### **ARRANGEMENT**

# ON THE JOINT FINANCING OF A NORTH ATLANTIC HEIGHT MONITORING SYSTEM

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## on the Joint Financing of a North Atlantic Height Monitoring System

The Civil Aviation Authorities of the Governments of Canada, Iceland, Ireland, Portugal, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and the International Civil Aviation Organization, hereinafter the Parties;

Desiring to ensure the safety of aircraft flying over the North Atlantic under the Height Monitoring System Program; and

Recalling the experience acquired in administration of the Danish and Icelandic Joint Financing Agreements;

Have agreed as follows:

#### Article I

For the purpose of this Arrangement:

- a) "Administrator" means the International Civil Aviation Organization;
- b) "Civil Aviation Authority" or "CAA" means the entity having responsibility for the administration of air navigation services within the concerned States; any reference to Canada, Iceland, Ireland, Portugal, the United Kingdom and the United States shall be construed as meaning the Civil Aviation Authority of these countries;
- c) "CMA" means Central Monitoring Agency;
- d) "GMU" means Global Positioning System Monitoring Unit;
- e) "HMU" means Height Monitoring Unit;
- f) "HMU Project" means procurement, installation, testing and commissioning of two HMUs and the CMA facilities and associated interfaces:
- g) "Danish and Icelandic Joint Financing Agreements" means the Agreement on the Joint Financing of Certain Air Navigation Services in Greenland (1956) as amended by the Montreal Protocol of 1982 and the Agreement on the Joint Financing of Certain Air Navigation Services in Iceland (1956) as amended by the Montreal Protocol of 1982;
- h) "Services" means the services specified in Section I of the Annex and any additional services which may from time to time be provided pursuant to this Arrangement;
- i) "NAT" means North Atlantic;

- j) "OAC" means Oceanic Area Control Centre; and
- k) "RVSM" means Reduced Vertical Separation Minimum.

#### **Article II**

- 1. Canada, Iceland, Ireland, Portugal, the United Kingdom, and the United States shall provide, operate and maintain the Services as set forth in the Annex to this Arrangement, and provide, operate and maintain such additional services as may be mutually agreed upon by them.
- 2. No State which is party to this Arrangement shall be liable for any acts or omissions of any other State which is a party to this Arrangement and which take place during the course of any services provided by such other State.

#### Article III

- 1. Canada, Iceland, Ireland, Portugal and the United Kingdom shall share, and before time of purchase shall, in accordance with paragraph 3 of this Article, provide the funding for the HMU Project in accordance with their respective share of total NAT traffic controlled by their OACs for the year 1992. These facilities shall be jointly owned by them, with each owning a share equal to its share of the funding. The total cost of the HMU project shall be subject to agreement of all Parties to this Arrangement before concluding contract with the HMU supplier.
- 2. The United Kingdom, with the agreement of Canada on the technical specifications, acceptance criteria and acceptance testing, shall deal directly with the HMU supplier on behalf of Canada, Iceland, Ireland, Portugal and the United Kingdom. Canada may enter into separate contract(s) in relation to HMU infrastructure requirements in Canada and shall be solely responsible for the obligations and liabilities arising under the separate contract(s).
- 3. The United Kingdom and Canada shall consult with one another and with Iceland, Ireland and Portugal on the schedules of progress payments to be made including any interest arising thereon in relation to the HMU project. These payments, as calculated in paragraph 1 of this Article, shall be made to the Administrator who, having collected such payments, shall make remittances to the United Kingdom and Canada which in turn shall make remittances to the HMU contractor(s) as per agreed schedule(s) of payments.
- 4. The funding for any replacement or new HMU equipment as determined by Canada, Iceland, Ireland, Portugal and the United Kingdom shall be shared in accordance with their respective share of total NAT traffic controlled by their OACs for the latest calendar year available at that time.
- 5. The costs incurred as regards the operation and maintenance, the annual depreciation and interest on the capital expenditures including interest on work-in-progress expenditures for the HMUs and associated infrastructure, the operation of the CMA and administrative charges including those of the Administrator, shall be recovered through a system of NAT RVSM user charge.
- 6. After completion or termination of the monitoring program, any net cost associated with dismantling the equipment including undepreciated capital costs, shall be recovered through the system of NAT RVSM user charge.

