#### INITIAL IMPLEMENTATION AGREEMENT

#### **BETWEEN**

## THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION OFFICE OF EARTH SCIENCE

AND

# THE NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM INTEGRATED PROGRAM OFFICE

#### FOR AN

#### ADVANCED TECHNOLOGY MICROWAVE SOUNDER

### I. <u>PURPOSE.</u>

The Office of Earth Science of the National Aeronautics and Space Administration (NASA) and the National Polar-Orbiting Operational Environmental Satellite System Integrated Program Office (NPOESS IPO) hereby agree to enter into a partnership to develop and deploy an atmospheric temperature and humidity sounding system which meets both NPOESS operational requirements and NASA scientific requirements for obtaining atmospheric temperature and moisture profiles. This sounding system includes an infrared sounder and a microwave sounder. This system will be flown and operated on the NPOESS-C1 spacecraft and subsequent NPOESS and/or European METOP spacecraft.

This Initial Implementation Agreement (IIA) accomplishes the procurement, development, and delivery of a new NASA research instrument to the NPOESS IPO under the policy and procedures set forth in Appendix 1 of the Memorandum of Agreement Between the Department of Commerce, Department of Defense, National Aeronautics and Space Administration For The National Polar-Orbiting Operational Environmental Satellite System, dated May 26, 1995.

#### II. RESPONSIBILITIES.

The NASA and the NPOESS IPO agree to jointly undertake the following responsibilities:

1. The NPOESS IPO is developing the infrared component of this system, known as the Cross-Track Infrared Sounder (CrIS), and will produce all flight models. NASA will

conduct the procurement and oversee the development and production of the microwave component, to be known as the Advanced Technology Microwave Sounder (ATMS), through the delivery of the first flight model. NASA will provide the funding through the delivery of the first flight model; recurring costs for subsequent flight models of the ATMS will be borne by the NPOESS IPO.

- 2. NASA and NPOESS IPO will jointly agree on ATMS performance parameters that are consistent with operational and scientific requirements, performance milestones to be achieved in the course of first unit development, procurement procedures, and contract terms and conditions for the first and subsequent flight models. Following the delivery of the first flight unit, the administration of the ATMS contract will be transferred to the NPOESS IPO. The NPOESS IPO will at that time assume the responsibility for funding and producing subsequent instruments, with NASA retaining full insight into the production process. Design or manufacturing changes which affect performance parameters will be agreed to by both partners.
- 3. Likewise, NASA will continue to have appropriate insight into the evolution of the CrIS to ensure that its performance meets joint operational and scientific sounding requirements. Design or manufacturing changes which affect performance parameters will similarly be agreed to by both partners.
- 4. The NPOESS IPO will have full responsibility for integrating the ATMS into the NPOESS spacecraft, coordinating the deployment of the instrument on the European METOP spacecraft, and for supplying data from the infrared and microwave atmospheric sounder system to NASA.
- 5. Acquisition details will be provided in an ATMS Project Implementation Plan (PIP) which will be developed by the responsible NASA implementing center in coordination with the NPOESS IPO. This PIP will also include the development methodology and its schedule milestones and will specify the performance parameters and milestones.

### III. FUNDING.

All activities pursuant to this IIA are subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341. This IIA is not a funding document, and does not represent the obligation or transfer of funds.

Each party shall support the other in the appropriation process and shall reconsider this agreement should conditions merit.

#### IV. EFFECTIVE DATE.

This IIA shall be effective upon the date of the last signature below. It is the intention of the parties to enter into a Final Implementation Agreement prior to the beginning of detailed design and implementation (Phase C/D) activity by the contractor.

Ghassem Asrar

Associate Administrator for Earth Science

James Mannen

Director,

NPOESS Integrated Program Office

27 Aug 88