nuclear fuels aboard. We are moving toward very large and complicated spacecraft, some of which themselves will carry nuclear materials aboard.

Mr. CHENOWETH. Have you had any instance up to now when you needed such a provision?

Mr. JOHNSON. We haven't had any catastrophe, and we are thankful for that. Neither has the Atomic Energy Commission had any trouble. The Department of Defense has a few claims pending.

There have been many instances, in our opinion and certainly in the contractor's opinion, where it would have been desirable to include indemnification provisions in the contracts to guard against catastrophic results.

All we are talking about here is the situation where a contractor which might be held liable for the results of a catastrophic incident literally might be wiped out by the imposition of liability far exceeding coverage which can be obtained from commercial insurance sources.

Mr. CHENOWETH. Are the contractors urging this?

Mr. JOHNSON. The contractors have been urging it from the beginning.

Mr. CHENOWETH. The contractors have been urging it?

Mr. JOHNSON. Yes, from the beginning.

Mr. CHENOWETH. Have any of them refused contracts because you don't have it?

Mr. JOHNSON. I don't believe they would do that. I don't believe any major company that is deeply in the space business could afford to do this. It is a matter of justice and prudence. We are not having strikes from contractors because of this.

Mr. CHENOWETH. I haven't quite been able to see the need for so much emphasis being placed on it at this time.

The chairman appointed a subcommittee to consider this one question. I wonder why all that attention and emphasis is being placed upon indemnification at this time.

Last year I don't remember hearing much about it. Maybe you are still a little premature in advocating this. You have precipitated quite a discussion in this committee. I wonder if it deserves all that

attention at this time. The committee has many other things that it could take up. Do you feel it does?

Mr. JOHNSON. We certainly feel it does. As far as we are concerned, aside from our authorization and appropriation legislation, we regard this as the No. 1 item in our legislative program. We think it is a highly undesirable situation for NASA not to have this authority while the Army, Navy, Air Force, and Atomic Energy Commission all have been given this authority; and they are certainly permitted today to exercise it repeatedly without any question by the Congress. I personally don't understand why it should be a matter of controversy to give it to NASA.

Mr. CHENOWETH. The Atomic Energy never has had to use it.

Mr. JOHNSON. They are using it all the time. That is all we hope we do.

Mr. CHENOWETH. There has never been any incident under the atomic energy program to—

Mr. JOHNSON. It would be too late—

Mr. CHENOWETH. I am just not quite impressed with the urgency of it.

Mr. JOHNSON. I would say that when you have the first incident, it is too late. That is like shutting the door after the horse is stolen.

This is legislation that should be enacted because certain difficulties can be perceived and anticipated. It is insurance. I don't think any one of us would want to say we shouldn't take out liability insurance because we have never had an accident driving an automobile.

Mr. CHENOWETH. When the basic act was passed, those who considered that didn't seem to consider it of quite that importance.

Mr. JOHNSON. I don't have the report with me. They recognized it as a serious problem but one that was too complex for them to go into, considering the great variety of things that they had to enact in a very new and complicated field, and they reserved it for consideration in the future. There was no rejection of it and no decision that it was not desirable.

There is a recognition in the report. I wish I had the report with me. There is a recognition in the report that this is a matter that Congress should take up in the near future. Three years have gone by and we don't have it yet.

Mr. CHENOWETH. They didn't consider it of such urgency that they had to do anything with it at that time.

Mr. JOHNSON. That is correct. We were hardly in business before the next session came around. You recall how our program has increased. At the present time our current authorization request is five times as much as the funds for the first year we were in business. They did recognize this as an upcoming problem.

Mr. CHENOWETH. I am not criticizing because you urge it. I recall last year it was not urged with the force that you are urging it this year. It apparently didn't have the priority last year.

Mr. JOHNSON. We used precisely the same language in presenting it last year. The only difference is in the congressional reaction. We have asked for it both years, utilizing exactly the same arguments. Last year, for some reason, the Congress—this committee—didn't feel it was necessary to go into it in depth. Our position has not changed the slightest.

Mr. CHENOWETH. If you had not now proposed the second step of this \$500 million, perhaps it would have been included in the bill and gone on and been considered as a rather routine part of the bill, as it was last year?

Mr. JOHNSON. I can't speak for the committee, Mr. Chenoweth. I don't know what the unique aspects of this are. We have proposed a number of additions here by way of clarification. That one is a substantive change.

We appeared before the Senate committee about 4 weeks ago in support of exactly the same bill, which passed the House last year and which this committee reported out favorably.

Mr. CHENOWETH. What has happened since you have made the changes—

Mr. JOHNSON. In the course of the hearing a number of questions were asked about clarification and the fact that perhaps some of the language which is in the military statute passed 9 years ago needed to be spelled out with some greater particularity. We were asked to go back and redraft a portion of this. This was a request of the Senate Space Committee.

In doing that we made a careful study of the Atomic Energy Act indemnification provisions and we thought it could be improved by inserting some of those.

This doesn't change the authority that we are requesting. We think we have a superior bill. I think the reception that we received in the Senate committee during our second hearing was that they thought it was an improved bill.

The result of that is that we have to make a few more explanations to this committee. But the nature of the authority is essentially the same.

As I said, we are not ourselves particularly concerned with this \$500 million limitation. We did not ask for it in the beginning, but the Senate asked that we put in an overall limitation. And this was done before we appeared before your committee the first time. We can't very well testify in support of one bill here and another bill over there. We are attempting to bring these things together.

The question of whether there should or should not be a \$500 million liability I consider as a matter of policy for Congress to decide.

Mr. CHENOWETH. Are you proposing substantially the Atomic Energy Act—

Mr. JOHNSON. In this respect—

Mr. CHENOWETH (continuing). With some improvements that you have made?

Mr. JOHNSON. The first portion of this bill is modeled essentially after the military departments legislation passed 9 years ago. The latter sections, which include the imposition of the overall \$500 million limitation of liability and several other procedural aspects, are modeled after the Atomic Energy Act.

We hope we have the best of both pieces of legislation.

Mr. CHENOWETH. It appears to me, Mr. Johnson, if we could eliminate the \$500 million limitation, that the committee would approve the language that you suggest without much comment. By leaving the \$500 million limitation in, it is going to provoke considerable discussion. I assume the outcome of that discussion would not be of

any great concern to you. You would just as soon have it in, but you would not be disappointed—

Mr. JOHNSON. We would not be greatly disappointed.

My reaction to the discussion so far, Mr. Chenoweth, in both this committee and the Senate committee, is that the greater number of members favor this limitation of liability.

We are interested, of course, in getting a law passed under which we can do business. I regard this as a matter that Congress should be mainly interested in.

Mr. CORMAN. I can see where you may have a practical problem. Some programs, like Rover, are conducted jointly by AEC and NASA. A contractor with AEC has this advantage and not with NASA. This might influence which of these two agencies would have the contracting capacity if it were a project that might involve a nuclear hazard.

Mr. JOHNSON. Perhaps I should comment on that, because there is a peculiar relationship to the Atomic Energy Commission here.

The Atomic Energy Commission's authority does not run only to its own contractors. It also runs to its licensees and the licensees' contractors. NASA is itself a licensee of the Atomic Energy Commission. To the extent at the present time that we are contracting for work of a nuclear nature, we can extend to those contractors the indemnification authority to those contractors which we derive from the AEC by virtue of their licensing authority. At the present time, I can say that this is not urgent in that particular area. When we go down the road, it gets a bit more confused.

Mr. CORMAN. Is there any difference of opinion now between NASA and the GAO on the present proposal as amended? Are you both in agreement that this is what you want or do you have differences as to any of the provisions?

Mr. KELLER. If I could review briefly the comments I made the other day before the full committee. There were several points which I brought out during the course of my testimony.

First, I think that the revision as submitted by NASA is a preferable bill. One, we favor a limitation, although I recognize, as Mr. Johnson does, that this is a matter which Congress must decide.

The limitation does have this effect: It gives Congress a second look when you have an incident of damage which might run to \$1 or \$2 billion.

In my testimony the other day I mentioned that the committee might want to consider, one, whether there should be indemnification in all cases, whether or not there was negligence on the part of the contractor.

My personal view is that indemnification is quite like automobile insurance, where you are insured against any damage or injury you cause a third person, regardless of whether you are negligent or not.

Second, we raised a question about the provisions of subsection (i) of the revisions which would require that the amount of private insurance be based primarily on cost.

We suggested that the committee might want to give NASA more flexibility in this area instead of making the cost of private insurance the primary factor in determining the amount of private insurance that would be carried.

The Atomic Energy Commission provisions allow AEC more flexibility in dealing with a contractor. It was indicated in the committee reports on that legislation that there may be cases where the Government would want to be a self-insurer all the way. The legislation as proposed, as I read it, shows a pretty strong indication that the Congress feels that the contractor should carry the maximum amount of private insurance available at a reasonable cost. And then your indemnification comes into play over and above that.

A third point raised is that there is nothing in the bill which spells out the law which would be applicable in the event of an incident and a subsequent claim.

I think it has to come under State law. We did suggest the committee might want to spell out in the bill that the law of the locality where the incident took place would govern.

Of course, when your cases go into court, in case of a suit against a contractor, the court is going to determine the law.

However, many of these claims will be settled administratively. Such a provision would be to tell NASA as to the law they are to follow in settling these claims.

As I understood Mr. Johnson's comments of the other day, I think NASA would prefer to let the law work itself out. As the claims come up, some cases would be forced to court action so that the law could be clarified.

I want to say that we do not feel strongly on this point. I think the committee should consider the question as to whether it wants to specify the law which would be applicable or let the law develop as claims arise.

Also, we think the committee might give some consideration to a maximum amount of which NASA would be allowed to settle on an individual claim, without a court judgment being rendered against the contractor, or possibly having concurrence of the Attorney General.

Let's say, for example, we have an individual claim against a contractor, as high as \$200,000, which is not too unusual these days. Perhaps the Congress would like NASA to either have a judgment against the contractor before paying the claim, or possibly concurrence by the Attorney General.

I am bringing this out because we are going to be in a new area in the event any damage claims have to be paid. There are going to be conflicts of law to be resolved. I would think the Attorney General particularly would be interested in keeping an eye on some of these matters.

Mr. CORMAN. What is the effect of (d) 1 and 2 in fixing the amount of \$100,000? Is that purely permissive on NASA's part? Subsection (d) provides that when a claim exceeds \$100,000—I take it that is the aggregate amount—payments may be made from special appropriations. Does that mean—

Mr. KELLER. Do you mean an individual claim, Mr. Corman?

Mr. CORMAN. Where total amount of claims arising out of a single incident exceeds \$100,000, payments may be appropriated. I don't know if funds have to be specifically appropriated or if NASA has to come back and ask if it were short of funds. Reading the whole thing, it appears as if NASA would be expected to ask for a special appropriation for any settlement over \$100,000 for a single incident.

Mr. KELLER. I think that is the way it reads; yes, sir.

Mr. CORMAN. That would to that degree—

Mr. KELLER. That would be congressional approval on an overall basis.

Do you interpret that section, Mr. Johnson, as including the total group of claims for a single incident?

Mr. JOHNSON. Yes; we did propose that language with that type of problem in mind.

I think the language is clear that where the total amount of claims, arising out of a single incident and certified by the Administrator to be just and reasonable, exceeds \$100,000, we must come before the Congress and obtain a specific appropriation of that money.

We testified before the Senate committee that this would give the Congress the opportunity, if it wished, to refer those claims to the Attorney General. We would not like to be saddled with the obligation in every case, based upon some arbitrary amount, of going to the Department of Justice. We feel, since special appropriations are required, that the committees which would receive these claims for review could always refer them to the Department of Justice for an opinion before appropriating the money.

Mr. CORMAN. Under this language, NASA could not pay out in excess of \$100,000?

I am a little confused as to why it says it "may" be done. Possibly it is because I am not familiar with legislative language in that respect. It says, "exceeds \$100,000, payments may be made out of funds specifically appropriated." It doesn't say they have to be out of funds specifically appropriated. If NASA had funds available and the claims were in excess of \$100,000, could they under this language make the payment without a specific appropriation?

Mr. JOHNSON. No, Mr. Corman. The reason we wrote it this way, you will see, is found in the language that is stricken which comes from the present military department legislation. It started off the same way. "Upon approval by the Administrator, payments under subsection (a) may be made from"—and then you had three subparagraphs there, but it was not tied down to any particular amount. That gives the military departments the unrestricted choice if they have the money. They might have a claim for \$500,000, and if they happen to have the money available they could pay it out. They wouldn't have to go to the Congress.

Certainly, our purpose in presenting it this way was to make it mandatory; in effect, to restrict our authority. I think that is the proper interpretation of it. It is all permissive authority, but we must follow the lines laid out here.

If the committee wished to change that language, we wouldn't have any objection to it.

Maybe my statement here is sufficient for the record.

Mr. KING. The Chair recognizes the distinguished gentleman from Connecticut, Mr. Daddario, a member of the full committee.

Mr. DADDARIO. Mr. Chairman, I just have one question that has actually troubled me when this problem was presented before the full committee, and which has only been touched on in the second part of the interpretation concerning the recommendation on page 3, presented as the revision of section 1(f) of H.R. 7115. This says the

amount of financial protection required shall be the maximum amount of insurance available from private sources, except that the Administration may establish a lesser amount, taking into consideration the cost in terms of private insurance.

When that was discussed, there was some mention about NASA having more flexibility.

My question just goes to the part of the interpretation of this section. What does it mean? How flexibly will you handle this particular provision from the standpoint of maximum amounts and costs of insurance available, and whether you wouldn't eliminate participation of the private insurance company and be a self-insurer, as you have suggested you might?

Mr. JOHNSON. Our intention is to administer this in such a way as to require the contractor to obtain commercial insurance whenever it can be obtained at reasonable rates. I don't think this is to difficult to determine.

I can be specific about this.

At the present time the aircraft industry, you might call it the aerospace industry, generally finds that they can obtain, at what I refer to as standard rates, about \$20 million of public liability insurance. At that point they run up against virtually a stone wall. The assets of the insurance industry are, of course, limited. They don't choose to commit more than a certain portion of their assets to a specific company and a particular risk. As long as this continues to be the situation, we would require this \$20 million of liability insurance before we would pick up an additional portion through indemnification.

We have had reports of some of these companies attempting to cover themselves through commercial insurance for specified additional risks that might exceed this amount at extraordinarily high premiums. You can buy insurance, if you wish to pay a sufficiently high premium, to cover almost anything, as you know.

We had one case reported to us, which sounds almost incredible, but we were told this by a company, that the premium would be \$200,000 for a potential \$300,000 loss.

That, I think, is an indication of why we would not want to have, as was suggested the other day, a provision in here which says that the contractor must always carry all the insurance that can be obtained, and indemnification will be available only for those risks which cannot be insured, because virtually every risk can be insured if a sufficiently high premium is paid.

There seems to be, from our discussions with both the insurance industry and the insured contractors, a rather clearly definable cutoff here. At the present time it runs in the neighborhood of \$20 million for third party liability insurance.

Mr. DADDARIO. Your approach is along the lines of this indemnification argument that has been going on over the course of years. It falls pretty well within those parts defined by the insurance companies and the Government—

Mr. JOHNSON. That is right.

We have no idea of replacing the commercial insurance companies in covering these contractors for third party liability or property damage insurance, which is presently available at reasonable rates.



Mr. DADDARIO. You would assume the position of a self-insurer, then, only where the cost of insurance was prohibitive, rather than use the availability standard, which I agree is one you should use?

Mr. JOHNSON. That is our position.

That is the reason that we think that the words we have put in here are a sufficient protection to the Government, taking into consideration the cost in terms of private insurance.

Mr. Keller has referred to the Atomic Energy Act provision, which appears on 42 U.S.C. 2210(b). It reads like this—

It says the amount of financial protection required shall be the amount of liability insurance available from private sources, except that the Atomic Energy Commission may establish a lesser amount on the basis of criteria set forth in writing, which it may revise from time to time, taking into consideration such factors as the following:

- (1) The cost and terms of private insurance.
- (2) The type, size and location of the licensed activity and other factors pertaining to the hazard, and
- (3) The nature and purpose of the licensed activity.

In our consideration of this we felt that those second and third criteria were unique to the kind of business the Atomic Energy Commission was in, and that it would not be appropriate for us to try to utilize that kind of language and those criteria in our business.

So, as far as we can see, we think that that first standard which we have included is a sufficient one. I would not like to see it changed.

I think we are going to make this decision solely on the basis of the cost and terms of private insurance. This might, in some of the companies, be self-insurance. Some large companies, as you know, have self-insurance programs. We would not compel them to change that and take private insurance if that has not been their general practice.

The bill, which is patterned after the Atomic Energy Act, specifically recognizes it might be self-insurance on the part of the contractor. In that particular case we would have to know the limits of self-insurance, and if we were convinced it would be an unreasonable risk for the contractor to be a self-insurer above a certain point, that is where the indemnification would pick up.

Mr. DADDARIO. In which case you would use the same standard to reach that assumption?

Mr. JOHNSON. I would think they would be comparable standards.

Mr. KING. The question is whether we shall meet tomorrow. The answer is tentatively, "Yes." The staff is in the process, as I understand it, of arranging for members of the private insurance industry to be with us, also representatives of the AEC and others, who may be able to throw further light on this problem.

Unless you hear to the contrary, we shall reassemble at 10 tomorrow, after adjournment today.

Mr. Johnson, if I interpret the mood of Congress today, it undoubtedly is that the Government should not do what can be done as well or better by private industry. I believe most Congressmen, if not all of them, deplore a situation where there is an overlapping and duplication of functions between the Government and private industry.

The questions raised by Mr. Daddario probed rather deeply into this very area. They were intended to bring out the question of whether or not private insurance companies would still be given a full role to play in this area to the extent that they are capable of doing so, and that the Government will pick up only at that point where private insurance companies leave off.

Do I correctly interpret your answer? Does the Government pick up only at that point where private insurance companies leave off, and there is no attempt to duplicate coverage that you will not have both private and public insurance overlapping in covering the same area; is that correct?

Mr. JOHNSON. That is correct, Mr. Chairman, except that I suppose, to be cautious, I must qualify it by saying where private insurance carriers leave off at reasonable rates, because it is possible to obtain private insurance under extraordinary circumstances, if one is willing to pay an extraordinary premium for it.

I think your statement is a correct representation of our position.

Mr. DADDARIO. I think the chairman has stated this position very properly, and yet we have to understand that there is an area of conflict in this question of indemnification on this particular point. However, the area of conflict has become narrowed down over the course of years. But the end objective is that, as stated by the chairman.

Mr. JOHNSON. Yes, sir.

