

**No. 11055**

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**UNITED STATES OF AMERICA  
and  
CANADA**

**Exchange of notes constituting an agreement for aeronautical  
research (with annex). Ottawa, 19 October and  
10 November 1970**

*Authentic text of note I and annex: English.*

*Authentic texts of note II: English and French.*

*Registered by the United States of America on 4 May 1971.*

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**ÉTATS-UNIS D'AMÉRIQUE  
et  
CANADA**

**Échange de notes constituant un accord relatif à la recherche  
aéronautique (avec annexe). Ottawa, 19 octobre et  
10 novembre 1970**

*Texte authentique de la note I et de l'annexe : anglais.*

*Textes authentiques de la note II : anglais et français.*

*Enregistré par les États-Unis d'Amérique le 4 mai 1971.*

EXCHANGE OF NOTES CONSTITUTING AN AGREEMENT<sup>1</sup>  
BETWEEN THE UNITED STATES OF AMERICA AND  
CANADA FOR AERONAUTICAL RESEARCH

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I

Ottawa, October 19, 1970

No. 208

Excellency :

I have the honor to refer to discussions which have taken place between representatives of the National Aeronautics and Space Administration of the United States and the Department of Industry, Trade and Commerce of Canada regarding their joint participation in an augmentor wing flight test project. These discussions have resulted in the terms and conditions contained in the Annex to this Note.

I have the honor to propose that if this Note and the Annex are acceptable to the Government of Canada, this Note and the Annex and your reply to that effect shall constitute an Agreement between our two Governments which shall enter into force on the date of your reply and shall remain in effect until July 1, 1974, unless either Government gives notice to the other of its intent to terminate the Agreement at any time during the period it is in effect, such notice to take effect six months following the receipt thereof by the other Government. It is understood that notice of termination of this Agreement will be given only after full consultation between the National Aeronautics and Space Administration and the Department of Industry, Trade and Commerce to enable them to evaluate the consequences and to resolve the matter giving rise to the intent to terminate.

Accept, Excellency, the renewed assurances of my highest consideration.

EMERSON M. BROWN  
Chargé d'Affaires ad interim

Enclosure :  
Annex

The Honorable Mitchell Sharp  
Secretary of State for External Affairs  
Ottawa

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<sup>1</sup> Came into force on 10 November 1970, the date of the note in reply, in accordance with the provisions of the said notes.

## ANNEX

I. *Introduction*

1. Hereafter, "NASA" means the National Aeronautics and Space Administration of the United States of America and "Department" means the Department of Industry, Trade and Commerce of Canada; "D.H.C." means the De Havilland Aircraft of Canada Limited; "Agency" in the singular or plural, means NASA, or the Department, or both, as the context requires; "Agreement" means the Agreement of November 10, 1970 concerning the joint participation of NASA and the Department in an augmentor wing flight test project.

2. NASA and the Department have reached an understanding on a joint Project to design, develop and test an aircraft embodying a trailing edge flap system based on a jet flap with nozzle thrust augmentation from an ejector, known as the "Augmentor Wing System."

3. The Project is an extension of the cooperation between the United States and Canada that has been underway since 1964 to evaluate and develop the Augmentor Wing System proposed by the D.H.C.

4. The Project will serve to further test and evaluate the Augmentor Wing System and in addition will provide data and experience which may serve as the technical foundation for a new family of short-take-off-and-landing (STOL) aircraft.

II. *Description of the Project*

The Project includes :

- (a) the design and development of an Augmentor Wing System for a DHC-5 Buffalo aircraft;
- (b) the design and development of a modified propulsion system for the Augmentor Wing System and the said aircraft; and
- (c) a flight test program for the exploration of low speed characteristics of the design, including take-off and landing, collection of data and evaluation of operating criteria to support future designs of vehicles employing the Augmentor Wing System.

III. *Division of Responsibilities*

1. Primary responsibility for the airframe and control system aspects of the Project, as well as for integration of the propulsion system into the airframe, rests in NASA and will be accomplished in accordance with mutually agreed Statements of Work.

2. Primary responsibility for the propulsion system and responsibility for assisting with the integration of the propulsion system into the airframe rests in the Department and will be accomplished in accordance with mutually agreed Statements of Work.

3. NASA and the Department will bear the cost of discharging their respective responsibilities including the cost of travel by their personnel and transportation charges on all equipment for which they are responsible.

4. It is understood that the ability of both NASA and of the Department to carry out the agreed responsibilities is subject to the availability of appropriated funds.

5. There will be no exchange of funds between NASA and the Department.

#### IV. *Management of the Project*

1. NASA and the Department will each appoint a Project Manager to be responsible for coordinating within his agency the agreed functions and responsibilities of each agency with regard to the other.

2. The Project Managers will establish a Joint Working Group to be responsible for assuring the total integration of the combined effort and, as agreed between them, may establish such subcommittees or groups as are required to ensure adequate coordination and control in the implementation of the Project.

3. The Project Managers will also ensure that the necessary liaison and exchange of information are maintained among the agencies and the contractors in order to successfully implement the Project.