#### Article IV

- 1. The United States shall, subject to the availability of appropriations, provide GMU equipment (estimated at 50 units), eight reference stations and post-processing equipment.
- 2. The United States shall also provide, subject to the availability of appropriations and as referenced in the North Atlantic Special Planning Group (NATSPG) Report dated January 1994, GMU operations and maintenance and GMU Operating Agency for the United States financial years 1995 and 1996 up to a total of USD TWO MILLION FOUR HUNDRED THOUSAND (\$2 400 000).
- 3. A GMU Operating Agency shall be contracted by the Administrator on behalf of Canada, Iceland, Ireland, Portugal and the United Kingdom to cover the GMU operations and maintenance in excess of the total amount provided by the United States from the United States financial year 1996 onwards to cover the GMU operations and maintenance after that date.
- 4. Any costs incurred by Canada, Iceland, Ireland, Portugal and the United Kingdom for the GMU operations not recovered through their own user charge system, shall be recovered through the system of NAT RVSM user charge.
- 5. The costs incurred by the United States for the equipment and services described in paragraphs 1 and 2 of this Article shall not be charged to the users.
- 6. The costs incurred by the Administrator as regards the GMU Operating Agency described in paragraph 3 of this Article shall be recovered through the system of NAT RVSM user charge.

#### Article V

- 1. Canada, Iceland, Ireland, Portugal and the United Kingdom shall furnish to the Administrator, on or before 15 September of each year, estimates, expressed in United States dollars, of the costs of the Services for the following calendar year. The estimates shall be drawn up in accordance with the Annex to this Arrangement.
- 2. Canada, Iceland, Ireland, Portugal and the United Kingdom shall furnish to the Administrator, on or before 15 September of each year, a statement of the actual costs, expressed in United States dollars, of the services for the previous calendar year.
- 3. The Administrator shall subject such statements of actual costs to such audit and other examination as the Administrator deems appropriate and shall furnish to the other Parties a report of the audit or examination.
- 4. Audits conducted by one party of its activities related to this Arrangement shall be made available to the other Parties if requested.

#### Article VI

1. A system of NAT RVSM user charge shall be operated. A single user charge shall be imposed on all civil aircraft making crossings as defined in Article VII of the Danish and Icelandic Joint Financing Agreements. The NAT RVSM user charge shall be calculated in accordance with the Annex to this Arrangement.

- 2. The United Kingdom shall arrange for the billing and collection of the NAT RVSM user charge on behalf of Canada, Iceland, Ireland, Portugal and the United Kingdom and shall arrange for remittance on a monthly basis to the Administrator of the amounts collected. On billing of the operators, the United Kingdom can add to the user charge a fee, not to exceed 5 percent of the user charge, in respect of its services in collecting and accounting for the user charges.
- 3. The amounts from NAT RVSM user charge received by the Administrator shall be distributed to Canada, Iceland, Ireland, Portugal and the United Kingdom, within 30 days of receipt, in accordance with the amount of estimated costs to be incurred by each during the year.

#### **Article VII**

- 1. The obligation of the Administrator to make payments to Canada, Iceland, Ireland, Portugal and the United Kingdom shall be limited to amounts actually received by the Administrator and available in accordance with the terms of this Arrangement.
- 2. The Administrator will keep proper accounts of the billings and collections under these arrangements and shall provide Canada, Iceland, Ireland, Portugal and the United Kingdom with a quarterly statement of reconciliation.

#### **Article VIII**

- 1. This Arrangement may be amended by mutual written agreement of the Parties. However, modification of certain provisions that do not affect the rights and obligations of all Parties, may be effected by mutual agreement of the Civil Aviation Authorities concerned, following notification of their intention to all Parties.
- 2. This Arrangement may be terminated by mutual agreement of the Parties.
- 3. The United States may withdraw from this Arrangement at any time after having completed its undertakings under Article IV by giving written notification to the International Civil Aviation Organization. Any such withdrawal shall take effect 6 months following the date of notification.

#### **Article IX**

Any dispute relating to the interpretation or application of this Arrangement which is not settled by negotiation shall, upon the request of any State party to the dispute, be referred to the Council of the International Civil Aviation Organization for its recommendation.

#### Article X

This Arrangement, and its Annex, which forms an integral part thereof, shall enter into force upon signature by all of the Parties.