We had hoped to make that quite clear here in this bill that we are proposing. This is not in the military department legislation. We felt that this was an area where we would be more specific and give both the Congress and the industry the assurance that we were in no way attempting to displace the proper operation of private insurance organizations in this picture.

Mr. KING. I would like to pursue this just a step further.

We have agreed on the theory. I believe that is our concensus without any question.

There is this possible question of what constitutes a reasonable rate and reasonable conditions.

As you have suggested, you can get insurance in almost any situation if you are prepared to pay exorbitant premiums. That raises the question; what is reasonable? Ordinarily one can determine what is reasonable, because there is a vast amount of history to determine what is reasonable and what is unreasonable. But when you get into an area of activity in which there is no history, and that is precisely the area into which we are moving, then how do you determine what is reasonable and what is unreasonable? How do you compute, for example, what are the possibilities of a serious disaster that might involve 10,000 people in a particular community? What are the chances of that happening? Are they one in a million, one in a billion, one in a thousand? Who can say?

I suppose, presenting it that way, you have stated why this is so difficult to determine what is or what is not reasonable.

Could you discuss that for a moment, Mr. Johnson, or Mr. Keller, what guidelines we might have available to us in determining what is reasonable when you get into an area in which there is no history?

Mr. JOHNSON. Well, I understand we are in the presence of lawyers here, and we understand the definition of the word "reasonable." That is what lawyers bank on when they can't define anything.

There comes a point in administering law, and in writing a law, for that matter, where it becomes almost worthless to try to be too specific and perhaps where the best course would be to hold a rather tight rein on the administrative agency and call it to account from time to time to explain how it is administering authority that has been given to it.

But I don't think this problem is quite as difficult as it may appear, because, as I understand it, the existing insurance industry isn't even interested in undertaking coverage in these astronomical amounts that we might be concerned with here.

As I said, \$20 million appears to be the available limit right now through conventional insurance channels for any single contractor.

I would say that as long as that amount is available, or if it were raised to \$25 million, \$30 million, \$40 million, this is what we would require. You get into a sharp cutoff, as a matter of fact, we have been told; when you go above the \$20 million, you have to try to get the insurance in a different way, and the rate doesn't bear any resemblance to the normal maximum that can be obtained.

This \$20 million is not tied down to any specific kind of risk. This can cover lots of these new kinds of hazards, too. But in any event, it limits the insurer's liability to the \$20 million. There may be, of course, a number of companies involved in paying off a claim of that kind. So I think that the sheer availability of this thing, and the discovery that all of a sudden, at a certain point, the premium bears an entirely different ratio to the anticipated loss, will probably make it a fairly simple thing to administer.

From everything I have learned so far, if we had it starting tomorrow, we would not find it a difficult problem. The facts would very quickly speak for themselves. But I think you would like the assurance that if we do have \$20, \$25 or \$30 million available at what are called the standard rates, we are not going to say that we think all the rates charged by the insurance industry are excessive; that they should be 10 percent lower, and we are going to step in and provide indemnification coverage to drive the rates down. There is no such intention, and the law will not be used in that way.

It is our purpose simply to be able to supplement the coverage that can be obtained from the insurance industry.

I think I would find it very difficult to define "reasonableness" as applied to all of these unknown things.

Mr. KING. You think the problem is not an unsurmountable problem?

Mr. JOHNSON. I do not think it is. After all, our purpose is not to be even concerned about this first \$20 million that the companies are presently getting, but to be concerned about the next \$480 million that might be involved if we have a \$500 million catastrophe.

I should like, Mr. Chairman, if I may, just very quickly to give our answers to the few points that Mr. Keller brought up, if the committee would like.

Mr. KING. Yes.

There was one question—Would you proceed, then?

Mr. JOHNSON. I think we are very close, and I am very pleased that we are, because it is always good to be able to come to agreement with the GAO on a bill of this kind.

The last point I don't want to say any more about. That had to do with this question of whether we should be given greater leeway in determining whether commercial insurance should or should not be obtained in certain amounts.

I think we have said enough about that.

His first point had to do with the possible exclusion of liability resulting from the contractor's negligence.

Mr. Keller did not press that point and said he realized himself that it probably was not useful to exclude it, and he drew upon the insurance analogy.

We would be firmly opposed to any such exclusion.

From our point of view, it would render the indemnification authority virtually useless if liability resulting from the negligence of contractors' employees were to be excluded.

This is an insurance type of coverage, essentially. Just as we would not want liability insurance that excluded liability from our own negligence in connection with any of our own private activities, similarly, this would leave the contractors without coverage in the very occasions where they may need it the most.

The Air Force, I understand, in its indemnification agreements, does not exclude the willful negligence or misconduct of top-ranking officers of the corporations that are indemnified.

I am sure we would want to consider carefully the limit to which such exclusions ought to go in our indemnification agreements. Here is a situation where you might be able to be concerned about a fairly small group of people. But a large contractor, with thousands of employees, must have public liability insurance that covers them in the case of the negligence of those employees, and similarly the indemnification coverage should also be that extensive.

I understand Mr. Keller did not press that point.

Mr. KING. You feel that to relax that rule would result in a lowering of their own self-imposed standards of good care and prudence in the operation?

Mr. JOHNSON. I don't think that it would have any appreciable effect on that. These companies are, in the main, carrying a substantial amount of liability insurance at the present time. I think that there are all kinds of safety standards imposed in connection with their operations. The insurance companies are active in this. I don't feel that the actual standard of conduct would change materially one way or the other. I do think that the usefulness of indemnification legislation would be destroyed if liability resulting from the contractor's negligence were to be excluded.

The second point—I am sorry—I think there were only four points, Mr. Keller, and the second point did relate to this matter of the amount of insurance obtainable, which we have been discussing, and whether cost should be the only factor.

The third point related to spelling out some criteria for determining which law should be applicable. I think this would be a very difficult thing to do in a statute, to simply say that the law, where the incident occurred should govern. I think it would be somewhat dangerous. It is all right to put this kind of thing in the Federal Tort Claims Act, because there we are providing directly for a suit against the Government, and there is a waiver of sovereign immunity

that lies at the base of that whole legislation. So the Government can consent to be sued on whatever basis it wishes to be sued and specify the law to govern. This is not that kind of legislation.

We are here simply picking up the liability of contractors as the law establishes it at the present time, whether it may be local statutory law or the common law, the common law in the course of development, which is somewhat unpredictable in this area. To tie it down to a particular jurisdiction by a set of words of this kind would, I think, be a dangerous and essentially a useless thing.

I think that the administrative agency, in this case NASA, which has the responsibility, should look at all the factors that pertain to any particular incident, all the factual considerations, all the legal considerations involving the places where suit might be brought—and it may very well be that the plaintiffs would have a choice of jurisdictions, and that the different jurisdictions where a suit might be brought might have varying rules concerning the choice of applicable law.

So it becomes a rather complicated thing. But I think we should have to look at the situation as a whole, and, if we attempt settlement before the case goes to judgment, take all these things into consideration.

That is the end of my remarks concerning Mr. Keller's third point. The fourth point is closely tied in with it, however.

He suggested the committee might want to give consideration to imposing a limitation on the maximum amount of settlement without a court judgment or without concurrence of the Attorney General.

I did mention earlier that so far as the concurrence of the Attorney General is concerned, the Congress, the congressional committees to which these matters are referred when the total claims exceed \$10,000 could, if they wished, seek the advice of the Attorney General without imposing that as a routine procedure, which I think would be unfortunate.

So far as court judgments are concerned, here again I think that is undesirable. I think it would be equally undesirable for the Congress to pass a law that says that the Attorney General or other agencies that presently have settlement authority in contract claims and tort claims could not settle a claim against the Government in the absence of a court judgment.

There may be many cases where it would be most undesirable to for the claimants to get a decision in a particular case.

On the other hand, I am sure that in appropriate cases we would consult with the Department of Justice, and if it were decided it would be desirable to have a court decision, which would settle the law, we would pursue that course.

I don't think it would be desirable to write into statute some criteria which compelled litigation to the point of judgment in any particular case.

That I think is the end of my comments in response to Mr. Keller.

Mr. KING. One little question, and I think we are through.

Who would define "hazardous risks," as set forth in the statute? Would it be the Administrator, himself?

Mr. JOHNSON. It would be the Administration, in accordance with regulations and criteria approved by the Administrator. The matter

would come up in the course of the negotiation of a particular research and development contract, where the contractor would request indemnification coverage. We haven't decided just how this would be administered in the agency, if the law is passed. But there would be some extraordinary procedure set up for the administration of this.

The contracting officer undoubtedly would get the request in the first instance. I think it is most likely that we would require headquarters approval before an indemnification clause is inserted in any contract. This would require that the clause be reviewed at headquarters to get uniformity and to be sure that the risk was properly defined.

Mr. KING. One final little one, and then I am through.

Where you have two or more joint tortfeasors, is there any problem of apportioning liability between them? Do you see that as a possible question coming up?

Mr. JOHNSON. Well, I can see all of these things as leading to rather careful investigation and consideration.

Where we might have the two joint tortfeasors, I assume you are thinking of a situation where a contractor and subcontractor were perhaps both involved.

The problem is really not too difficult, however, because both of them would be indemnified, and the important thing is to determine what the total potential liability of both might be. In that particular case, we would look at the extent of the injury which the plaintiff had suffered. And while, if they were to pursue their private rights, they might have a bit of difficulty in determining what portion went to contractor X and what portion to subcontractor Y, from the point of view of the Government, which is indemnifying both, this would not, I should think, be too difficult a problem.

We would look primarily at the total loss which the plaintiffs had suffered and for which they had a legitimate cause of action against one party or another who were indemnified.

Mr. KING. If the injury had been caused by a subcontractor, and if the Government's dealings were exclusively with the contractor, the Government would still indemnify the subcontractor, if, under the contract between the contractor and the subcontractor the contractor himself was liable?

Mr. JOHNSON. We have a specific provision, Mr. Chairman, in this section, subsection (i). The term "contractor" includes subcontractors of any tier under a contract in which an indemnification provision pursuant to subsection (a) is contained.

So that once we have determined that the subject matter of the prime contract is one which involves the unusually hazardous risk for which liability may exceed the available insurance coverage, then the indemnification applies not only to the contractor but the subcontractors, recognizing it may be the manufacturer of one of the components that might possibly be held liable for the resulting catastrophe rather than the manufacturer of the thing into which the component went. It would cover the whole complex of subcontractors and the contractor contributing to the subject matter of that contract.

Mr. KING. Mr. Hines reminds me there is one other question that has been raised and that hasn't been answered yet.

Should the indemnification be limited to just R. & D. or should it go to production contracts, also?

Mr. JOHNSON. Mr. Chairman, we joined with the Department of Defense 2 years ago in seeking a broader indemnification coverage than this. As you know, the Department of Defense indemnification is presently limited to research and development contracts, and the law is essentially modeled after that.

Our first attempt to get indemnification legislation in 1959 was to submit a bill in identical terms with that submitted by the Department of Defense, which would not be limited to research and development. This bill was not favorably acted on. It was referred to the Armed Services Committee, which took jurisdiction over it, rather than the Space Committees. You deferred to the Armed Services Committees.

We came back last year with a more restricted provision, hoping that we could get at least that which the Department of Defense has. From NASA's point of view, this covers us pretty thoroughly because we are essentially a research and development organization.

The Department of Defense goes into quantity production on items beyond the research and development stage. NASA does not. Those things which we are using that are in quantity production, such as the Thor booster, we are getting from the Department of Defense. They are the contractors in our behalf for those things.

I don't say that it is not conceivable we may have some quantity production in the future that would go beyond the research and development stage. I don't say, either, it is not desirable to have that coverage.

Personally, I am very sympathetic with the Department of Defense's request for the broader coverage. As far as NASA is concerned, it is not a matter of much importance to us at the present time. Research and development covers the great bulk of our activity.

Mr. KING. Thank you.

May I express the appreciation of this subcommittee to both of you gentlemen, Mr. Johnson and Mr. Keller, for coming here. Your contribution has been very significant, and we will consider very carefully the testimony that you have given.

Is there further business to come before this subcommittee?

If not, we shall stand adjourned until tomorrow morning at 10 a.m. (Whereupon, at 12:01 p.m., the subcommittee adjourned, to reconvene at 10 a.m., Tuesday, June 13, 1961.)

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## TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

TUESDAY, JUNE 13, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
SPECIAL SUBCOMMITTEE ON INDEMNIFICATION,  
*Washington, D.C.*

The subcommittee met at 10 a.m., pursuant to adjournment, in room 214-B, New House Office Building, Hon. David S. King (chairman of the subcommittee) presiding.

Mr. KING. The special subcommittee appointed to investigate the indemnification section of H.R. 7115 will come to order.

This is the second and, presumably, the last public hearing that will be held on this matter.

The Chair would like to state that there has been submitted to this subcommittee a recommendation, whose author is Mr. Ray Wilcove. This recommendation proposes that an astronautics casualty indemnification fund be established to cover losses for which the Government would be liable. The fund would be set up in the Treasury Department and administered by the Secretary of the Treasury. Each contractor awarded a contract, wherein the risks involved were defined as unusually hazardous, would be required to pay into the fund a premium to insure him against losses over and above those covered by commercial insurers. The premium would be a percentage fee based on the gross value of each contract. The amount of the fee would rise if contract costs went up, decline if contract costs fell. The premium rate could be based on the rate now charged by commercial insurers.

There is more to the recommendation, but the Chair has sketched out just the highlights.

The Chair would like to say that this particular proposal may have merit and may not have merit. This subcommittee is not in a position to pass judgment on the merits of this plan. Because of the exigencies of the present situation this subcommittee is not in a position now to go into this matter and to hold hearings on the merits of this proposal.

The Chair has made reference to this plan at this point, however, in order that the record show that it was submitted to this subcommittee. It may be that the full committee, at some future date, in its wisdom, may authorize this subcommittee or some other subcommittee to pursue this matter.

But at this time, because of the urgent necessity that we submit a report if possible by the end of this week, this subcommittee will not have occasion to pursue this matter further.



We have with us this morning Mr. Richard H. Butler, representing Travelers Insurance Co.; Mr. James Fortuna, representing United States Aviation Underwriters; Mr. John Dane, representing Liberty Mutual Life Insurance Co.; and Mr. DeRoy C. Thomas, representing the Association of Casualty & Surety Companies.

Do I understand correctly that you four gentlemen are here more or less together, because you represent essentially one point of view? Is that correct?

Mr. THOMAS. That is correct.

Mr. KING. Your testimony is to be informally given, with perhaps you, Mr. Thomas, beginning, and perhaps you introducing in others as you see fit, so that all of you can make your contribution jointly? Is that correct?

Mr. THOMAS. That is correct.

Mr. KING. At this time the Chair will recognize you, Mr. Thomas. Perhaps you can begin and say what you will and bring in the others, as you have agreed with them.

**STATEMENTS OF RICHARD H. BUTLER, TRAVELERS INSURANCE CO.; JAMES FORTUNA, UNITED STATES AVIATION UNDERWRITERS; JOHN DANE, LIBERTY MUTUAL LIFE INSURANCE CO.; DeROY C. THOMAS, ASSOCIATION OF CASUALTY & SURETY COMPANIES**

Mr. THOMAS. Mr. Chairman, I would like first to introduce each of the gentlemen with me and to point out who they do represent.

As you pointed out, Mr. Butler is the secretary of the Travelers Insurance Co., and he is an underwriter, experienced with the writing of nuclear risks.

Mr. Fortuna is a vice president of the United States Aviation Underwriters, and he is very familiar with the writing of large aviation risks.

Mr. Dane, like myself, is a lawyer, assistant counsel to the Liberty Mutual Insurance Co., and today Mr. Dane also speaks for the American Mutual Alliance, which is an association of mutual casualty companies. I speak today for the Association of Casualty & Surety Companies, which is composed of some 135 stock casualty companies.

We want to express our deep appreciation for the invitation to appear before you today in connection with your consideration of the revised H.R. 7115.

We would like to say at the outset that we have no objection to the present bill, since casualty insurers have always taken the position that they can have no objection to Government indemnity in areas where they are unable to perform.

We would like to say, specifically, we are pleased with subsection (e) of the revised bill, which provides for underlying financial protection in the form of insurance, private contractual indemnities, self-insurance or other forms of financial responsibility. We are convinced that the language of section (e) which provides that the—

amount of financial protection required shall be the maximum amount of insurance available from private sources—

is designed to permit maximum participation of private insurers.

Mr. KING. You are referring now, are you not, to the proposed revisions—

Mr. THOMAS. In all cases.

Mr. KING. To H.R. 7115, these proposed revisions having been submitted likewise by the legal department of the NASA and specifically referred to by Mr. Johnson and Mr. Keller on yesterday?

Mr. THOMAS. That is right, sir.

We are also satisfied that the authority given to the administration to establish lesser amounts, taking into consideration the cost and terms of private insurance, is a proper restriction on the standard of the maximum amount of insurance available. Any doubts that we may have had on that score were resolved when we listened to the colloquies between Chairman King, Congressman Daddario and General Counsel Johnson at the hearings yesterday.

Finally, we want to express our satisfaction with the incorporation of new subsection (g) into the revised bill, which is taken from 170(g) of the Price-Anderson Act. It provides that in administering the section, to the maximum extent practicable, the Administration shall use the facilities and services of private insurance organizations. Under this provision, in the event of a major incident, we feel certain that we will be able to make available our vast and experienced claim facilities.

We want to thank you once more for your kind and courteous attention.

We are prepared to try to answer any questions you may have.

Mr. KING. We appreciate your contribution very much, Mr. Thomas. It is very concise. I believe it will be very valuable in helping to establish the necessary legislative history for this bill, which will be of value in guiding those who are charged with administering this bill when and if it shall be enacted into law.

As I understand it, then, your position is that you, representing the segment of private industry, private insurance companies, believe that private insurance companies should be given every opportunity to participate in this program of indemnification up to the point where they feel they can reasonably do so?

Mr. THOMAS. Exactly, sir.

Mr. KING. After that point has been reached and passed, then you feel that the Government has a very legitimate position or justification to step in and give assistance?

Mr. THOMAS. We do.

Mr. KING. Your reasoning, as I understand it, is based at least, in part, on the fact that the hazards with which we are dealing here are potentially extremely large, much larger than any one or any combination of companies could be expected to handle. We are talking about possibly hundreds of millions of dollars. We hope and pray that no calamitous event like that will ever come to pass. But, at least it is a possibility. So we are confronted first with the fact that we could have excessively large claims and, secondly, the fact that we have absolutely no history to go on. There is no science, no actuarial tables, no scientific prognosis of what the chances are for having to cover such losses. Where there is absolutely no history. That being true, such coverage would not be based on a science. It would be just a gamble, and no sound business practice can be built up just on a gamble. There is always an element of gamble, that is true.