4. Technical changes to the work described in this Annex and Schedules that are required to implement the Project shall be made by agreement of the Project Managers.

5. Substantive revisions, additions, or changes to this Annex and Schedules shall be made by agreement between NASA and the Department or their duly authorized representatives.

6. If a question arises as to whether a proposed change is technical or substantive in nature, the Project Manager shall refer this matter for determination to higher authority within their agencies.

7. NASA and the Department will conduct the contractor selection, negotiation and award for their respective contracts in accordance with their regularly established procedures and in each case, there will be joint participation on the committees formed to provide technical recommendations regarding selection.

8. NASA and the Department shall give to each other an opportunity to comment on the proposed selection of their respective prime contractors prior to making a contract award.

9. NASA shall be solely responsible for the management of the contracts let by NASA, and the Department shall be solely responsible for the management of the contracts let by the Department and management of these contracts shall be construed to encompass financial and schedule as well as technical considerations.

10. NASA and the Department are responsible for assuring necessary access for Project personnel, including their officers, agents and employees and their contractors and subcontractors, to government and contractor facilities involved in the Project.

#### V. *Ownership and Disposal of Equipment*

1. Ownership of the modified De Havilland DHC-5 Buffalo airframe will vest in NASA.

2. Ownership of the propulsion system, less the items provided by NASA will vest in the Department.

3. Special tooling and supporting equipment procured by each agency for the Project will vest in the procuring agency.

4. Upon completion of the test program, the aircraft systems and supporting equipment provided by each agency will be returned to the providing agency for disposal unless otherwise agreed.

5. NASA and the Department will ensure that the equipment provided to each other for purposes of the Project will be cared for and maintained in such a condition that the maximum disposal value can be obtained upon completion of the Project, due allowance being made for normal wear and tear.

#### VI. *Continuing and Future Collaboration*

1. In the event that follow-on testing programs should become desirable, both agencies will seek to establish further collaboration on such programs subject to the approval of their respective governments and will consult as to the desirability of continued involvement by the contractors engaged in the Project.

#### VII. *Patent and Data Rights*

##### *Patents*

1. NASA will acquire and control rights, throughout the world, to any invention resulting from the performance of its responsibilities under the Agreement and will promptly notify the Department of any such inventions.

2. The Department will acquire and control rights, throughout the world, to any invention resulting from the performance of its responsibilities under the Agreement and will promptly notify NASA of any such inventions.

3. With respect to such rights acquired by NASA, NASA will grant to the Department a nonexclusive, royalty-free license, together with the right to grant sublicenses throughout the world.

4. With respect to such rights acquired by the Department, the Department will grant to NASA a nonexclusive, royalty-free license, together with the right to grant sublicenses throughout the world.

##### *Data*

5. (1) Subject to sub-paragraph (2) of this paragraph, all technical data acquired to carry out this cooperative Project shall be made available without restrictions to both agencies so that the Project can be carried out as expeditiously

as possible and so that both agencies are kept abreast of overall Project developments.

(2) It is recognized that in carrying out their respective responsibilities as described in this Annex, it may be necessary for the agencies to provide or to exchange with each other certain technical data which the furnishing agency may desire to protect under disclosure restrictions, and to insure such protection, the furnishing agency will mark the technical data to be protected with the following notice :

#### NOTICE

These data are furnished pursuant to the Agreement of November 10, 1970 between the Government of the United States and the Government of Canada covering the joint participation of the National Aeronautics and Space Administration and the Department of Industry, Trade and Commerce in an augmentor wing flight test project. The National Aeronautics and Space Administration of the United States/Department of Industry/Trade and Commerce of Canada may use and duplicate these data and may disclose these data outside the United States Government/Canadian Government with the limitation that the data may be used only for purposes of the Project covered by the said Agreement. These data may not be otherwise disclosed outside the United States Government/Canadian Government without the prior approval of the National Aeronautics and Space Administration/Department of Industry, Trade and Commerce of Canada, and then only for the specific purpose or purposes defined in such approval. The recipient of these data is not impaired from using similar or identical data acquired from another source without restriction.

This notice shall be marked on any reproduction hereof, in whole or in part. These limitations shall automatically terminate upon 1 July 1978 or when these data are disclosed by the owner without restriction, whichever occurs sooner.

6. Technical data generated by either agency or its contractors as a result of their participation in the Project shall be transmitted promptly without restrictions to the other agency.

7. Technical data and reports resulting from the flight test program will also be made fully and freely available to both agencies without restriction. Prior to final publication of the reports on the program by either agency, draft copies will be transmitted to the other agency for review and comment.

8. Disclosure of data between agencies pursuant to the terms and conditions in this Annex shall not be construed as conveying any patent rights.