#### **ANNEX**

#### **SECTION I - THE SERVICES**

Services shall be provided in the form of a NAT HMU/GMU Height Monitoring System, as well as a Central Monitoring Agency (CMA), required to support the provision of reduced vertical separation minima (RVSM) between FL 290 - FL 410 inclusive in the North Atlantic Region. The NAT Height Monitoring System (HMU/GMU) must be capable of measuring the geometric height of an aircraft for comparison with the geometric height of the flight level at which it is being flown. To this respect,

- a) Canada shall provide for the operation and maintenance of one HMU at Gander NFLD;
- b) the United Kingdom shall provide for the operation and maintenance of one HMU at Strumble and shall provide for the operation of the CMA;
- c) the United States shall provide GMU equipment (estimated at 50 units), eight reference stations, post-processing equipment, GMU operations and maintenance and GMU Operating Agency as provided for in paragraph 2 of Article IV of the Arrangement; and
- d) the Administrator shall enter into a contract with a GMU Operating Agency on behalf of Canada, Iceland, Ireland, Portugal and the United Kingdom as provided for in paragraph 3 of Article IV of the Arrangement.

#### **SECTION II - DEPRECIATION AND INTEREST**

- 1. Commencing with the calendar year in which the equipment is commissioned, annual depreciation of the two Height Monitoring Units and associated infrastructure shall be charged by Canada, Iceland, Ireland, Portugal and the United Kingdom at the rate of one seventh of their share of the capital expenditure pursuant to paragraph 1 of Article III of the Arrangement, until it has been completely depreciated.
- 2. Interest on capital expenditures shall be charged commencing with the year in which the equipment is commissioned. This interest shall apply to the share of residual value of capital expenditures of Canada, Iceland, Ireland, Portugal and the United Kingdom before depreciation of the year. Interest on work-in-progress shall be charged to the users in the year in which it is incurred. The interest rates applicable shall be determined annually by Canada, Iceland, Ireland, Portugal and the United Kingdom and provided to the Administrator by 15 September each year.
- 3. The residual value of capital expenditures disposed of shall be charged to depreciation in the year of disposition and the proceeds from disposition, if any, shall be credited in the same year.

#### SECTION III - NAT RVSM USER CHARGE

- 1. Pursuant to Article VI of the Arrangement, on or before the effective date of the Arrangement, the Administrator shall determine a single NAT RVSM user charge per civil aircraft crossing for the calendar year 1995 for the jointly financed services. The user charge shall be calculated by dividing the estimated costs to be incurred by Canada, Iceland, Ireland, Portugal, the United Kingdom and the Administrator for 1995, expressed in United States dollars, by the total number of crossings in 1993. On or before 20 November 1995, the user charge for 1996 shall be calculated by dividing the estimated costs for 1996 by the total number of crossings in 1994. For 1997 it is the estimated costs for 1997 plus an adjustment for under-recovery or minus an adjustment for over-recovery in 1995 (calculated in accordance with paragraph 2 below) divided by the total number of crossings in 1995. The same principle as for 1997 applies thereafter. From the calendar year 1996 onwards, the estimated costs shall also include the estimated costs to be incurred by the Administrator for the GMU Operating Agency provided for in paragraph 3 of Article IV of the Arrangement.
- 2. The over- or under-recovery referred to in paragraph 1 of this Section is the difference between the actual costs incurred by Canada, Iceland, Ireland, Portugal, the United Kingdom and the Administrator in 1995 and the total amount collected from the users in that year. From the calendar year 1996 onwards, the actual costs shall also include the actual costs incurred by the Administrator for the GMU Operating Agency provided for in paragraph 3 of Article IV of the Arrangement.

- END -

IN WITNESS WHEREOF, the undersigned representing the Civil Aviation Authority of their respective Governments and the International Civil Aviation Organization, have signed this Arrangement.

Date **Signatories** 

For Canada

R. Jackson Assistant Deputy Minister, Aviation Transport Canada

For Iceland

Dr. Thorgeir Palsson Director General of Civil Aviation Iceland

For Ireland

B.D. McDonnell Chief Executive The Irish Aviation Authority

For Portugal

Pedro Rosa Member of the Board Empresa Pública Aeroportos e Navegação Aérea

For the United Kingdom of Great Britain and Northern Ireland

J.E. Davidson Director of Finance National Air Traffic Services

For the United States of America

Joan W. Bauerlein Director of International Aviation Federal Aviation Administration

For the International Civil Aviation Organization

Dr. Philippe Rochat Secretary General

ulerm 18.8.95

B. D. me Dorall 12 December 1995

Padro Resa 28/9/95

Southaiden 25 Octor 1995

Jan W. Bauerluni "August 1995

31/07/95