There has to be some science along with the gamble. Am I correct on that?

Mr. THOMAS. As to the underwriting aspects of this, I might ask Mr. Butler or Mr. Fortuna to comment.

Mr. BUTLER. I think you have said it very well, Mr. Chairman.

In what we call the excess field in general, which is the high-limit field, there is always limited experience, even outside the problem of missiles, and so forth. But there is some. There is a long history of insuring those hazards within the area in which we have capacity. So that we use a combination of what we prefer to call judgment rather than gamble, and such experience as we have, and we have no experience of any consequence at all in this field.

Mr. KING. You can compute the chances of a particular man having a heart attack in a certain timespan. Although all men are different and therefore you can't say with absolute certainty what the chances are, still men do fall into a pattern, and you do have case histories on millions and millions of men who have gone before. On the basis of those case histories you can come up with something reasonably predictable.

Mr. BUTLER. The life people can give you a figure on that on very short notice.

Mr. KING. However, when you come into a situation like this and you are trying to decide what are the chances of a community being wiped out because of a miscalculation or a horrible accident happening in connection with the launching of a rocket, as I said yesterday, whether your chances are one in a thousand or one in a million or one in a billion, who is to say? There is just absolutely no basis. It would be pure guesswork. To the extent that it is, then to that extent private companies would feel that they shouldn't enter into that area of it and would be perfectly happy to have the Government help out, as indicated in this bill. But always keeping in mind the idea that where the private companies can come in and participate on a sound businesslike basis, then to that extent they should be allowed to do so.

Mr. THOMAS. That is exactly our position, sir.

Mr. KING. I wanted to be certain to get that into the record.

It may sound a little repetitious, but I think it will be beneficial for guidelines for those who are administering this law.

Mr. FORTUNA. May I add one thought? The lack of exact precedent, lack of experience in a particular area would be less significant in this problem than the actual magnitude of the exposure. Various types of new equipment, aircraft, for example, were new a relatively short time ago. But the lack of experience did not preclude private insurance in acting. In fact, it is active in support of the commercial aircraft industry. So, lack of experience, by itself, would not be a difficult problem to private insurance but magnitude obviously is.

Mr. KING. What is the scope of your aviation coverage, in total amounts of money?

Mr. FORTUNA. I believe most commercial operators of aircraft today carry layers of insurance protection that gets close to \$20 million. Some may buy more, some slightly less. This is a reasonable routine maximum.

Mr. KING. That would cover one casualty?

Mr. FORTUNA. Per casualty.

And, of course, in the case of a midair collision this could be \$20 million for the operator of each aircraft, and the capacity of these fully fueled aircraft to damage property on the ground is considerable. Within the established limits of coverage available, I think private insurance, by its past performance, has demonstrated an ability to handle this type of catastrophe.

Mr. KING. Is it possible, as we move into this field of rocketry in outer space and do build up a little more history, that the private insurance companies may likewise be willing to move a little more confidently into this field and may be willing, perhaps later, to participate a little more than they would now feel is reasonable and prudent.

Mr. THOMAS. It is certainly our hope our capacity will develop as this field develops, sir.

Mr. KING. The Chair recognizes Mr. Hines.

Mr. HINES. Considering the large amount of coverage that Mr. Fortuna represents, is the experience in dealing with major air catastrophes transferable? For instance, are the criteria that you have developed out of your experience with major air disasters transferable into this particular field?

Mr. FORTUNA. In a very broad sense. I think the example is transferable. In the sense that before very expensive aircraft with large passenger capacities were available, there was no insurance available; there was no need for it. The aircraft industry required higher capacities and private insurance generated those capacities. To say that that capacity is now automatically transferable to any other field, I think, would be a presumption certainly on my part. I would not say that. But I think the demonstrated capacity of the private insurance industry to solve that problem would suggest that the industry should be looked to to seek solutions to this current matter of missile liabilities.

Mr. HINES. What has been the history of the premiums? Have they come down?

Mr. FORTUNA. It has followed, over the period, the experience of its insurers. I think you had two curves, again speaking very broadly; the rate seemed rather high in the beginning, but it grew higher as the purchasing power of the dollar fell. And as a new concept of responsibility, the aircraft operator was expected and is expected, as he should be, to live up to an ever-increasing standard of perfection. There was more forgiveness given to the operator of the 1920 airplane than to a 1961 airplane. So the actual cost, I would say, in dollar to dollar has increased and will, if the same pattern of inflation continues, increase further.

Mr. HINES. You anticipate the same sort of experience?

Mr. FORTUNA. I would think so.

Mr. KING. The Chair recognizes the gentleman from California, Mr. Corman.

Mr. CORMAN. I take it that you would have to distinguish this field of space exploration with its attendant activities from that of underwriting in the airline field or aviation field because of the much broader market for the aviation insurance? I should think that would have a good effect on your rates, would it not? We couldn't anticipate the same kind of rate structure in a smaller activity.

Mr. FORTUNA. The rates would naturally be different in proportion to the exposures. This becomes a function, I suppose, of the underwriter's judgment. Since you don't have direct experience, the underwriter seeks the analogous experience and in his judgment tries to determine the relationship and the value of the analogy. I think then he feels the effect of competition, of which in certain elements of this industry there has been considerable.

I think a fair amount of insurance, certain areas of liability insurance, has already been written by private insurers in the missile area. And competition, I think, is reasonably active in that area right now.

Mr. CORMAN. In this field, does your rate structure show a marked change in the curve at any point? I assume you start at the bottom with the insurance costing so much per thousand or so much per million. Is there, at any point, a sharp increase in the rate, in this missile field?

Mr. FORTUNA. I think the pattern that is followed today in this particular type of insurance is insurance in relation to a particular corporation's ability, not an attempt to measure all possible responsibilities involved in any one venture. So that the traditional variation in cost is to start at a higher price for the first dollar of protection and reach a reducing price. When you exceed the routine maximum, perhaps you have already had all—if I may use the term "professional underwriters"—committed to their maximum line. Then, if you seek to attract nonprofessionals who would not want to write this class, then you would perhaps have to pay a surcharge premium to attract these nonprofessionals. To that extent you may have a reverse in the curve where the highest segment may cost more than its predecessors.

Mr. CORMAN. Would you suggest as one guideline, when we get to paying a "premium-premium," that that would be the point at which the Administrator should look carefully to the Government underwriting under this statute?

Mr. FORTUNA. It would be a possible parameter.

Mr. CORMAN. Do you feel the Administrator should consider the competition in the field or, put conversely, when he gets to that point where there is not vigorous competition among the insurance companies for coverage, he should consider Government indemnity taking over? Would you agree with that as being a reasonable consideration of the Administrator?

Mr. FORTUNA. Yes.

Mr. CORMAN. I would like, for the record, to say that I have no argument with the insurance companies absorbing the major portion of this, particularly in the lower amounts of money. On the other hand, I think, realistically, we have to admit it is the taxpayer who is paying the premiums in the final analysis, and that the Administrator is going to have the burden of ascertaining the public welfare in fixing this limit at which the Government will take over. Anything that is done in the space field at the moment is done with the taxpayers' money.

I won't argue with the capacity of the insurance companies to give better protection than the Government could in the lower amounts.

I suspect that the Administrator must look constantly to the existence of competition among companies in the field to justify private insurance agreements.

Mr. KING. In that connection, the Chair will state that the crucial language in question is found in subsection (e) of the proposed revisions of section 308, the second sentence:

The amount of financial protection required shall be the maximum amount of insurance available from private sources, except that the Administration may establish a lesser amount, taking into consideration the cost and terms of private insurance.

So that the key words are—

except that the Administration may establish a lesser amount, taking into consideration the cost in terms of private insurance.

In those words I suppose are to be found such an elasticity as would be necessary in administering this type of a statute to reach the results that the gentleman from California has suggested in his statement.

In discussing this matter with some of the gentlemen now before the committee, it was suggested yesterday, during this private discussion, that perhaps these words might be a little too elastic. The Chair would like to ask the question:

In view of the rather definite discussion that we have conducted on this point, and the legislative history that we have gotten into the record, do you gentlemen feel that, with that legislative history as a rather firm guideline, that this language is satisfactory?

Mr. THOMAS. Of course, I hesitate to speak for the others. I personally feel that you have very carefully and clearly explored the area.

I would like to add, for Mr. Corman's benefit, that competition certainly is one regulating factor that will be of help here. I think you will find there is extensive regulation by the States in this area. States require that rates be not inadequate, excessive, or discriminatory. This, too, I think you will find will be helpful in helping you determine the adequacy of the rate that is charged.

We think generally—at least I do—the helpful discussion clarified the thing completely.

Mr. DANE, do you want to add to that?

Mr. DANE. I would quite agree with that statement. I think the fact that you are going to take into consideration the cost of private insurance actually contemplates the things that the gentleman from California has stated.

I think the record very clearly indicates that.

Mr. KING. Mr. DANE, are you satisfied with the conclusions that have been tentatively reached this morning, and do the expressions of opinion uttered by the other three gentlemen concur with your own opinion?

Mr. DANE. Yes, they do, sir.

Mr. KING. Do any of the four of you have anything further? And I am not suggesting that you should have. I think what we have now—

Mr. THOMAS. I want to thank you very much again on behalf of all of us for the opportunity to appear today. We deeply appreciate it.

Mr. KING. I appreciate your being here.

The Chair would like to express the opinion that it feels these have been very thorough and exhaustive hearings.

We are grateful for your contribution.

With that, the subcommittee will stand adjourned.

(Whereupon, at 10:40 a.m., the subcommittee adjourned.)

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TO AMEND THE NATIONAL AERONAUTICS AND SPACE  
ACT OF 1958

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MONDAY, JULY 10, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
*Washington, D.C.*

The committee met at 10 a.m., pursuant to notice, in room 214-B, New House Office Building, the Honorable Overton Brooks (chairman) presiding.

The CHAIRMAN. The meeting will come to order. I think, since it has been several weeks since we had a meeting, because of the Fourth of July recess, it might be appropriate to have it opened by a formal rollcall. We will leave the record open for those who come in a little later to tally themselves present.

Will you call the roll, Mr. Finch.

Mr. FINCH. Mr. Brooks?

The CHAIRMAN. Here.

Mr. FINCH. Mr. Martin?

Mr. Miller?

Mr. MILLER. Here.

Mr. FINCH. Mr. Fulton?

Mr. Teague?

Mr. Chenoweth?

Mr. Anfuso?

Mr. Van Pelt?

Mr. VAN PELT. Here.

Mr. FINCH. Mr. Karth?

Mr. Bass?

Mr. Hechler?

Mr. HECHLER. Here.

Mr. FINCH. Mr. Riehlman?

Mr. Daddario?

Mr. DADDARIO. Here.

Mr. FINCH. Mrs. Weis?

Mr. Moeller?

Mr. Mosher?

Mr. MOSHER. Here.

Mr. FINCH. Mr. King?

Mr. Roush?

Mr. ROUSH. Here.

Mr. FINCH. Mr. Roudebush?

Mr. ROUDEBUSH. Here.

Mr. FINCH. Mr. Morris?



Mr. Bell?

Mr. BELL. Here.

Mr. FINCH. Mr. Casey?

Mr. Randall?

Mr. Davis?

Mr. DAVIS. Here.

Mr. FINCH. Mr. Ryan?

Mr. Corman?

Mr. CORMAN. Here.

Mr. FINCH. Mr. McCormack?

Mr. McCORMACK. Here.

Mr. FINCH. Mr. Chairman, there are 12 members present.

The CHAIRMAN. There will be another member in very soon, I am sure, to make a quorum. Will you please enter the names of those coming in later.

The first order of business this morning is to read into the committee's record House Resolution 367, which appears in the Congressional Record of June 29 on page 10966:

*Resolved*, That J. Edgar Roush of Indiana, be, and is elected a member of the standing committee of the House of Representatives on Science and Astronautics and to rank No. 10 thereon.

The resolution was agreed to by the House on that date. I want to take this opportunity to welcome home our colleague and friend, Mr. J. Edgar Roush. We are happy to have you back on the committee. I think you did excellent work last term, and we want you to pitch in and do the same high standard and caliber of work in the future which you have done so well in the past. We are glad to have you here.

Mr. ROUSH. Thank you, Mr. Chairman. It is good to be home again, Mr. Chairman, to come back to this committee. I thoroughly enjoyed my work on the committee under your leadership in the 86th Congress. I am anticipating the work during the coming few months, and I am glad to renew my acquaintanceship with my colleagues and the work of this committee. I trust we may have a very successful time here.

The CHAIRMAN. I think it is noteworthy to remember that Mr. Roush was on this committee. He knows what the work of the committee is, and yet he asked to be put on the same committee.

Mr. ROUBUSH. I would like to enter in the record now that the shouting and the tumult has died that I very warmly welcome my good friend, Ed Roush to our committee, and say that it certainly will be a pleasure to serve with him.

The CHAIRMAN. Thank you very much.

The meeting this morning will address itself to a number of matters. First, we have a report entitled "Equatorial Launch Sites—Mobile Sea Launch Capability," which is ready for our action. I understand Mr. Roubush has some observations he wants to make with respect to this report.

I think it is a very excellent report, well written by our committee counsel Mr. Hammill. It is really an excellent report. Everybody else seems to be satisfied with it. If there is no objection, we can approve the report today, subject to Mr. Roubush's observations which he may wish to make for the record.

It is so ordered.

Mr. ROUDEBUSH. Mr. Brooks, may I make my observation before the approval?

The CHAIRMAN. You can make your observations now if you wish.

Mr. ROUDEBUSH. First, I would like to say that nothing I would say here today should in any way indicate to any member of this committee any lack of confidence in our staff. I think it is an excellent report, too.

However, I just disagree with some of the findings contained in the report. No. 1, I think it is quite evident that Mr. Rubel shares my concern. On the last page of the committee report you will note, "request further study regarding mobile launch sites." No. 2, I just question the feasibility of the so-called double dogleg technique from Cape Canaveral. You know to fire a communications satellite into orbit it is necessary first to fire a rocket which will take a satellite to the necessary altitude, and then a rocket tips and places the satellite into that altitude orbit. Then in order to go into a path over the Equator you would have to have a double dogleg technique. It has to make a right angle turn and a left angle turn in order to be in proper orbit. We do not have these techniques. I refer to the Discoverer program, and probably the first question that may be in the committee's mind is why do I quote the Discoverer program. Well, I quote it and the statistics surrounding the Discoverer program because similar techniques are necessary in this particular program. I point out that the record shows that with no doglegging there were only 6 of 26 successful shots. This was quoted in the Washington Post on the front page this morning, 6 out of 26 with no doglegging.

Mr. MILLER. Six recoveries, was it not, of cones, out of 26?

Mr. ROUDEBUSH. It mentioned successful shots, Mr. Miller.

Mr. MILLER. Four snatched out of the air and two snatched out of the water. There is some data that comes back, whether these are recovered or not.

Mr. ROUDEBUSH. The point I want to make, Mr. Miller, if I might, there were six completely successful shots—

Mr. MILLER. I would say there were six shots in which they successfully recovered the cone.

Mr. ROUDEBUSH. That is correct.

Mr. MILLER. This is another technique all together that has nothing to do with getting the satellite into orbit.

Mr. ROUDEBUSH. I think the gentleman will agree that a similar technique is necessary in this case.

Mr. MILLER. I am not arguing that at all. I just want to keep the record straight. I don't know that there may have been one or two failures in the Discoverer. I don't remember now the number of failures to get the Discoverer into orbit. But for the most part it got into orbit. We are talking about getting it into orbit. We are not talking about a recovery here. There were six recoveries and this, I think, is a very good record because you have had to develop a technique of snatching these things out of the air that many people thought was impossible. We have not only snatched them out of the air but we have recovered two of them in the water. I think the record there is very good.

Mr. ROUDEBUSH. I certainly thank you for your observations, Mr. Miller. I am not trying to give any misleading statements here. As

I point out on your double doglegging it requires two turns and the tipping of the satellite. Another point that hasn't been, I don't think, properly brought out in this committee report is that the so-called double doglegging technique reduces the payload. When you consider an equatorial launch, first the type launches that would be carried out at the Atlantic Missile Range at Cape Canaveral, and in this case I quote the 22,000-mile satellite, the actual loss in payload is 600 pounds. In other words, in an equatorial orbit we are able to launch 600 pounds more payload by using an equatorial launch. I don't have the figures on low-altitude multiple satellites; however, the payload would be correspondingly to these figures I give you on the high altitude. I would like to point out on the mobile sea launch, first, it allows, one, secrecy in firing of our missiles. I think that is very important. Two, it does away with the political implications. By "political implications," I mean the possibility of the establishment of a launch site in a country that is unstable and perhaps we spend many millions of dollars to establish a launch site in a country and find the politics change overnight and find this site is no longer available to us.

We have had similar experience in some of our heavy bombardment squadrons. It enhances the possibility and capability, and again I speak of sea launch, of the destruction of satellites. By the maneuverability of this launch site it makes it possible to intercept satellites and demolish them. I am speaking perhaps of our own satellites or the possibility of enemy satellites. Lastly, I would like to point out: The type of mobile launch would be a multilaunch site. In other words, we could use it for a number of different types of rockets. We could use it for a number of different types of launch. We have a crowded condition at Cape Canaveral now. It would be possible to bring this mobile launch site and anchor it offshore at Cape Canaveral and use it as an additional launch pad, in addition to the selectability of the type of firing. We do not have this technique at the present time. It is entirely feasible from the standpoint of technology. We have built and there are many shipbuilders in the New York, the Boston area where they build these heavy type of drydocks and so forth, it is entirely possible to build such a launch site. In other words, we have sites, we have similar craft that have already been constructed that would handle this purpose. The only point I bring out, Mr. Chairman, is I feel that the report should be held in abeyance until we get the facts, and to publish a report without all these facts to me is wrong. I would like to point out, and I am just looking at the "Missiles and Rockets" in the issue of June 26, 1961, I was going over this this morning, the development of Cape Canaveral. Any of you who have been down to the Atlantic Missile Range, and I assume that means everyone on the committee, realizes the tremendous value of the real estate surrounding Cape Canaveral.

It is a highly populous area, with summer resorts and you have Cocoa Beach and other communities immediately in the area of Cape Canaveral. The estimate by Mr. McNamara for land alone is \$1 billion, an additional half billion dollars for facilities. We had our distinguished admiral of the Navy, Admiral Hayward, before this committee just a few weeks ago. He estimated that he could build or the Navy could build through contractors an adequate launch site for, that is mobile water launch site, for \$7 million. Even if this

figure were correspondingly higher, let's say it ran \$15 or \$16 million, to compare this figure against a billion and a half, well, it doesn't compare very well. So, Mr. Chairman, just as one member of this committee, and as a freshman Congressman I felt it was very proper that I bring these facts to the committee's attention before they approve this report.