#### *Background Patents and Data*

9. It is recognized that, among the background patents which may relate to augmentor wing technology and which may be pertinent to the ultimate hardware developed under or subsequent to the Agreement, there are several held or applied for by DHC. In order to carry out the objectives of the respective agencies pursuant to the Agreement and to make the resulting technology accessible to the aircraft

industries of the United States and Canada, the Department will obtain the following commitment from DHC :

“De Havilland of Canada Ltd. (DHC) agrees to grant United States domestic nominees of the National Aeronautics and Space Administration at a royalty a license to practice any DHC background patents, background data, know-how, or similar information for the purpose of manufacturing in the United States, and using and selling throughout the world (including the United States) systems utilizing the technology which has been further developed under the Agreement between the United States and Canada of November 10, 1970 concerning an augmentor wing flight test project. By reason of the contribution of the United States and Canadian Government agencies to this project and the funding in this area of technology over the last six years by the United States and Canadian Government agencies with DHC and others, DHC agrees to a royalty which shall be reduced to approximately half the royalty fee level which would normally obtain. In the event DHC and a NASA nominee are unable to agree on the terms of any such license, DHC agrees to submit the matters in dispute to a representative of NASA and the Department, whose decision shall be final. DHC further agrees not to exercise the right of injunction against a NASA nominee for the practice indicated above of any of the patented inventions claimed by DHC during the period a decision is pending.”

#### VIII. *Performance*

1. The agencies, recognizing that significant delays by either side in the completion of the Project could impose commensurate cost burdens upon the other, will make every effort to avoid such delays.
2. Upon being advised of any occurrence which could cause delays or jeopardize the completion of the Project, the agencies or their designated representatives will meet promptly and decide on the future course of the Project.

#### IX. *Warranty*

For items procured by one agency but intended for use by the other agency, the procuring agency shall pass on to the other agency the warranty on items supplied that it would obtain should it procure such items for its own use.

#### X. *Liability*

1. If minor damage is sustained by the DHC-5 aircraft, spares or supporting equipment required for the cooperative Project, NASA will bear the cost of repairs to the airframe and the Department will bear the cost of repairs to the propulsion system.

2. If major damage is sustained by the DHC-5 aircraft, NASA and the Department or their designated representatives will consult and decide jointly whether the aircraft is beyond economical repair, taking into account not only the estimated cost of such repair, but also the extent of the Project already completed and any Project extension if repair were undertaken. If the decision is to undertake the repairs, the costs will be borne as in sub-paragraph (1) of this paragraph. If the decision is that the aircraft is damaged beyond economical repair, neither NASA nor the Department will be liable to the other for the value of any part of the aircraft.

3. If supporting equipment or material is destroyed or damaged beyond economical repair, NASA will consult with the Department concerning the need for replacement of such damaged property and, if replacement is agreed to be necessary, then NASA and the Department or their designated representatives will consult and decide how the cost is to be borne.

4. In general, NASA will be responsible for settling any valid claims for damages to property or injuries to persons arising from the use or operation of the aircraft in connection with this Project by United States personnel authorized by NASA, including contractor personnel, and the Department will be responsible for settling any valid claims for damages to property or injuries to persons arising from the use or operation of the aircraft in connection with this Project by any Canadian personnel authorized by the Department. However, notwithstanding the foregoing these general responsibilities may be modified in cases where the personnel of the other agency may be found to have contributed significantly to the damage or injury incurred. In such event, the sharing of the responsibility will be as agreed between NASA and the Department or their duly authorized representatives.

#### XI. *Export Permits*

The agencies will be responsible for obtaining any export permits required for items to be shipped from their respective countries.

#### XII. *Taxes and Duties*

The agencies will use their best efforts to arrange for the duty and tax-free entry of all items shipped to their respective countries.

#### XIII. *Termination Costs*

In the event of the termination of the Agreement, the agency of the Government terminating the Agreement will be liable for its full share of the costs incurred up to the date of expiration of the six months notice of termination provided by the Agreement, and the agency of the non-terminating Government will have the right to continue the project at such agency's cost on a basis agreed between the agencies.



## II

MINISTER OF INDUSTRY, TRADE AND COMMERCE  
OTTAWA 4, CANADA

Ottawa, November 10, 1970

Excellency,

I have the honour to refer to your Note No. 208 of October 19, 1970 and Annex, addressed to The Honorable Secretary of State for External Affairs, regarding the joint participation in an augmentor wing flight test project to be carried out by the Department of Industry, Trade and Commerce of Canada and the National Aeronautics and Space Administration of the United States of America.

I have the honour to confirm that the proposals contained in your Note and Annex under reference are acceptable to the Government of Canada. Accordingly, your Note and Annex together with this Note of November 10, 1970, which is authentic in the English and French languages, shall constitute an Agreement between our two countries and shall enter into force on the date of this reply and remain in effect until July 1, 1974, unless either Government gives notice to the other of its intent to terminate the Agreement at any time during the period it is in effect, such notice to take effect six months following the receipt thereof by the other Government. It is understood that notice of termination of this Agreement will be given only after full consultation between the Department of Industry, Trade and Commerce and the National Aeronautics and Space Administration to enable them to evaluate the consequences and to resolve the matter giving rise to the intent to terminate.

Accept, Excellency, the renewed assurances of my highest consideration.

JEAN-LUC PEPIN

Minister of Industry, Trade and Commerce

His Excellency Mr. Adolph W. Schmidt  
Ambassador of the United States of America  
Ottawa