The CHAIRMAN. Let me suggest to the gentleman that, as I recall the hearings, we took that matter up and it was definitely rejected by most of the witnesses because of the terrific cost. With regard to Cape Canaveral, I introduced the bill that created Cape Canaveral. I presented it to the House of Representatives, and at the time Cape Canaveral was authorized, it was merely a swamp in Florida with a lot of mosquitoes and a lot of salt water. It was called the Banana River Base. They changed the name later to Cape Canaveral. So that the value of the real estate followed the use of the base; the value of the land was quite low at the time the base was created.

Mr. Hammill, you handled the hearings on this subject. What is your recollection regarding the testimony on the mobile launch site suggested by our colleague?

Mr. HAMMILL. Since the hearings, I have taken the trouble to check with Assistant Secretary of Defense John Rubel who had testified before the committee. I have also talked to Mr. Sam Snyder, the witness from NASA, on this matter. They both say that the \$7 million figure quoted by Admiral Hayward is really meaningless in the perspective in which such a development should be viewed. By that I mean any significant capability for launching space vehicles from platforms at sea would certainly cost vastly more than that; it wouldn't be just twice or three times that amount, either.

The CHAIRMAN. Doesn't the record of the hearings reject the creation of a mobile sea launch capability at this time?

Mr. HAMMILL. No one testified that we need it today. Everyone agreed that it is technically feasible, but no one said that it was really a good idea, other than the Navy witness. Everyone else said that it would create novel problems, that it is not needed at this time, but that it will continue to be studied in connection with future requirements.

The CHAIRMAN. Well, did not they also say that \$7 million would be just the beginning of an enormous outlay; and that the figure \$7 million really had no meaning at all because there would have to be so many supply ships and additional auxiliary and support ships that the total cost would be extremely high? And that, therefore, the figure \$7 million was purely meaningless?

Mr. HAMMILL. That is exactly right.

The CHAIRMAN. Does the record show that?

Mr. HAMMILL. I don't know that the record brings it out quite as clearly as the conversations I have had with Mr. Rubel and Mr. Snyder since that time. They have both condemned the figure \$7 million as being completely meaningless in my conversations with them.

The CHAIRMAN. Perhaps at some later date the committee might look further into the question of mobile sea launch sites, but the record to date, as I see it, does not justify recommendations on our part in favor of such a development at this time. Is that correct?

Mr. HAMMILL. Yes, sir. That is my view. I might add that officials of both NASA and the Department of Defense have stated that these things are currently under study, and that the results of their studies will be furnished to the committee when completed. I am informed that the NASA study is expected to be completed in about a year. The DOD study should be completed in a matter of months.

Mr. BELL. May I ask Mr. Hammill a question? When we were down to Cape Canaveral for the first astronaut's flight, one of the executives down there made the statement that they were studying the possibility of launch sites out in Banana River itself. Have they come up with any answer on that as yet?

Mr. HAMMILL. No, they haven't. I might say at this point that Mr. Roudebush's letter to the chairman refers to a recent excursion to the area of Cape Canaveral by officials of the Air Force and NASA to determine what might be needed in the way of future launch and support facilities. This study is a direct outgrowth of the President's message on the "man to the Moon" shot, the program whereby the United States hopes to have a man on the Moon by 1970. This study was ordered by NASA; cooperation was received from the Department of Defense, specifically the Air Force, and they are now in the process of completing this study. The results of this study should be available by the end of this month according to my information. They are considering all kinds of methods and ways of solving the problems involved in establishing the necessary launch sites and support facilities for future programs. Certainly mobile sea launch capability will continue to be a prime consideration among the various alternatives. But at this point no one in NASA and no one in the Department of Defense says we really need or should begin to develop a mobile sea launch capability at this time.

Mr. BELL. I wasn't talking about mobile sea launch. I was talking about the launch in the Banana River, of setting up a launch program.

Mr. HAMMILL. I can't answer you specifically because the report is not yet in. I understand that it will be in at the end of this month. I assume this is one of the many things that they are presently considering, if that is what you were told by someone at the cape.

The CHAIRMAN. As I said before, the report has been approved by the committee subject to the one objection. If there is no objection we will just let the approval stand, subject to the objection. I think myself that the time may come when we will have to reopen the matter and develop it further. Mr. Roudebush has furnished us assistance in this respect, for which we thank him.

Mr. ROUDEBUSH. Is it possible this letter to you could be incorporated in the record?

The CHAIRMAN. The record of today's proceedings, yes. If there is no objection it will be placed in the record at this point. That completes the matter. The report is approved.

(The letter referred to follows:)

JULY 1, 1961.

Hon. OVERTON BROOKS,  
Chairman, Committee on Science and Astronautics,  
House Office Building.

DEAR MR. CHAIRMAN: A committee report written by Mr. Frank Hammill, of the staff of the Science and Astronautics Committee, entitled "Equatorial Launch Sites—Mobile Sea Launch Capability" was distributed to all members of the committee for review and comment. The report covers hearings on this subject which were held May 15 and 16, 1961.

Neither the hearings nor the report appear to adequately bring out all of the factual information. This is evidenced by subsequent information provided to the staff member who authored the report by Mr. John Rubel, noted in the last paragraph of the report. A portion is here quoted:

"Subsequent to the hearings, Mr. Rubel informed the committee that as a result of the committee's interest in this matter and in order to clarify thinking within the Department of Defense, his office has proposed that a cost analysis and more thorough study be made on the desirability of developing a mobile sea launch capability. He stated that such a study is considered timely in view of a current technical evaluation being conducted by his office on the requirements of the Advent military communications satellite program. Advent is one program which would be greatly aided by a capability to launch from a point at the Equator. The committee commends this action by the Office of Defense Research and Engineering."

I, too, commend the action of the Department of Defense in making the study of the desirability of mobile sea launch in equatorial regions. It appears to me that this report is incomplete and would be of much more value if its issuance were held in abeyance until the Department of Defense study is completed and the results transmitted to the committee for inclusion in the report.

In addition, I have information that NASA is equally concerned about the lack of a mobile capability which was not in evidence when the NASA witness testified. I understand that the U.S. Air Force, at the request of the Department of Defense, made a study of the requirements for a Nova launch complex at the Atlantic Missile Range. Last week, representatives from NASA and the Defense Department were invited to the Atlantic Missile Range to receive a preliminary presentation on this study. It appears that three approaches to the development of a Nova launch complex were presented. The cheapest one, excluding a mobile launch capability, priced out at \$1.5 billion, of which \$1 billion was to be used for the expansion of the Atlantic Missile Range, primarily for the acquisition of real estate. This situation is shocking.

In addition, it appears that there are certain safety requirements which dictate this costly land acquisition. How much of the land acquisition is being charged to NASA for the agrandizement of the Air Force is unknown.

Looking at the technical aspects of the desirability of mobile launch at the Equator, I have it on good authority that Mr. Rubel's concern over making the study for mobile sea launch centers around the fact that the Atlas Centaur cannot place the Advent military communications satellite in a 24-hour equatorial orbit when launched out of the Atlantic Missile Range unless the payload is substantially reduced in weight, which would degrade the usefulness of the system. It appears that a double dogleg and a coasting period which is required for launching out of the Atlantic Missile Range into an equatorial orbit, based on the experience of the Discoverer program, would be extremely costly due to the limited probability of success of the operation. It costs approximately \$9½ million per shot to place an Advent communications satellite into orbit on the equator with an Atlas Centaur missile. In all probability, we would have to launch 6 to 10 Atlas Centaurs, based on past experience, to insure that we have one successful payload in the desired orbit. This appears to be overly expensive.

Admiral Hayward testified that a ship-based mobile sea launch capability could be provided for something over \$7 million. This is less than the cost of one Atlas Centaur failure to dogleg out of the Atlantic Missile Range. In addition, if we launch from the Equator we take advantage of the earth's rotational velocity, we eliminate the need for a dogleg and we eliminate the fuel boiloff problem resulting from the coasting period required to dogleg, thereby picking up an additional 600 pounds of useful payload which can be placed in a 24-hour equatorial orbit. This, to me, is extremely significant and was completely overlooked by the author of the report.

Therefore, I urge that the issuance of this report be held in abeyance until more facts are brought to light. I also understand that NASA is now seriously looking at the advantages which could accrue from a mobile launch capability at sea since most certainly it would be much less than \$1.5 billion.

Sincerely,

RICHARD L. ROUDEBUSH.

The CHAIRMAN. Thank you, Mr. Hammill. Tomorrow and Wednesday, the committee has open scheduling for informal briefing by NASA on H.R. 6874, authorization for NASA as amended by the Senate. These hearings are being directed primarily toward the increased authorization provided by the Senate and are for the information of all the members of the committee and particularly those who may be designated as conferees appointed by the Speaker. Thursday and Friday there will be investigative hearings to continue hearings on communication satellites, with the Government witnesses. I might say that we scheduled these hearings a number of weeks ago and we partially completed the hearings. At the request of NASA we suspended the hearings and now this hearing will be set up with the idea of getting the hearings on communication satellites. There might be some very interesting developments, I am told, in these hearings. The business of today is to mark up H.R. 7115, the King special subcommittee reporting back on the indemnification section. Mr. King will be in, I am told, at 10:30. Mr. Finch, have you heard from Mr. King one way or the other?

Mr. FINCH. No, sir; I will check again.

The CHAIRMAN. You might check with his office. We can go over 7115, subject to the King report which is purely on the matter of indemnification. By that time I am sure Mr. King will be here. Phil, did you handle that matter?

Mr. YEAGER. I can pinch-hit this morning if you would like. Mr. Ducander handled this part of the bill. I will be glad to present it. Do you wish to do this markup in open session?

The CHAIRMAN. I think so. There is nothing secret about it.

Mr. YEAGER. Since the General Counsel of the Space Administration is present I would like—I would like to ask his assistance, if I give you any erroneous data.

The CHAIRMAN. Does everyone have a copy of H.R. 7115?

Mr. YEAGER (reading):

A BILL To amend the National Aeronautics and Space Act of 1958, as amended, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the National Aeronautics and Space Act of 1958, as amended, is amended as follows:*

(a) Section 203 is amended—

(1) by striking out "to lease to others such real and personal property;" in paragraph (b) (3) and inserting in lieu thereof the following: "to lease to others such real and personal property, and any such lease may provide, notwithstanding section 321 of the Act of June 30, 1932 (40 U.S.C. 303b), or any other provision of law, for the maintenance, protection, repair, or restoration, by the lessee, of the property leased, or the entire unit or installation where a substantial part of it is leased as part of all of the consideration for the lease;"

My recollection, Mr. Chairman, is that this is identical with a provision that was in the space amendments act last year which was passed by the House and provides authority primarily to outlease for a non-monetary consideration.

The CHAIRMAN. As the law is now there must be a monetary consideration.

Mr. YEAGER. For NASA; yes, sir. It is my understanding this would give NASA the same kind of authority now available to the military departments. A case in point that was cited last year—I don't know if it was this year—concerned a proposal by a group of citizens that areas around the runways of NASA at Chincoteague be leased to them for agricultural purposes in consideration for keeping the growth close cropped to enhance use of the runway. NASA didn't have the authority to enter into that type of lease and couldn't do it.

The CHAIRMAN. Some bases have contracts for cutting down weeds—

Mr. YEAGER. This was a sample. There are probably other instances where they permit them to use it for agricultural purposes in turn for keeping the property in such condition that it is beneficial to the military departments or to NASA themselves.

The CHAIRMAN. Is there any discussion on that? We approved it last year?

Mr. MILLER. For the sake of the record, Mr. Chairman, this isn't an invitation to NASA to enter into that type of contract exclusively, because there may be instances where the Government can recover money for the use of these lands. I have a case in point in California where the AEC has this problem, but the AEC is able to rent the land for a consideration and, therefore, obtain some return to the Government. I think the record should show where it can be rented we expect NASA to protect the interest of Government to this extent. Where it can't be rented, I think it necessary to have this flexible language in the bill.

Mr. YEAGER. I should think the report could make it very clear that this is only to be used in those cases where it is not possible to get a return to the Government for the use of the land.

The CHAIRMAN. I think that is an excellent suggestion, if you will recall it when you write the report.

Mr. YEAGER. (ii) By striking out "and" at the end of paragraph (12) of subsection (b), by striking out the period at the end of paragraph (13) of such subsection and inserting in lieu thereof "; and", and by adding at the end of such subsection the following new paragraph:

"(14) to require leases, before suit is brought, for past infringement of patents."

This section also is identical with one that was incorporated in last year's bill, Mr. Chairman. I believe the explanation of it was that this provides authority to settle claims against the Government for past infringement of patents. This, too, is something that the military departments now enjoy, the authority to settle, without imposing upon the claimant the necessity for litigation. There is one section in the Space Act which permits NASA authority to settle tort claims up to \$5,000, but it is felt this is inadequate because of dollar limitations.

This amendment would cover both full and partial settlements and both direct and contributory infringements and would provide authority identical to that available to the military departments. It is purely a matter of easing the administrative burden.



The CHAIRMAN. We approved that last year?

Mr. CORMAN. I wonder if this affects one way or another the patent rights of those contractors working exclusively for the Government? This was not under the King subcommittee—

The CHAIRMAN. No, that did not come under the King subcommittee.

Mr. CORMAN. This whole section of the law did not. We didn't get started—

The CHAIRMAN. As a matter of fact, it simply grants the right to close out pending claims.

Mr. YEAGER. I believe this is in instances where a patent has been infringed by the Government, is that correct, Mr. Johnson?

Mr. JOHNSON. Yes. This has nothing to do with the so-called property rights in inventions provisions of the Space Act.

Mr. DADDARIO. It gives an alternative to bringing suit by the claimant. The language of the bill at the moment does not have that latitude.

Mr. YEAGER. I believe that is right.

Section 204 is repealed. I believe that was the Liaison Committee which you will find in the act on page 6. The entire section there, which required a military-civilian liaison committee, is being eliminated. There is nothing being replaced in the act as such, although the Aeronautics and Astronautics Coordinating Board which has been set up jointly by the Department of Defense and NASA on an administrative basis is functioning and is doing the job that was originally intended for the Military-Civilian Liaison Committee. That Board is cochaired by the Deputy Director of NASA and by the Director of Defense Research and Engineering. It is divided now into a number of panels and is doing a job which this liaison committee was originally set up to do.

The CHAIRMAN. There is no need for the original committee? Is there any objection to that repeal? If there is not—

Mr. McCORMACK. I want to ask a question. We know the history of this. You remember we had a provision in the original act in connection with jurisdiction on the military and the civilian. You remember that; don't you?

Mr. YEAGER. Yes, sir. That is still there I believe.

Mr. McCORMACK. In the bill passed last year we adopted an amendment to that particular part of the organic act, which amendment I offered. Where would that amendment be in order in this bill?

Mr. YEAGER. Last year, Mr. McCormack, the space amendments bill changed the declaration of policy and purposes of the act and removed the language which we had initially put in there—

Mr. McCORMACK. That is the—

except are primarily associated with the development of weapon systems, military operations, or the defense of the United States—

In brackets—

including the research and development necessary to make effective provision for the defense of United States—

bracket—

shall be the responsibility of and be directed by the Department of Defense; and that determination of which such agency has responsibility for and direction of such activity shall be made by the President in conformity with section 201 (E).

Mr. YEAGER. Yes, sir.

Mr. McCORMACK. My amendment clarified that for the purpose of, in the world of today, of strengthening on those matters which are significantly military, to strengthen the hands of the military, is that right?

Mr. YEAGER. Yes, sir.

Mr. McCORMACK. Where is my amendment? Where is it?

Mr. YEAGER. Your amendment was as follows, which was a new provision which we put in because the language which you just read had been removed—

the Department of Defense shall undertake such activities in space and such research and development connected therewith as may be necessary for the defense of the United States.

That was your amendment.

Mr. McCORMACK. Where in this bill would it be offered?

Mr. YEAGER. In this bill it is not offered at the present time.

Mr. McCORMACK. Where would I offer it in this bill, in section 204, where it is repealed?

Mr. YEAGER. That is approximately where we put it in last year. We put in a new section called "Responsibility for defense and related activities."

Mr. MILLER. Is that presently retained in the language in the law, or that language retained in the law?

Mr. YEAGER. The amendment that Mr. McCormack offered was included in last year's bill which was passed by the House, but not taken up in the Senate, so the law actually remained unchanged.

Mr. McCORMACK. On page 6 of the bill that we reported out last year which was passed by the House and not acted on in the Senate, section 204(a) reads:

The Department of Defense shall undertake such activities in space and such research and development connected therewith as may be necessary for the defense of the United States.

Mr. YEAGER. Yes, sir.

Mr. McCORMACK. I offer that amendment now at this point because it is apparently the place to offer this amendment.

Mr. MILLER. Do you offer it as section 204?

Mr. YEAGER. We are repealing that—

Mr. McCORMACK. The staff can take care of that, if the amendment is adopted.

Mr. DADDARIO. Could we have that reread?

Mr. McCORMACK (reading):

The Department of Defense shall undertake such activities in space and such other research and development connected therewith as may be necessary for the defense of the United States.

The purpose of this amendment is, when we drafted the original bill there was a lot of complications about military and civilian. In the world of today the members of the committee felt we should recognize the importance of survival, that everything else was dependent upon having this country, that we all love and are proud of, and that everything is dependent upon that, all of our way of life and everything involved with it. We thought we had put language in there which pretty effectively met the situation, but apparently some-

where along the line the fight was not made at the right time by the Defense Department. I say this not unkindly but it is a historical fact, and as a result of that there is some cloudiness about the rights of the Defense Department. This language here is to undertake to specify the importance that we attach to the military aspects of outer space, and it is a direction to, an authority to the Defense Department in connection with—

activities in space, research and development connected therewith as may be necessary to the defense of the United States—

which is very important and quite necessary at this time.

Mr. MILLER. All this amendment does then is to clarify the field of activity of NASA with relation to the Defense Department and writes out any gray area that might be there.

Mr. McCORMACK. That is the purpose of it. It is our hope that it will accomplish it. We thought the language we put originally in the original act would do that but apparently it didn't. I think the language did. And it was a unanimous report of the select committee of which I was chairman, the unanimous action, rather, and we thought we had taken care of that as you remember. But certain developments arose later on, which are not necessary to go into and rehash, where, being a strong supporter of NASA as I am, nevertheless I realize in the period of the world's history that we are undergoing, the vital importance of the military—of military aspects of outer space, and this language I think is vitally important in connection with that. That will not interfere with NASA in any way but strengthen the hand of the Defense Department in connection with military activities. With research and development activities.

Mr. VAN PELT. What effect would this have on the discussion that has been going on in the last couple of years in connection with communication satellites?

Mr. McCORMACK. Well, of course, the space council in a sense would have a determining voice in allocating what is military and what is civilian. But this language would give the Defense Department the power to press its point more effectively than it can under the existing law.

The CHAIRMAN. Let me ask the gentleman this: I recognize the validity of what the gentleman has to say. I think we have to give unto the military that which it needs to defend the United States. But now as to removing the gray areas, I thought, and I think today that every bit of space is going to be needed by the military. I think, following this to a logical conclusion, that there is not going to be anything left that isn't going to be military. Certainly all space this side of the moon is military. I don't see, for instance, communications, Mr. Van Pelt spoke about that, I think undoubtedly communications are vital to the military, and certainly navigation is vital to the military.

I don't recall a single portion of the space program that hasn't a military background of significance. I am wondering if it wouldn't be better to relate the amendment just a little more definitely to the Space Council, giving the Space Council just a little more authority to designate which agency handles which portion of the program.

Mr. MILLER. Mr. Chairman, I realize that it is hard to define these two. On the other hand, this can also be said: Yet we have come to

recognize whereas there are certain things, certain facilities, navigation aids that are common to both the military and civilian, nevertheless, the military must maintain certain of its own facilities that the civilian does not find useful. With respect to communication satellite, I believe communication is one field of peaceful penetration of space that the military need not concern itself with, particularly, as a private communication system. The Army has told you, I believe, that irrespective of plans for putting up satellites for commercial or private communications it must have its own type of satellite. I see no conflict between this and between the military any more than the Department of Defense maintaining a communication system on its own, of its own at the present time.

That is not directly related to the commercial telephone or telegraph system, although they use the commercial system, as a matter of fact, rather than duplicate certain facilities. I am certain that messages can be sent all around the world from the Pentagon or to places all over the world from the Pentagon without touching private communication facilities. I think this isn't going to interfere with the program—

The CHAIRMAN. Let me ask, if the gentleman will yield, how will this affect the booster program?

Mr. MILLER. I don't think it will affect the booster program. I think in the matter of vehicles, the trucks to carry the load, to put them into space, NASA will develop one type maybe, if the military finds it is necessary to use a NASA vehicle they are going to buy a NASA vehicle. Just as now you are buying vehicles from the military to put up nonmilitary satellites.

That is just the truck—

The CHAIRMAN. How would this affect the solid propellant program?

Mr. MILLER. I don't think it is going to have any effect upon the solid propellant program because I believe that the Defense Department is going to select a propellant for its vehicles that it feels is best suited for them irrespective of NASA's feeling in the matter. When it comes to putting up Nova or something of that nature certainly NASA is going to take all data that the Defense Department has and use it in the development of its own facility. I don't see any great clash between these two. I am very happy to see them working so well together in those fields where they can. But where the fields come, where the military has to depart from NASA, I think it should be so.

Mr. McCORMACK. There is no inconsistency here except it does give a complete recognition on our part to the vital importance of outer space in connection with the military. On the higher circles this language gives them the opportunity of pressing their claim and showing that behind—there is a recognition on the part of the Congress of the importance of the military in connection with outer space. The final decision is on the high level. But it gives them the leverage.

Mr. RYAN. Has the military in fact been hamstrung in research and development in space? Is this going to change anything substantially?

Mr. McCORMACK. Mr. Ryan, if I got into that I would open up a broad field that is unnecessary at the present time. We went over this language very, very carefully in the original act. In setting up the civilian agency, which I was strong for and all of us, we wanted to recognize the practicalities of the world of today, try to draw a fine working situation from legislative language, and we thought we had. Somewhere along the line the action was taken which in effect negated the language that we had in the original act. This language that I very carefully drafted is designed as I said to not put anyone in a superior position but certainly not put the defense in an inferior position when decisions are being made as to whether the civilian agency or the military agency should have jurisdiction over certain matters, as provided here, such as—

activities in space and such research and development connected therewith as may be necessary for the defense of the United States.

Mr. VAN PELT. I am pretty much in accord with your views. But the thing that disturbs me is the statement in yesterday's paper by one of the members of the other body coming from the chairman's—I don't want to see anything that will tie down this communication to just a Government operation.

Mr. McCORMACK. I didn't see that statement, Mr. Van Pelt. This language is vitally important in connection with the directions of both agencies, both the Defense Department and the civilian agencies in connection with use of outer space in connection with military purposes.

Mr. CORMAN. I certainly would not argue with the defense having priority on the—

Mr. McCORMACK. It is a question of protecting—

The CHAIRMAN. It is not priority. It is just recognition of authority.

Mr. CORMAN. The thing that I am concerned about is the probability of duplication because I can't see how NASA is going to undertake anything that won't have some military implication. I am only wondering under this language who would be the authority to decide whether DOD or NASA should proceed with a specific project.

Mr. McCORMACK. The Space Council, wouldn't it, George?

Mr. MILLER. As far as I know.

Mr. McCORMACK. Where the Vice President is the Chairman of the Space Council.

The CHAIRMAN. That was my point exactly. I think it would go back to the Space Council. The question in my mind was whether or not we should repeat in the amendment the suggestion that the final determinations in the Space Council.

Mr. McCORMACK. That is understood.

Mr. CORMAN. My only thought was that someone would have the capacity to avoid duplication of effort.

Mr. McCORMACK. It is for the purpose of avoiding duplication, saving the taxpayer money, but recognizing the responsibility of both agencies and the downgrading of no one, putting neither agency in an inferior position, but on the level of presentation, at least having the language in there that would be a mandate to the Defense De-

partment, the NASA and the Space Council to carefully consider these things in connection with the question of survival.

The CHAIRMAN. You have heard the amendment. We discussed it last year. We adopted it last year. Is there any objection to it this year?

Mr. YEAGER. I want to be sure I made it clear that the current bill does not remove the "except" clause in the declaration of policy.

Mr. McCORMACK. It would remove that. You could take care of that language.

Mr. YEAGER. The "except" clause remains in in the current bill. So the amendment suggested would be in addition to the "except" clause.

The CHAIRMAN. Why not strike out the "except" clause and leave the amendment in?

Mr. YEAGER. That may raise some additional questions. Would you care to hear the general counsel of NASA on this question, Mr. Chairman?

The CHAIRMAN. Mr. Counsel, if you will.

Mr. JOHNSON. I just think, Mr. McCormack, that we ought to go over the history of last year a little bit. The thing that gave rise to your amendment last year, Mr. McCormack, was the fact that the administration then proposed a complete revision of section 102 of the act that contains the except clause; and it would have repealed the except clause entirely, leaving nothing in its place. So you made your amendment then to replace it and to preserve the position of the Department of Defense in the act. It was necessary for the administration proposal last year to contain that repeal of the except clause because it was proposed to repeal the provisions concerning the President's authority and the Space Council which are referred to at the end of section 102(b). This year the administration made a very different set of proposals. The Space Council not only has been retained, but the Congress has adopted a provision amending that portion of the law, and has placed it on a somewhat different basis. Our proposal this year leaves section 102 intact in the form in which the Congress considered it 3 years ago and enacted it. So if we were to add section 204(a) now, Mr. McCormack, it would be in a very different context from last year. Last year it replaced something. This year it would be in addition to that which is already in the act, but in somewhat different language. I think you would have a problem of a conflict, if they were both to remain. If you were to take the proviso out of section 102(b), which is something that we have not proposed this year, then you have a major redrafting problem because it is tied in with the whole structure of 102(b) and the reference to the Space Council. I should think that it would be better simply to leave 102(b) intact.

The whole change that gave rise to your proposal a year ago is simply not involved this year, and we continue with the law as enacted in 1958. You see, if we are to take the proviso out we would have quite a bit of difficulty because the sentence reads:

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.

That would include military as well as civilian. You simply can't take the except clause out of there and leave the rest of it standing. When you leave it in there, as it is, it comes out very nicely—

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.

It goes on to say that the determination of which such agency has responsibility for and direction of any such activity shall be made by the President in conformity with section 201(e), which is the Space Council provision. This all has to stand as a whole. If we begin to take part of it out the whole thing would have to be reconstructed. Then you would have to have some reference to the Space Council, probably, in connection with your proposed section 204, as you mentioned. I should think we would have a major drafting problem on our hands since we are not proposing this year, as we did last year, to tamper with 102(b).

Mr. McCORMACK. Yes, but you have another major problem at hand. You have a problem of clarifying the language of the original act which by administrative action has been strictly, to some extent, downgrading in connection with the Defense Department. You are aware of what I have in mind; you know what I have in mind.

Mr. JOHNSON. Mr. McCormack, I really thought you had in mind the NASA's proposal of last year to repeal this proposal of the law.

Mr. McCORMACK. In the hands of the military in connection with the military aspects of outer space.

Mr. JOHNSON. The law, as it now stands, makes it quite clear that the President has the power to draw this line. You wouldn't want to take the except clause out without revising all of section 102(b), because there would be nothing for him to draw a line on if the except clause were not in there. I should think, now that the Space Council has been revived and reinvigorated, that the best thing to do would be to watch the manner in which this line is being drawn and this provision is being administered under the guidance of the new Space Council, rather than to attempt a legislative revision.

Mr. McCORMACK. You know we put in there the working committee which this bill is designed to repeal, 204, don't you?

Mr. JOHNSON. Yes, sir.

Mr. McCORMACK. We know the history of that.

Where we use the word "shall" and the committee became for all practical purposes inoperative, is that right?

Mr. JOHNSON. Yes, sir. We proposed to repeal that, however, before it became inoperative.

Mr. McCORMACK. It was felt very strongly by the select committee that the working committee should be in operation between the agencies. I recognize under the leadership the fact that you can have a very effective one put in. I understand that. But on the other hand, the intent of Congress was not carried out so far as the working committee is concerned. Do you agree to that? I will withdraw that. I won't ask you to agree to that. I will make that as a statement of fact. It concerns a number of us. That was one committee that we placed great reliance upon in connection with the Defense Department

and NASA in working out these day-to-day matters, and it was a top level committee. Mr. Holaday was the chairman of it and he was one of the top-ranking men in the Defense Department before he was made chairman of that particular committee. And you remember when Mr. Webb was before us a few weeks ago he said that he didn't say that but the impression was that "shall" was construed as "may." Do you remember that?

Mr. JOHNSON. I remember the colloquy.

Mr. McCORMACK. You remember the colloquy? That is a good answer. So there is a lot of concern, you know, among some of us about what has happened particularly in relation to that committee and particularly in relation to the failure of the Defense Department—I will strike out the word "failure," the fact that the Defense Department on one or two occasions did not make the fight for jurisdiction in connection with the military aspects of outer space that some of us felt should be made. There was no public criticism at the time and I am not making any now except making this statement. That created the impression in our mind that the intent of the select committee had been downgraded by administrative action, in the interpretation of that language under the except clause. This language was put in there, affirmative in nature, as another expression of legislative intent to the Defense Department that where there was a strong feeling that certain activities are military that they will make the fight on the high level on the jurisdictional question. You understand that, don't you?

Mr. JOHNSON. Yes, sir. I do understand that last year it was put in only in place of the except language, Mr. McCormack, which the administration proposed to repeal, and not in addition to it. My recollection was that you wished to preserve the substance of the except clause in the act, and therefore this was a substitute for it. If we really look at the except clause and at 204, it seems to me they are completely duplicative, and the except clause is actually more specific.

The CHAIRMAN. You mean the except clause in 102(b)?

Mr. JOHNSON. Yes.

The CHAIRMAN. Is there any way that except clause could be toned up to meet Mr. McCormack's idea?

Mr. JOHNSON. I think everything in 204 is said in the except clause and is said more specifically. I shouldn't think that would be necessary.

The CHAIRMAN. I remember when 102(b) was written. I remember Mr. McCormack did put in an awful lot of time on it, and the select committee was very, very critical in all of its language used before writing the provision.

Mr. FULTON. Why can't we use Mr. McCormack's approach? Why do we have to get anything other than what he says? What is the difference?

The CHAIRMAN. The gentleman missed it, but the counsel explained last year when we put in Mr. McCormack's language—I am in favor of the purport of what he has in his amendment, but the counsel explained last year we had taken out 102(b) and therefore, the exception which the select committee had placed in the bill was removed. In the bill that we reported out last year and Mr. McCormack's amendment was necessary to protect the military. This year the rec-



commended bill includes 102(b) with the exception which the select committee wrote into the bill, which exception speaks specifically that the military shall—that the responsibility shall be that of the Department of Defense for military purposes.

Mr. FULTON. My point is this, I am glad to have the explanation, since it has been the position of Mr. McCormack, to me it has been a valid one, why don't we just about do what Mr. McCormack wants on language.

Mr. MOSHER. It seems to me the key question is this: Does Mr. McCormack think that his amendment has a significance that differs essentially from the except clause?

Mr. McCORMACK. I do, yes.

Mr. FULTON. That is my point, too.

Why don't we adopt Mr. McCormack's language—

Mr. McCORMACK. I think one way we might meet it for the time being, Jim, if I might suggest, I realize the situation, if the report very strongly carries out the amendment which I ask, going back to the intent of Congress in connection with the construction on the declaration of policy and purpose, I think that probably would be a very good way to meet it, showing what our intent was in connection with the except clause. And that I think could be included in the report, and explain, by the staff, I would like to see it when it is drafted, I think that probably might for the time being meet the situation.

The CHAIRMAN. Is there any objection to that thought? I think Mr. McCormack has an excellent idea.

Mr. FULTON. Does the counsel approve?

The CHAIRMAN. Counsel could draft the language that would meet Mr. McCormack's idea there and submit it to him, why, before hand, and we could then approve it in the draft. If there is no objection the matter can be disposed of in that way.

Mr. FULTON. Does the counsel of NASA approve that approach?

Mr. JOHNSON. Yes, sir.

The CHAIRMAN. Let's take up the next thing there?

Mr. YEAGER. Section 205 is redesignated as section 204. This became necessary because 204 has been eliminated. Section 206 is redesignated as section 205, and such section as so redesignated is amended by striking out "semiannually" in subsection (a) and by inserting in lieu thereof "once a year."

The effect is to require NASA to make an annual report to Congress rather than once in 6 months. They find it burdensome and it is a little too often to be useful.

The CHAIRMAN. Is there any discussion on that section? If not—

Mr. FULTON. When should the report be made? Should we have something in here as to the timing of the report? Can we ask the counsel of NASA what would be the best timing of it? Should it be by the fiscal year, calendar year or by your programming year?

Mr. JOHNSON. I should think the most useful report would be one that was ready for the Congress when it came into session in January, and therefore the calendar year would be the best period.

As you know, the Congress gets reports from us repeatedly while it is in session through presentations at hearings. This is one reason why we felt semiannual reports are rather unnecessary. I shouldn't think it would be necessary to specify this. I feel that administratively

we would try to make this as helpful as possible, and that it would probably be based upon the calendar year.

The CHAIRMAN. Any objection to that as read? If not it is so ordered.

Mr. MILLER. Can we write calendar year in there?

The CHAIRMAN. No, we will leave it at once a year.

Mr. FULTON. Could we put that in the report, Mr. Miller?

Mr. MILLER. I think that might be well.

The CHAIRMAN. Make a note to write that in the report.

Mr. YEAGER. (e) Section 304 is amended by striking out "certified by the Council or the Administrator, as the case may be," in the first sentence of subdivision (b) and inserting in lieu thereof "certified by the Council or the Administrator or designee thereof, as the case may be,".

The CHAIRMAN. What does that do?

Mr. YEAGER. This amendment adds a phrase, "or designee thereof" after the reference to the Administrator in connection with authorizing access to restricted data relating to aeronautical and space activities on condition that such access is performed in requirement of duty. The making of these certifications, according to testimony, is a routine function which should be delegable by the Administrator to security officers and others in connection with the normal practice of DOD and NASA.

The CHAIRMAN. There is objection to that provision? It is so ordered.

Mr. YEAGER. The next is the indemnification provision and I think Mr. King and his counsel, Mr. Hines, will discuss that.

The CHAIRMAN. That is the last, isn't it?

Mr. YEAGER. No, sir. We can turn to page 4 of the act:

SEC. 2. The Act of April 29, 1941, as amended (40 U.S.C. 270e), is amended (1) by striking out "or the Secretary of the Treasury" and inserting in lieu thereof "the Secretary of the Treasury or the Administrator of the National Aeronautics and Space Administration", and (2) by striking out "or Coast Guard" and inserting in lieu thereof "Coast Guard, or National Aeronautics and Space Administration."

This section relates to the authority to waive performance and payments bonds. This was also included in the act last year. It would give NASA the same authority now held by the military and the Treasury Department to waive such bonds and in effect as I understand it would permit some savings on their part since the cost of these frequently are borne by the Government.

The CHAIRMAN. Yes, and sometimes the cost is very high on those performance bonds. If there is no objection—

Mr. DADDARIO. How does that affect the Coast Guard?

Mr. YEAGER. It doesn't affect the Coast Guard. It adds it onto the end. The reason the Coast Guard was mentioned was because it was the last one in the sentence and now it is next to the last.

The CHAIRMAN. Section 3.

Mr. YEAGER. Section 3. Section 2302 of title 10 of the United States Code is amended by striking out—

or the Administrator of the National Aeronautics and Space Administration. and inserting in lieu thereof—

or the Administrator or Deputy Administrator of the National Aeronautics and Space Administration.

Mr. Chairman, I believe this was not included in last year's bill. I am not familiar with it. I will ask Mr. Johnson, if I may, to explain that.

Mr. JOHNSON. This is a change in that part of title 10 of the code which is commonly referred to as the Armed Services Procurement Act and which is also applicable to the procurement activities of NASA. There are a number of functions under that act which are to be performed only by the head of the agency or head of the department concerned, and the head of the department or head of the agency is especially defined in an early section of the act to include certain designated officials. In the case of the Department of Defense and the military departments, it includes the Assistant Secretaries; but inadvertently, I would think, when the Space Act was passed, it was amended only to refer to the Administrator of NASA and not the Deputy Administrator. Under certain provisions of the Space Act, there is authority for the Deputy Administrator of NASA to perform nondelegable functions vested in the Administrator by law. Relying on that provision, the Deputy Administrator has been authorized by the Administrator to perform these functions under the Armed Services Procurement Act. It is a somewhat confusing situation however, since the Armed Services Procurement Act makes specific reference to Assistant Secretaries of the military departments but not the Deputy Administrator of NASA, and our contractors and their lawyers are accustomed to looking at that act rather than the Space Act. This is nothing but a cleanup provision to make it quite clear that the Deputy Administrator may perform all the functions of the Administrator.

The CHAIRMAN. This would put NASA under the Armed Services Procurement Act, wouldn't it?

Mr. JOHNSON. No, sir; it is already under the Armed Services Procurement Act. It would make it clear that the Deputy Administrator of NASA may perform certain functions just as the Assistant Secretaries of the military departments are authorized to do.

The CHAIRMAN. There is no objection to that I am sure. That brings us to the indemnification provision. I want to say the committee has a special subcommittee on the question of indemnification. Mr. King is chairman of it. This subcommittee to my knowledge has worked long and diligently on the matter. I think they have come up with an excellent report. Since Mr. King is here, I am going to ask him if he will, to present the report. Mr. King, would you like for your counsel to read the report first for you and then you could explain it?

Mr. KING. Would you like to?

Mr. HINES. It is up to you, sir.

Mr. KING. Perhaps I could read it myself.

The CHAIRMAN. Will you read in a loud and audible voice?

Mr. KING. Mr. Chairman, pursuant to your instructions, the Indemnification Special Subcommittee undertook to explore the indemnification provisions, with proposed NASA amendments thereto, of H.R. 7115, now under consideration by the full committee.

The subcommittee held open hearings on June 12 and 13, and an executive session on June 14, at which time testimony was presented by Mr. John A. Johnson, General Counsel for NASA, Mr. Robert

Keller, General Counsel for the General Accounting Office, and by several representatives of commercial insurance and underwriter companies. The testimony thus adduced, all of which went to the question of the acceptability of certain proposed changes in the present law dealing with indemnification of NASA contractors, was, in the opinion of your subcommittee, sufficient in scope to adequately clarify the subject. We found no substantial disagreement among the witnesses on the pertinent provisions of the indemnification amendment. All agreed that the language of the amendment satisfies the needs of NASA and the position taken by the commercial interests. In particular, NASA offered no objection to the changes effected by the subcommittee.

We did propose two changes which I shall discuss later.

Several subquestions received the particular attention of your subcommittee. These included the following:

1. Will private insurance companies be given an opportunity to participate in the proposed indemnification program, to the extent that their rates and other conditions of indemnification entitle them reasonably so to do?

This question was answered to our satisfaction in the affirmative. It was felt that the language of section 308(e) of NASA's proposed amendments to the indemnification section (par. I(f)) of H.R. 7115, gives to the Administrator sufficient flexibility of action to require NASA contractors to provide their own liability insurance, covering all, or a portion of the risk, where such may be reasonably done under competitive and reasonable rates and conditions. It is understood that private insurance companies are ordinarily willing to write public liability insurance policies in amounts up to \$15 million to \$20 million, but that beyond that their rates and conditions of liability become so excessively exorbitant as to be unreasonable, even from their own point of view. The Administrator is therefore given sufficient discretion to require no more public liability insurance from nongovernmental sources than that which is reasonable, viewed from a point of view of sound business practice. At all times the Administrator will be required to subordinate the interests of all interested private parties, including those of insurance companies, to the paramount objective of projecting and operating a space program of highest possible quality and lowest possible cost, consistent with the reasonable dictates of prudence and sound business judgment.

2. Will the United States be required to indemnify a contractor for its willful misconduct? It was felt that the proposed language is sufficiently flexible to allow the Administrator to include in its indemnity contract a provision to the effect that indemnification for willful misconduct shall be specifically denied. The DOD has reached this same conclusion, by administrative decision, based upon language in its act identical to the language in the bill under consideration. A sufficient legislative history was established, in the record of these hearings, moreover, to make clear that it is Congress intention that the results of willful misconduct not be indemnified by the United States. This exclusion, however, would apply only to willful acts of responsible officials in the contracting company, rather than willful misconduct committed by subordinate agents or servants.

3. Is it necessary that NASA submit to the House Committee on Science and Astronautics, and to its counterpart in the other body, 30 days prior to payment, a report on all proposed indemnity payments less than \$100,000, as provided in subsection (d) (2) of section 308 of the proposed revision of the indemnification section (sec. 1(f)) of H.R. 7115?

It was felt that this provision was not necessary. Inasmuch as the provision in question did not give to Congress the power to disallow the payment, it follows that the submission of the report to Congress was a superfluous act. Its usefulness is only to give Congress useful information. There is nothing to show that NASA will not supply whatever useful information Congress may desire, without cluttering up a statute by so requiring it.

4. Should the indemnification provision of the proposed bill contain an upper ceiling of \$500 million, or of any amount?

After much discussion on this point, it was felt that the answer to this question should be in the negative. To impose an upper limit (the proposed NASA revision to H.R. 7115 contains an upper ceiling of \$500 million) injects so many intricate and almost unanswerable problems that it was felt best to eliminate the provision altogether. The proposed language provided, for example, that all liability arising out of a catastrophic event—not only to the United States, but to the contractor or subcontractors themselves—should be limited to \$500 million. The committee felt that the power of the Federal Government to place limitations upon the extent of tort liability created by State law was extremely dubious. The baffling and extremely vague provisions of the section dealing with the jurisdiction of bankruptcy courts (in absence of any showing of bankruptcy) caused your subcommittee to have serious misgivings. The proposition that all indemnitees should be required to submit to a possible pro rata diminution of their claims, which requirement is inherent in the imposition of an upper limitation of the amount of the indemnity, seemed to your subcommittee to involve inherent inequities. For that reason, we recommended the deletion of subsection 308(f) of the proposed revision of the indemnification provision of H.R. 7115.

In conclusion, the indemnification provisions of H.R. 7115 are copied, almost verbatim, from their counterpart in the statutes governing the operation of the Department of Defense (10 U.S.C. 2354). The National Aeronautics and Space Administration proposed several amendments to these provisions, which amendments are patterned largely after their counterpart in the statutes governing the operation of the Atomic Energy Commission (42 U.S.C. 2210).

Your subcommittee recommends that the indemnification section of H.R. 7115, as amended by the proposed amendments submitted by the National Aeronautics and Space Administration, be adopted by the full committee, in toto, with the following exceptions:

1. It is recommended that that portion of subsection (d) (2) of the proposed amendments to the indemnification section of H.R. 7115, commencing with the word "provided" on line 5 thereof, and continuing throughout the word "payment" at the end of said subsection, be deleted.

Mr. FULTON. Can you tell us what that means?

The CHAIRMAN. Lets finish with the report and then go back.

Mr. KING. 2. It is recommended that all of subsection (f) of the proposed amendments to the indemnification section of H.R. 7115 be deleted.

May I take this opportunity of expressing the thanks of the subcommittee for this opportunity of serving the full committee in regard to this matter.

The CHAIRMAN. Now explain to the full committee those two changes in a little more detail.

Mr. KING. Mr. Hines, No. 1 is the change on the \$500 million?

Mr. HINES. No, sir. No. 1 is the change in the \$100,000 limitation.

The CHAIRMAN. On what page is that?

Mr. HINES. You will find in front of you—the amendment.

The CHAIRMAN. Very well.

Mr. KING. Considering now recommendation No. 1, that that portion of section (d) (2) of the proposed amendment to the indemnification section of H.R. 7115, commencing with the word “provided,” on line 5 thereof—

The CHAIRMAN. This is a complete revision of section 308?

Mr. KING. That is correct. The recommendations of the subcommittee are geared into the text which was submitted to us by NASA with proposed changes. I am gearing the discussion into that. I refer again to page 3 of the proposed NASA amendments, subsection (d) (2) and line 5 of subsection 2, beginning with the word “provided,” and continuing through the rest of that subsection 2, ending with the last word, which is the word “payment.”

This was discussed in my report back on page 4. Item 3 on page 4 of my report is the matter which is the concern of recommendation No. 1.

This particular clause, as it now appears, and which we are recommending be deleted, provides that before NASA honors any claim up to \$100,000—any claim for indemnification, which it may do without congressional authorization, under existing law, if I am incorrect check me on this—it must first submit a detailed report of the circumstances of such claim for indemnification to this committee, and to its counterpart in the other body, and that such report must rest with us for a 30-day period before NASA acts.

Our feeling, Mr. Chairman, was that this was cluttering up a statute with a provision which could be very easily handled on an administrative level. If this committee desires to be advised of the nature of these claims up to \$100,000 as they are being processed by NASA, there is nothing to indicate that a working arrangement could not be worked out that would be very satisfactory. But to require, to put it into the law that it must be done, when as a matter of fact this committee couldn't do anything to prevent their processing the claim if it so desired, then to so do we felt was a vain and unnecessary act.

In fact, it was almost a suggestion of lack of confidence in NASA. We have every reason to have the utmost confidence in their willingness to cooperate with us.

The CHAIRMAN. Why wouldn't it be a good thing to read now to the full committee the revised section 308, the section on indemnification?

Mr. KING. Mr. Chairman, would you like me to dispose of No. 2 first, and then recapitulate?

The CHAIRMAN. I thought you had disposed of it?

Mr. KING. I disposed of just one.

The CHAIRMAN. About the \$500 million.

Mr. KING. May I dispose of that? No. 2, it is recommended that all of subsection F of the proposed amendments to the indemnification section of H.R. 7115 be deleted, and subsection F is found on page 4 of the proposed revision submitted by NASA. It carries over to page 5. It is proposed that that be deleted in its entirety. And the reason, as already explained in our report on page 5, is that the subcommittee felt this was injecting problems whose scope and ramifications were almost without end. This is a situation which we would sincerely and devoutly hope would never come up. We are talking about a claim in excess of \$500 million. We hope and pray this never will come. The chances are extremely remote that it will. In the event that such a claim were made, the subcommittee felt that the language of the proposed amendment just created too many problems.

The problem of limiting the claim to \$500 million in itself creates a problem. It means a pro rata reduction, of claims perhaps, although the statute doesn't really say that. It leaves the question open. You raise the question, therefore, would the law be favoring those who were in a position to present their claims immediately, and that presumably would be insurance companies and those that are in the business of handling claims? Whereas private individuals, where there were deaths involved, might be considerably delayed in presenting claims and they might be penalized by coming to the grab bag after the bag was empty. The inherent inequities of the situation caused us some very serious concern.

Also the matter of bringing in the jurisdiction of the Bankruptcy Court where no bankruptcy had been proven caused us serious concern. Also the problem of the Federal Government presuming to limit a tort claim that was created by State statute involved some rather serious constitutional problems that we felt were unanswerable.

The CHAIRMAN. Why not at this time have the revised version read to the committee, so the committee will know what it is, then we can more properly, I think, ask questions.

Mr. MILLER. Is there any time limit in which these claims must be filed?

Mr. KING. Mr. Johnson, am I not correct that this would be handled by the ordinary statute of limitations governing the respective States?

Mr. JOHNSON. That is correct. The bill would only give NASA the authority to indemnify its contractors for whatever liability they might suffer to third parties in these cases. So the liability of the contractor would be determined by the applicable local law. This might be a rather complex question under certain circumstances.

The CHAIRMAN. They vary.

Mr. JOHNSON. It would vary. Therefore, it would be inappropriate to try to write a uniform law into this statute.

Mr. KING. Thank you, Mr. Johnson.

Now, Mr. Chairman, pursuant to your suggestion, would you like me—

The CHAIRMAN. Let's proceed to have that read. Why not let the counsel read it.

Mr. HINES. This is the revision of 1(f) of H.R. 7115, (e), title III:

(e) Title III is further amended by adding at the end thereof the following new section:

"INDEMNIFICATION

"SEC. 308. (a) With the approval of the Administrator or his designee, any contract of the Administration for research or development, or both, *the performance of which involves a risk of an unusually hazardous nature*, may provide that the United States will indemnify the contractor against either or both of the following, but only to the extent that they arise out of the direct performance of the contract and to the extent not [compensated by insurance or otherwise] covered by the financial protection required under subsection (e)."

As you notice on your sheets, the words "compensated by insurance or otherwise" in brackets are deleted. The words in brackets come out.

Mr. CHENOWETH. You should tell us what comes out. The language of this isn't what we agreed on in the committee.

Mr. KING. The deletions that appear here in brackets are deletions that NASA itself recommended. Am I correct, Mr. Johnson?

The CHAIRMAN. Don't read the deletions. Read the others and we can see what the deletions are.

Mr. JOHNSON. The material in brackets was recommended by NASA originally in submitting this. This is for purposes of comparisons with the earlier version. When your subcommittee met, Mr. Chenoweth, the deletions were up for consideration.

Mr. CHENOWETH. That has nothing to do with what we are considering now.

Mr. HINES. No, sir.

*Liability (including reasonable expenses of litigation or settlement) to third persons, except liability under State or Federal workmen's compensation acts to employees of the contractor employed at the site of and in connection with the contract for which indemnification is granted, for death, bodily injury, or loss of or damage to property, from a risk that the contract defines as unusually hazardous.*

(2) Loss of or damage to property of the contractor from a risk that the contract defines as unusually hazardous.

(b) A contract that provides for indemnification in accordance with subsection (a) must also provide for—

(1) notice to the United States of any claim or suit against the contractor for death, bodily injury, or loss of or damage to property; and

(2) control of or assistance in the defense by the United States, at its election, of any such suit or claim for which indemnification is provided hereunder.

(c) No payment may be made under subsection (a) unless the Administrator, or his designee, certifies that the amount is just and reasonable.

(d) Where the total amount of claims arising out of a single incident and certified under subsection (c)—

(1) exceeds \$100,000, payments may be made from funds specifically appropriated therefor;

(2) does not exceed \$100,000, payments may be made from (i) funds obligated for the performance of the contract concerned, or (ii) funds available for research or development, or both, and not otherwise obligated.

(e) Each contractor which is a party to an indemnification agreement under subsection (a) shall have and maintain financial protection of such type and in such amounts as the Administration shall require to cover liability to third persons and loss of or damage to the contractor's property. The amount of financial protection required shall be the maximum amount of insurance available from private sources, except that the Administration may establish a lesser amount, taking into consideration the cost and terms of private insurance. Such financial protection may include private insurance, private con-



*tractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures.*

(g) *In administering the provisions of this section, the Administration shall use, to the maximum extent practicable, the facilities and services of private insurance organizations, and the Administration may contract to pay a reasonable compensation for such services. Any contract made under the provisions of this subsection may be made without regard to the provisions of section 5 of title 41, upon a showing by the Administration that advertising is not reasonably practicable, and advance payments may be made.*

(h) *The authority to indemnify contractors under this section does not create any rights in third persons which would not otherwise exist by law.*

(i) *As used in this section, the term "contractor" includes subcontractors of any tier under a contract in which an indemnification provision pursuant to subsection (a) is contained.*

The (h) and (i) should be (g) and (h).

The CHAIRMAN. That is a clerical correction.

Mr. MILLER, you had a question.

Mr. MILLER. Considering the old (d)—

In administering the provisions of this section the Administration shall use to the maximum extent practicable the facilities and services of private insurance organizations—

in the State of California we have a State fund for insuring these activities. Do I infer that this prevents insuring with a State fund?

Mr. JOHNSON. I don't recall that question ever having been raised before, Mr. Miller. I don't know the nature of that State fund, or what its function is. The purpose of this was not only to authorize, but to direct to the extent practicable, NASA's use of private insurance organizations, particularly in the field of safety regulations and measures and the investigative and settlement process. This does not duplicate the earlier provision which says that the contractor shall take out a certain amount of financial protection as approved by NASA, but it relates to other functions than the insurance function itself; namely, the safety, the investigative, and the claims settlement functions where the insurance organizations have a great deal of expert capability which we could utilize under contract.

Mr. MILLER. This fund was built up by the State of California to more or less keep insurance companies in line. It is a well-recognized agency for this purpose. I would like to see some language written in here that would permit the use of such funds. I have no objections to private insurance companies coming into this picture. But I wouldn't want to see somebody stop some contractor out there from using the State fund; under the provision of this he has to use some private company.

Mr. CASEY. In the first place, Mr. Miller, the terms of this are more applicable to the additional liability over and above the contractor's coverage. If a contractor in California has a contract with NASA, NASA will first tell him he has to get all the liability insurance that he can reasonably get. If it is a real large contract, why, he gets the coverage. If he has an accident which is covered and defined as extrahazardous the liability of which turns out to be in excess of his insurance coverage, that is when this comes into play. The application of this is to try to determine the extent of liability and what is a reasonable settlement. And then NASA could employ an adjuster from some private insurance company—

Mr. MILLER. I have no objection to that.

Mr. CASEY. How does your fund come in on that now?

Mr. JOHNSON. I think I can be more specific now in response to Mr. Miller's question, because I think that what you are really concerned about is the situation where a California company is insured with that kind of a fund.

Mr. MILLER. Yes.

Mr. JOHNSON. That is a problem which arises under subsection (e), rather than the last one. It refers to the kind of financial protection which will be acceptable to us. You will see that there the language is very broad and is not confined to private insurance organizations, but says "such financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures."

I think that so far as that insurance-type function is concerned, the language of subsection (e) is the relevant language and is sufficiently broad.

Mr. MILLER. Then the language in subsection old (g), as it is here, in no way gives a monopoly to private insurance companies for this insurance?

Mr. JOHNSON. Not at all.

Mr. MILLER. You say, "Not at all." You mean it does not?

Mr. JOHNSON. It does not.

Mr. MILLER. I want the record to show this very clearly.

Mr. DADDARIO. I think there is one question, however, that you have to follow with your line of reasoning, Mr. Miller, and that is in the event under this indemnification section, there was some damage, say, in California, and the people who do run this fund have experience in this area, the private insurance companies would be the ones who would be called upon to render their services and the people who run your fund would not.

Mr. MILLER. That is true.

Mr. CASEY. Is the fund you are referring to public—

Mr. MILLER. Publicly owned by the State of California.

Mr. CASEY. Do they have adjusters?

Mr. MILLER. Yes, sir.

Mr. CASEY. May I suggest this—

Mr. MILLER. They make every adjustment and do all the things that insurance companies do.

Mr. CASEY. May I suggest this—I agree with you, I don't think they should be excluded—in this (g) it looks to me like the facilities and services of the private insurance organizations—

Mr. MILLER. How about striking out the word "private"?

Mr. CASEY. Leave "public and private".

Mr. MILLER. Would that be acceptable?

Mr. JOHNSON. No objection.

The CHAIRMAN. Is there any objection on the part of anybody to that?

Mr. Corman has been wanting recognition for some time. Is it in reference to this particular amendment?

Mr. CORMAN. Yes, sir. I think the controlling language is at the tail end of paragraph (e), where it says what kind of financial protection will be acceptable. I think at that point you would have to also insert the word "public" as well as private insurance.

The CHAIRMAN. Is there any objection on the part of anyone to inserting the words "public and" on line 5, page 4, immediately after the word "include", so that will read "such financial protection may include public and private insurance"?

Is there any objection to that?

Mr. CHENOWETH. Just one question on that. The word "State" instead of "public" would be better. You say it is a State fund. The "State" would clear it up quickly.

The CHAIRMAN. Maybe you have a city fund.

Mr. FULTON. Could I be heard on that? I think the point of the provision originally was that the use of private enterprise should be emphasized rather than public bodies or agencies. That was a direction to the Administrator of NASA to deal as far as possible with private insurance agencies and companies and institutions. I believe that Mr. Miller has a good point about the State having a type of insurance. I believe counsel for NASA has hit a good point that I was likewise thinking of. It is the kind of financial protection required by the Administrator of NASA of the contractor in the contract. I think we might get something in the report, but to me it would seem to derogate the intent of the section when you put either the word "public" or "State" in it. The intent of the section was clearly emphasized by "private enterprise".

I believe the exception can be handled in the report. I don't think it is possible with the many kinds of approaches the various States have to insurance matters to delineate on a statutory basis what the requirements or the policy shall be. I think a situation like California could be set out in the report to show what our intent is. But I don't think you can make it a statutory provision at this point. Furthermore, I think if you want the Administrator of NASA to deal with private enterprise as much as possible, except in certain cases, you better do it.

Mr. MILLER. May I answer the gentlemen? I agree with the gentleman that we should use private enterprise wherever we can, but I don't believe in giving private enterprise a bonus and making NASA insurance a WPA for private enterprise or perhaps forcing some contractor who might use such a State fund continuously and gets a little better break on his rates, to go to another company.

Mr. FULTON. I think you have a good point.

Mr. MILLER. I am for private enterprise as long as private enterprise doesn't put in a squeeze. I am thinking of the taxpayers at that time.

The CHAIRMAN. Let me ask the counsel, Mr. Johnson, how would those two words—

Mr. FULTON. May I finish—

The CHAIRMAN. I am going to ask counsel—We are going to have to adjourn in a moment because we have no authority to meet.

Mr. FULTON. I don't think Mr. Miller should be left on this question, that competitively the Administrator of NASA should try for the lowest price. If it can be gotten from a public agency of a State or municipality, I think then private enterprise must meet the price. I yield to Mr. Daddario.

Mr. DADDARIO. I think I have a suggestion for section—

The CHAIRMAN. Mr. Fulton has the floor.

Mr. FULTON. I yield to Mr. Daddario.

Mr. DADDARIO. I think I have a section that will clarify (f). Rather than adding words to it, if we take out the word "private" and say "the facilities and services of insurance organizations," we eliminate a great deal of problem in this matter.

The CHAIRMAN. Can I ask counsel, Mr. Johnson, which language would you prefer there? Which language would be preferable, I will put it that way, the words "public and" or just strike out the word "private."

Mr. JOHNSON. I have to make a distinction between (e) and (f). If we look at (f) I would say, from NASA's point of view, it would make no difference if you inserted the words "public and private," or left out the adjective. It would have the same effect as far as we are concerned. It is a matter of style more than anything else for the committee to decide. As far as (e) is concerned, it a different question. It has to do with the insurance coverage itself; and the first problem arises in the second sentence where it says, "the amount of financial protection required shall be the maximum amount of insurance available from private sources." This has to do with the amount rather than the source from which it is obtained. I don't think that would cause any trouble because the amount will be the same. I am sure they would probably run on about the same kind of basis, as far as amount is concerned, as private companies do. Then the last sentence I personally think is broad enough as it stands to take care of the unusual situation in California, because it says, "other proof of financial responsibility, or a combination of such measures." A note in the report such as Mr. Fulton recommended would make it quite clear that you didn't intend to preclude such organizations as the State. Therefore, I would recommend that you not change subsection (e); and that you either add "public" or strike the word "private" in subsection (f).

Mr. MILLER. I think it is easier to strike "private" and I so move.

The CHAIRMAN. If there is no objection—

Mr. FULTON. Just a minute. Could we just ask the counsel on his comment, when he pointed to the last sentence on the conclusion— inclusion of—

private insurance, self-insurance or other proof of financial responsibility or a combination of such measures—

it should be pointed out that the sentence includes the word "may" which is permissive, giving a very broad discretion to the Administrator of NASA in handling situations of this kind, such as Mr. Miller suggests, is that not correct?

Mr. JOHNSON. That is correct. I can see the purpose of the sentence merely as exposing, you might say, to public gaze the great variety of ways in which this requirement of financial responsibility can be settled and that NASA is to use its best judgment and be quite flexible in achieving it.

Mr. FULTON. I would like Mr. Casey to hear this particularly.

The CHAIRMAN. Just proceed with your statement. We are going to have to adjourn. We are running overtime.

Mr. FULTON. I want them to hear. Actually in (e) then, the counsel of NASA says that the language is satisfactory as it is, because there is a broad discretion in the Administrator of NASA to handle

such a situation as Mr. Miller suggests in California. But in section (f) the counsel says that it is merely a matter of literary construction as to what the effect will be. On that point I would have to object to the elimination of the words "private enterprise." I think they have a place in this.

The CHAIRMAN. (f) has been stricken out.

Mr. FULTON. We were discussing it and there was objection. So it was not by unanimous consent that it was stricken. I don't understand that it was stricken out.

The CHAIRMAN. By the subcommittee. Certainly it was recommended—

Mr. HINES. That is old (g), sir, that we are talking about.

Mr. CHENOWETH. I am inclined to concur with the gentleman from Pennsylvania, that this should be taken care of in the report rather than in the bill. I think we ought to retain the private insurance designation. As a member of the subcommittee I don't recall this matter even came before us at all. Does our distinguished chairman have any recollection of that?

Mr. KING. The problem was not raised.

Mr. CHENOWETH. We don't want to preclude the California State fund to participate in this and I think it can be handled in the report.

The CHAIRMAN. My thought is, gentlemen, that what our discussion has revealed shows the Chair that the subcommittee went into this matter. The subcommittee has presented a very excellent report, some very fine recommendations, and since now it is after 12 and the House is in session, and it is the first session that we have had since the holidays, I suggest that we adjourn until tomorrow, that we restudy the subcommittee report and we meet at noon and dispose of the matter.

Mr. MILLER. Noon?

The CHAIRMAN. At 10.

Mr. FULTON. Could we have counsel prepare for us language for the report as an alternative to changing the language in the bill itself? Would you do that for the next time?

Mr. HINES. Yes.

The CHAIRMAN. If there is no objection, we will adjourn until tomorrow morning at 10 o'clock.

(Whereupon, at 12:09 p.m., the committee was adjourned to reconvene at 10 a.m., Tuesday, July 11, 1961.)

# TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

TUESDAY, JULY 11, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
*Washington, D.C.*

The committee met at 10 a.m., in room 214-B, New House Office Building, Hon. Overton Brooks (chairman) presiding.

The CHAIRMAN. The committee will come to order.

This morning we have as a carryover from yesterday the subcommittee's report on indemnification which was fully discussed yesterday, and some questions asked of the subcommittee headed by our colleague, Mr. King.

Who were the other members of the subcommittee, do you know, Phil?

Mr. KING. Mr. Casey, Mr. Corman, Mr. Chenoweth, and Mr. Bass were the other four members, Mr. Chairman.

The CHAIRMAN. I think the report is a most excellent report. Our discussion of yesterday after discussing certain features that were ironed out and explained to the committee, backs up my thought that it is a good report. Is there any further discussion on that report?

Mr. DADDARIO. Mr. Chairman, I would like to inquire into the removal of the \$500 million ceiling. I wonder, first of all, if by the removal of it we are not opening up a Pandora's box, so to speak? It would seem to me that in any case involving a disaster of that proportion, we run into the proposition of needing some kind of a ceiling imposed on the total amounts of moneys that can be paid to claimants, either through insurance coverage or overages which would upon themselves place an artificial limitation of the assets of the company or people involved, or by the earning capacity over a period of time.

In every such circumstance there is always a method worked out to meet that particular situation, and these artificial or actual limits are utilized in order to confine the claims, and to bring order out of chaos.

Admittedly, a damage situation which resulted in \$500 million or more, or figures even less than that would be a matter of serious proportions. Yet, because the Government is involved, I am concerned about the possibility that there will not be a limitation, that rather than limit it, liability would be enlarged beyond all proportions. I wonder if we aren't making a mistake in not leaving in the \$500 million limitation.

I would think that the Senate would keep it in and I would think that somebody from the Joint Committee on Atomic Energy would

also propose this. It does have certain merit. I think we ought to consider this particular aspect, and I wonder—

The CHAIRMAN. That is one of the major points that the subcommittee considered, isn't that right, Mr. King?

I was impressed yesterday by Mr. King's explanation of the subcommittee report. If liability is limited to a certain amount, that is going to open up a Pandora's box. If there is a large claim, then a few claimants are going to rush to get their claims approved and paid before the rest can do so before the limit is reached, isn't that right?

Mr. KING. That is exactly correct. We discussed this item, I suppose, longer than any other single item before us.

The very point that the distinguished gentleman from Connecticut has now raised was raised before our subcommittee. We went through that, and we recognized that there was merit in that argument. But, when we faced the actual provisions of subsection (f), we found ourselves confronted with so many legal arguments which, in our opinion, were very uncertain and muddy, and even indefensible, that we just did not feel that we wanted to take upon ourselves the burden of having to go on to the floor of the House to defend subsection (f).

For example, it says right on the face of it that the amount of liability shall be limited to \$500 million. You are confronted immediately with a very serious constitutional question of whether the Federal Government has any legal right at all to limit the amount of liability under a tort created by State law. I, in my own heart, very seriously have doubts. I have very serious reservations and doubts whether we have such jurisdiction to do that.

The CHAIRMAN. If the U.S. Government is liable for a portion of a claim, in the instance of one claimant, how can the U.S. Government say it is not liable to another claimant, based on the same claim, same state of facts, and the same tort? Is that correct?

Mr. KING. That is absolutely correct, Mr. Chairman.

Furthermore, there are some international implications here that may or may not have substance. But, the subcommittee was not satisfied that there might not be some international implications.

We are in the process now of trying to work out basic ground rules for tort liability and the like which will apply among all nations.

We haven't made too much progress in this field, it is true, and we understand this is the great legal horizon that we are now facing.

If we enter negotiations with Russia and other foreign countries on the matter of tort liability and, at that time have laws on our own statute books which limit liability, then that perhaps might be used against us in some way.

Other countries could say, "Well, you have limited your liability. We will limit our liability." Only they might not be quite so generous. Instead of fixing it at \$500 million, they might fix it at \$100 million or \$1 million or any other arbitrary figure they select. This might be a matter of great embarrassment to us.

Mr. ANFUSO. Have you had any legal research on this, Mr. King?

Mr. KING. We discussed the matter at some length with Mr. Johnson and others before the committee. Mr. Johnson, I don't want to put words in your mouth. Perhaps you would like to discuss this matter.

You will recall that we did ask you the question and your answer, as I remember, was that you felt there were probably no international implications but you acknowledged that there might possibly be.

We didn't pursue the matter much further. Since we decided to eliminate subsection (f) anyway, we did not feel that further research was necessary.

If you would like to discuss the matter——

Mr. JOHNSON. That is correct, Mr. King. You did ask me to find out from the State Department whether this sort of limitation would violate any of the existing treaties or international agreements which the United States is a party to.

I did provide the committee with assurance that it would not violate any such agreements or treaties. Aside from the international legal aspects, however, the constitutional question, I know, gave the subcommittee a good deal of difficulty. At that time that I was testifying I pointed out this provision had been modeled word for word after an analogous provision in the Atomic Energy Act, and that the constitutional question apparently had not concerned the Congress or, if it had, the Congress felt it had been satisfactorily resolved at the time that act was passed.

We did some research on that and found that there had been a few law review notes written speculating on the question of constitutionality and a few memorandums introduced in the record at the time the Atomic Energy Act was up for consideration.

I would say no one of these comments or memorandums really dealt comprehensively with the problem. They all recognized that there were possible constitutional questions, but the writers came to the conclusion that such a provision was probably constitutional, and we have provided the subcommittee with those citations.

But I would have to agree that there are certainly serious constitutional doubts about it. There is no way of resolving those finally at this point.

Mr. KING. Commenting just further on the international picture, it is true you did indicate to us that you had been assured that this did not violate any existing treaties or understandings.

The concern of our committee was not alone whether we violate existing treaties, but whether this might not possibly be embarrassing as we faced future treaties and agreements that might be entered into as we move toward working out basic ground rules for space law. That was the thing that concerned the committee most.

Mr. JOHNSON. I understood that. You asked the first specific question and I was able to give you that assurance. I could not give you the assurance on the other point. It was too speculative.

Mr. KING. I wanted to clear up the record and show there was a legitimate uncertainty in the minds of the subcommittee on the matter of future agreements that might be entered into, although we were satisfied that there was no conflict as far as existing treaties were concerned.

Carrying it just one step further, Mr. Chairman, first, there was this international matter that concerned us. Second, there was a possible constitutional question of limiting liability that concerned us. Third, there was this matter of the bankruptcy courts. Subsection (f) does try to tie into our bankruptcy law and utilize the bankruptcy courts



and the jurisdiction of the bankruptcy courts. But, that also raised in our minds some very serious questions because this technically may not involve a bankruptcy.

It may or may not. We don't know. There are conceivable considerations where bankruptcy would not be involved, but where the jurisdiction of the bankruptcy court would be invoked.

That to us raised some serious questions.

Then, there is the overall problem of the pro rata reduction. There was no means in subsection (f) for effectuating an equitable pro rata reduction. This meant, as we suggested before, that it would be a sort of first come, first served situation which would mean that those who were in a position to prosecute their claims quickly might be paid off in much fuller measure than those that were not in a position to do so.

So, all in all, Mr. Chairman, the members of the subcommittee felt that there were so many unanswered legal questions posed in subsection (f) that we just did not feel that we could in good conscience go upon the floor of the House and defend it as it was written.

The CHAIRMAN. I think that fully explains it.

Mr. DADDARIO. It doesn't fully explain it—

The CHAIRMAN. I think we are going to have to set it aside and hear the witnesses this morning.

Mr. DADDARIO. I would just like to comment on this particular point. It is not a persuasive argument to me that the law would be administered on a first come, first served basis, whether there was a limitation on it or not.

I doubt that the courts would handle it or allow it to be handled in such a way. I couldn't conceive of such a disaster occurring without the courts setting up a special means through which all claims would be handled in the same manner. I doubt that any other proposition could adhere to. I feel that, regardless of the limitation, all claims would be handled under some kind of a committee arrangement as set forth by the court through which all claims would have to be processed. I don't think there is any question but that there would be that kind of control. It is not a logical argument that we should eliminate this subsection because of the fact that some people may get preferential treatment.

I don't think that could possibly happen. I do think that what would or could happen would be that under such an arrangement there would be a larger possibility of payment by the Government because there would be no limitation to impose a top limit of claim in any particular case.

The CHAIRMAN. The real limit would be the appropriations. I think we have witnesses here this morning. We apparently can't get together on the subcommittee report.

Mr. VAN PELT. I would like to move adoption of the report.

The CHAIRMAN. The gentleman moves the adoption of the report. All in favor say "aye."

All opposed?

The ayes have it. The report will be adopted.

We are going to wait until a little later until more members of the committee are here to pass on the bill. We have gone over all sections of the bill and this was the last section. All sections are approved by the committee as of yesterday. Later on this morning,

we will have a vote on the bill itself, as amended by the subcommittee's report.

(Whereupon, the committee proceeded to further business.)

The CHAIRMAN. The hour of 11:30 has arrived. All the members have been notified, have they not, Mr. Finch, that we would have a vote on the pending bill, H.R. 7115, as amended by the committee, inserting the recommendations of the King subcommittee on the indemnification provisions?

The committee has thus far uniformly and I think unanimously approved every portion of the bill.

Are you ready for the question?

Mr. FULTON. Mr. Chairman, at the time we had a last meeting on legislative matters, there was a rollcall that had been demanded on the motion concerning Edward Yellin. I made a motion on that. Because there was not a quorum present, the rollcall was not completed. Might I suggest—

The CHAIRMAN. I suggest to the gentleman that it is really not in order for this morning. We are planning additional hearings. As a matter of fact, we have before the committee a bill which will amend the National Science Foundation Act to prevent the reoccurrence of the Yellin case. It would seem to me that would be the proper time for the motion.

Mr. FULTON. The motion was made, seconded, and the rollcall was in process. That should be completed before there can be any other business before the committee.

The CHAIRMAN. The gentleman will agree to take that up, won't he, next week?

Mr. FULTON. I would like to have the rollcall on Yellin, that we are recommending to the National Science Foundation that the grant of \$38,000 not be made to this man who has been sentenced to a Federal penitentiary because he refused to answer the question before the Un-American Committee at to whether he had been a Communist.

That rollcall had been demanded and it was put off to the next meeting. The record will show it. I have to ask that the rollcall be made.

The CHAIRMAN. I don't want anything to be done about it. They have agreed not to do anything. We are taking up a bill to make it legally impossible to do that.

Mr. FULTON. I think you will find in the rules of the House that when a rollcall is in progress you must finish the rollcall before other business can be brought up.

Mr. BASS. I suggest we put this over.

The CHAIRMAN. What is that?

Mr. BASS. I ask that we not act on Mr. Fulton's motion now. This is a public hearing. I think we ought to postpone it until such time as we are in executive session. I move we do that.

The CHAIRMAN. Is there objection to that suggestion?

Mr. FULTON. I want the vote on Edward Yellin. I want a time set. I must say to you that based on the House rules, once a rollcall is started, it must be completed before other legislation business comes.

Mr. ANFUSO. Mr. Chairman, will the gentleman from Pennsylvania object if we take it up next time? Let's finish this business.

I think we can all agree we will take it up next time.

Mr. BELL. There was a question of a quorum as I understand it.

The CHAIRMAN. We will take up the matter in regular course.

Mr. FULTON. Hold just a moment.

I want the vote on Edward Yellin that I asked for. It had been granted. If it is going to be put over until tomorrow, that is all right. Notify everybody and I will agree to it. I just don't want it postponed indefinitely.

The CHAIRMAN. The Chair has no intention of postponing the gentleman's motion indefinitely. The gentleman will know what the committee thinks about his motion in due course.

We are going to take the whole matter up next week. It would seem to me that is a proper time. Unless I am overruled, I am going to rule we will take it up next week.

Mr. RIEHLMAN. May I make a suggestion? If it is a matter of disposing of this problem, in which apparently Mr. Fulton is very interested, wouldn't it be proper to have an executive session either tomorrow or whatever day you want, and to set it for a period of time so that we can discuss it and then let the committee act?

The CHAIRMAN. We have witnesses summoned for tomorrow and we have the Yellin matter set for next week.

Mr. BASS. What is the rush about this?

Mr. FULTON. There is no rush but I want a record vote on Edward Yellin.

Mr. MILLER. I make a point of order, that we were to vote on this matter at 11:30. It is now 11:30 and I say we should proceed to vote on the bill before us.

The CHAIRMAN. The point of order is good. The bill, H.R. 7115 is now before us as amended by the King subcommittee report, which changes the indemnification provision.

Are you ready for the question?

Mr. Finch, would you call the roll? All in favor of H.R. 7115, as amended, will make it known by saying "aye." All those opposed by the same sign.

Mr. Finch.

Mr. FINCH. Mr. Brooks.

The CHAIRMAN. Aye.

Mr. FINCH. Mr. Martin.

Mr. Miller.

Mr. MILLER. Aye.

Mr. FINCH. Mr. Fulton.

Mr. FULTON. Aye.

Mr. FINCH. Mr. Teague.

Mr. Chenoweth.

Mr. CHENOWETH. Aye.

Mr. FINCH. Mr. Anfuso.

Mr. ANFUSO. Aye.

Mr. FINCH. Mr. Van Pelt.

Mr. VAN PELT. Aye.

Mr. FINCH. Mr. Karth.

Mr. KARTH. Aye.

Mr. FINCH. Mr. Bass.

Mr. BASS. Aye.

Mr. FINCH. Mr. Hechler.

The CHAIRMAN. I have Mr. Hechler's proxy. He votes "aye."

Mr. FINCH. Mr. Riehlman.

Mr. RIEHLMAN. Aye.

Mr. FINCH. Mr. Daddario.

Mr. DADDARIO. Aye.

Mr. FINCH. Mrs. Weis.

Mrs. WEIS. Aye.

Mr. FINCH. Mr. Moeller.

Mr. Mosher.

Mr. MOSHER. Aye.

Mr. FINCH. Mr. King.

Mr. KING. Aye.

Mr. FINCH. Mr. Roudebush.

Mr. ROUDEBUSH. Aye.

Mr. FINCH. Mr. Roush.

Mr. MORRIS.

Mr. MORRIS. Aye.

Mr. FINCH. Mr. Bell.

Mr. BELL. Aye.

Mr. FINCH. Mr. Casey.

Mr. RANDALL.

Mr. RANDALL. Aye.

Mr. FINCH. Mr. Davis.

Mr. DAVIS. Aye.

Mr. FINCH. Mr. Ryan.

Mr. CORMAN.

Mr. CORMAN. Aye.

Mr. FINCH. Mr. McCormack.

The CHAIRMAN. How does that tally?

Mr. FINCH. On this vote 20 members vote "yes." There were no "nays."

The CHAIRMAN. The bill, as amended, is approved by the committee. Unless there is objection, I will ask the staff to take 7115 and attach the amendments that have been approved by the full committee and introduce it as a clean bill for consideration by the House of Representatives.

Mr. FULTON. Mr. Chairman.

The CHAIRMAN. I would make this suggestion about the timing before the Rules Committee. I would think that we might work this out in order to take it up by suspension of the rules; the vote is unanimous here. It is a bill that we all agree on. It might be that we could push it forward faster by taking it by that route.

Unless there is objection—

Mr. MILLER. I suggest that be left to the discretion of the Chair.

The CHAIRMAN. I will leave it to the discretion of the leadership.

Mr. FULTON. A parliamentary inquiry. On the language of the bill: I understand that the emphasis on private enterprise and the use of private enterprise, except where there might be State or local insurance agencies, has not been taken out of the bill. That language was not changed in the matter of indemnification. We had language in the previous legislation that had emphasized the use of private enterprise and private insurance companies and agencies, where possible, for indemnification coverage. I had objected to taking that out, I just wanted to make sure that the adoption of this approval of the

bill and reporting it out has not changed that language. My understanding was it had not.

The CHAIRMAN. The question is a parliamentary inquiry, and I will say to the gentleman that the committee agreed unanimously that we would have the counsel write in the report a clarification of that situation. If the gentleman wishes to see it before—

Mr. FULTON. That is all right, as long as the private-enterprise provision is in the bill.

The CHAIRMAN. We are all in favor of private enterprise. That completes the bill.

Before any members leave, may I interrupt a moment. Mr. Ryan came in a little late. If there is no objection, we are going to let him vote for the bill. You are for it, aren't you?

Mr. RYAN. I vote "aye."

The CHAIRMAN. If there is no objection, it is so ordered.

(Whereupon, at 10:30 a.m., the committee was adjourned.)

# TO AMEND THE NATIONAL AERONAUTICS AND SPACE ACT OF 1958

THURSDAY, JULY 13, 1961

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SCIENCE AND ASTRONAUTICS,  
*Washington, D.C.*

The committee met, pursuant to adjournment, at 10 a.m., in room 214-B, New House Office Building, the Honorable Overton Brooks (chairman) presiding.

The CHAIRMAN. At this time then we want to take up H.R. 8095. It is the clean bill that I introduced. Do I hear a motion to approve it?

Mr. ANFUSO. I so move.

Mr. KARTH. Second.

The CHAIRMAN. It has been moved and seconded.

(EDITOR'S NOTE.—H.R. 8095 supersedes H.R. 7115.)

[H.R. 8095, 87th Cong., 1st sess.]

A BILL To amend the National Aeronautics and Space Act of 1958, as amended, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the National Aeronautics and Space Act of 1958, as amended, is amended as follows:

(a) Section 203 is amended—

(i) by striking out "to lease to others such real and personal property;" in paragraph (b) (3) and inserting in lieu thereof the following: "to lease to others such real and personal property, and any such lease may provide, notwithstanding section 321 of the Act of June 30, 1932 (40 U.S.C. 303b), or any other provision of law, for the maintenance, protection, repair, or restoration, by the lessee, of the property leased, or of the entire unit or installation where a substantial part of it is leased as part or all of the consideration for the lease;"

(ii) by striking out "and" at the end of paragraph (12) of subsection (b), by striking out the period at the end of paragraph (13) of such subsection and inserting in lieu thereof, "; and", and by adding at the end of such subsection the following new paragraph:

"(14) to acquire releases, before suit is brought, for past infringement of patents."

(b) Section 204 is repealed.

(c) Section 205 is redesignated as section 204.

(d) Section 206 is redesignated as section 205, and such section as so redesignated is amended by striking out "semiannually" in subsection (a) and by inserting in lieu thereof "once a year".

(e) Section 304 is amended by striking out "certified by the Council or the Administrator, as the case may be," in the first sentence of subdivision (b) and inserting in lieu thereof "certified by the Council or the Administrator or designee thereof, as the case may be,".

(f) Title III is further amended by adding at the end thereof the following new section:

## "INDEMNIFICATION"

"SEC. 308. (a) With the approval of the Administrator or his designee, any contract of the Administration for research or development, or both, the performance of which involves a risk of an unusually hazardous nature, may provide that the United States will indemnify the contractor against either or both of the following, but only to the extent that they arise out of the direct performance of the contract and to the extent not covered by the financial protection required under subsection (e):

"(1) Liability (including reasonable expenses of litigation or settlement) to third persons, except liability under State or Federal Workmen's Compensation Acts to employees of the contractor employed at the site of and in connection with the contract for which indemnification is granted, for death, bodily injury, or loss of or damage to property, from a risk that the contract defines as unusually hazardous.

(2) Loss of or damage to property of the contractor from a risk that the contract defines as unusually hazardous.

"(b) A contract that provides for indemnification in accordance with subsection (a) must also provide for—

"(1) notice to the United States of any claim or suit against the contractor for death, bodily injury, or loss of or damage to property; and

"(2) control of or assistance in the defense by the United States, at its election, of any such suit or claim for which indemnification is provided hereunder.

"(c) No payment may be made under subsection (a) unless the Administrator, or his designee, certifies that the amount is just and reasonable.

"(d) Where the total amount of claims arising out of a single incident and certified under subsection (c)—

"(1) exceeds \$100,000, payments may be made from funds specifically appropriated therefor;

"(2) does not exceed \$100,000, payments may be made from (i) funds obligated for the performance of the contract concerned, or (ii) funds available for research or development, or both, and not otherwise obligated.

"(e) Each contractor which is a party to an indemnification agreement under subsection (a) shall have and maintain financial protection of such type and in such amounts as the Administration shall require to cover liability to third persons and loss of or damage to the contractor's property. The amount of financial protection required shall be the maximum amount of insurance available from private sources, except that the Administration may establish a lesser amount, taking into consideration the cost and terms of private insurance. Such financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures.

"(f) In administering the provisions of this section, the Administration shall use, to the maximum extent practicable, the facilities and services of private insurance organizations, and the Administration may contract to pay a reasonable compensation for such services. Any contract made under the provisions of this subsection may be made without regard to the provisions of section 5 of title 41, upon a showing by the Administration that advertising is not reasonably practicable, and advance payments may be made.

"(g) The authority to indemnify contractors under this section does not create any rights in third persons which would not otherwise exist by law.

"(h) As used in this section, the term 'contractor' includes subcontractors of any tier under a contract in which an indemnification provision pursuant to subsection (a) is contained."

Sec. 2. The Act of April 29, 1941, as amended (40 U.S.C. 270e), is amended (1) by striking out "or the Secretary of the Treasury" and inserting in lieu thereof "the Secretary of the Treasury or the Administrator of the National Aeronautics and Space Administration", and (2) by striking out "or Coast Guard" and inserting in lieu thereof "Coast Guard, or National Aeronautics and Space Administration".

Sec. 3. Section 2302 of title 10 of the United States Code is amended by striking out "or the Administrator of the National Aeronautics and Space Administration." and inserting in lieu thereof "or the Administrator or Deputy Administrator of the National Aeronautics and Space Administration."

Mr. FULTON. I want consideration later of a possible committee amendment on page 3, lines 14 and 15. It is a technical amendment

limiting the reference to employees of the contractor employed at the site. I think "at the site" should be removed because these experiments are now getting so big that the site of a NASA experiment doesn't mean much any more.

The CHAIRMAN. This was approved by the subcommittee and the full committee after long discussion.

Mr. FULTON. I say for committee amendment later.

The CHAIRMAN. If the committee wishes to take up an amendment to the bill at a later date, fine. You have heard the motion duly seconded. Mr. Finch, will you call the roll? All in favor of the approval of the bill H.R. 8095 make it known by saying "aye."

Mr. MORRIS. Are we voting that the bill be reported favorably to the House?

The CHAIRMAN. Correct.

Mr. FINCH. Mr. Brooks?

Mr. BROOKS. Aye.

Mr. FINCH. Mr. Martin?

Mr. MILLER?

Mr. FULTON?

Mr. FULTON. Aye.

Mr. FINCH. Mr. Teague?

Mr. CHENOWETH?

Mr. CHENOWETH. Aye.

Mr. FINCH. Mr. Anfuso?

Mr. ANFUSO. Aye.

Mr. FINCH. Mr. Van Pelt?

Mr. VAN PELT. Aye.

Mr. FINCH. Mr. Karth?

Mr. KARTH. Aye.

Mr. FINCH. Mr. Bass?

Mr. HECHLER?

Mr. HECHLER. Aye.

Mr. FINCH. Mr. Riehlman?

Mr. RIEHLMAN. Aye.

Mr. FINCH. Mr. Daddario?

Mr. DADDARIO. Aye.

Mr. FINCH. Mrs. Weis?

Mr. MOELLER?

Mr. MOSHER?

Mr. MOSHER. Aye.

Mr. FINCH. Mr. King?

Mr. KING. Aye.

Mr. FINCH. Mr. Roudebush?

Mr. ROUDEBUSH. Aye.

Mr. FINCH. Mr. Roush?

Mr. ROUSH. Aye.

Mr. FINCH. Mr. Morris?

Mr. MORRIS. Aye.

Mr. FINCH. Mr. Bell?

Mr. BELL. Aye.

Mr. FINCH. Mr. Casey?

Mr. RANDALL?

Mr. RANDALL. Aye.

Mr. FINCH. Mr. Davis?



Mr. DAVIS. Aye.

Mr. FINCH. Mr. Ryan?

Mr. RYAN. Aye.

Mr. FINCH. Mr. Corman?

Mr. CORMAN. Aye.

Mr. FINCH. Mr. McCormack?

On this vote, 19 members vote "yes," no member votes "no."

The CHAIRMAN. We have a quorum. The bill is approved and will be reported to the House favorably.

Mr. FULTON. I make a motion to authorize the chairman to take the necessary steps.

The CHAIRMAN. Would your motion permit perhaps considering the bill by suspension of the rule?

Mr. FULTON. I will be glad to add that.

The CHAIRMAN. You have heard the motion. All those in favor make it known by saying "aye." Those opposed, by saying "no." The ayes have it.

The Chair will take the necessary steps.

I have a very short statement that I want to make at this time.

I have here the preliminary staff report covering the problems of management and funding of the weather satellite program which I consider an outstanding review of the current situation and the problems which are presented. I will release this report to the press sometime this afternoon. I expect that what is decided in the weather satellite program may well establish a precedent for the management of subsequent space programs in which NASA will be involved in satisfying the requirements of other agencies of the Government. The members of the committee will be furnished a copy of this study this afternoon. I hope you will look it over very carefully before the hearings on this subject come up.

(Whereupon, the committee proceeded to further business.)

## APPENDIX

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CHAMBER OF COMMERCE OF THE UNITED STATES,  
*Washington, D.C., June 13, 1961.*

HON. OVERTON BROOKS,  
*Chairman, House Committee on Science and Astronautics,  
New House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: The Chamber of Commerce of the United States herewith submits recommendations regarding H.R. 7115.

The bill would revise the National Aeronautics and Space Act of 1958 by providing the National Aeronautics and Space Administration with authority to indemnify contractors against unusually hazardous risks arising out of research and development contracts and eliminating the statutory requirements for a Civilian-Military Liaison Committee.

The bill also would give NASA authority to settle patent infringement claims, waive payment and performance bonds in cost-type construction contracts, and lease Government property for nonmonetary consideration, similar to that provided the military departments.

The national chamber is particularly interested in the proposed indemnification provisions. NASA should have the same authority to indemnify research and development contractors that Congress has provided the Department of Defense. This is particularly important where NASA and DOD are placing large contracts with the same industry.

The Department of Defense has submitted to Congress several bills to broaden its current indemnification authority to include production type contracts. Congress has been reluctant to consider such legislation. Although favoring approval of the indemnification provisions of H.R. 7115, as amended, the national chamber wishes to make it clear that it favors extension of indemnification, where insurance is unavailable, to include production type contracts and also common and contract carriers transporting for the Government or its contractors.

The chamber believes the Federal Government should recognize that its contractors (of any tier) are entitled to full protection against loss or liability to third persons from unusually hazardous risks. But Government indemnification covering unusually hazardous risks should be limited thereto and should not be authorized except to the extent that private insurance is unavailable.

Certain revisions to section 1(f) of H.R. 7115 were submitted to your committee by NASA. The chamber generally supports the revised language but makes the following suggestions.

It was suggested by a witness from the General Accounting Office that the committee might wish to consider a modification of subsection (e) of the proposed revisions to provide that determination by the administration of the amount of private source financial protection required of the contractor be based on all facts and circumstances pertaining to the particular contractual activity rather than primarily on the cost and terms of available private insurance. The chamber recommends that you do not adopt this suggestion.

The witness from the GAO also suggested that the provisions of subsection (g), requiring the use of facilities and services of private insurance organizations to the maximum extent practicable, be made permissive rather than mandatory. The chamber recommends that you reject this suggestion because we believe the Government should fully utilize the services and facilities of the insurance industry.

The chamber favors repeal of the statutory requirement for a Civilian-Military Liaison Committee. Although such a committee might have been deemed necessary in the early formative stages of our space program and NASA itself, we believe that coordination and liaison can best be accomplished by the Aeronautics and Astronautics Coordination Board which was established by joint

action of NASA and the Department of Defense. It is important that the agencies responsible for our vital space programs be allowed to retain maximum flexibility to establish whatever means will bring about complete coordination and liaison at all levels, as well as prompt decisions.

Authority to settle patent infringement claims, waive performance and payment bonds in cost-type construction contracts and to lease Government property for nonmonetary consideration should be granted to NASA. The military departments have statutory authority in each of these areas. Granting this authority to NASA would correct serious obstacles to the efficient management of our space program.

I hope you will give these recommendations serious consideration. It will be appreciated if you make this letter a part of the record of your current hearings on this legislation.

Cordially yours,

CLARENCE R. MILES,  
*Manager, Legislative Department.*

NATIONAL ASSOCIATION OF MANUFACTURERS,  
*New York, N.Y., June 29, 1961.*

Hon. OVERTON BROOKS,  
*Chairman, House Committee on Science and Astronautics,  
House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: I am writing you on behalf of the National Association of Manufacturers with reference to H.R. 7115, now before your committee, which would amend the National Aeronautics and Space Act of 1958.

The National Association of Manufacturers is made up of more than 18,000 member companies, a great many of which are involved in one way or another in the national defense effort. Many of these companies have contracts and subcontracts in connection with the space program, as well as with the Department of Defense. We are, therefore, particularly interested in those provisions of H.R. 7115 which would authorize the National Aeronautics and Space Administration to indemnify contractors against unusually hazardous risks arising out of research and development contracts. The Department of Defense already has such authority and we believe it should be extended to NASA contracts as well.

We believe that the indemnification provisions of H.R. 7115, with the revisions recently proposed by NASA, represent a worthwhile step forward and would favor their adoption. At the same time we would recommend that NASA indemnification of its contractors against unusually hazardous risks be made automatic, rather than permissive as H.R. 7115 now provides. It is our feeling that such a change in the bill would in no way alter NASA's intent, but would simplify negotiations of contracts covering work involving risks of unusually hazardous nature.

Also we remain strongly of the view that indemnification should be extended to cover all types of contracts with NASA against the extrahazardous risks which are inherent in much of the work carried on by that agency, in production contracts as well as research and development contracts.

We have previously advocated indemnification for both prime and subcontractors of the Department of Defense against unusually hazardous risks arising out of DOD contracts and we were particularly gratified to note the NASA, in its revision, has included subcontractors of all tiers in its definition of "contractor."

We are also in agreement that any indemnification provided by the Federal Government to cover unusually hazardous risks should be limited to such risks as cannot be covered by private insurance. We, therefore, favor the suggested indemnification modification of H.R. 7115 which would require contractors to provide their own insurance coverage to the extent that private insurance is available.

We urge favorable consideration of the indemnification provisions of H.R. 7115, as proposed to be modified by NASA, as a step in the right direction. We do hope, however, that during the current session of Congress your committee will consider extending such protection to all NASA contractors on an automatic basis along the lines suggested in the last Congress for Department of Defense contractors.

We appreciate this opportunity to express our views on this matter and hope that they may be of some assistance to the members of the committee. It is respectfully requested that this letter be made a part of the hearing record on H.R. 7115.

Sincerely yours,

ERNEST W. FARLEY, Jr.,  
*Chairman, National Defense Committee.*

