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**Statement of  
Christopher J. Scolese  
Associate Administrator  
National Aeronautics and Space Administration  
before the  
House Subcommittee on Investigations and Oversight  
and  
House Subcommittee on Energy and Environment  
Committee on Science, Space and Technology  
United States House of Representatives**

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear today to share information regarding the NASA role in, and commitment, to the National Oceanic and Atmospheric Administration (NOAA) Joint Polar Satellite System (JPSS) Program. JPSS is critical to the Nation's weather forecasting system, climate monitoring and research activities. As the Nation's civil space agency, NASA is fully supporting JPSS on a reimbursable basis for NOAA.

**Background**

In February 2010, in conjunction with the FY 2011 Budget Request, the Administration directed a major restructuring of the National Polar-orbiting Operational Environmental Satellite System (NPOESS). That decision was reaffirmed by the June 2012 National Space Policy. In April 2010, NASA established the Joint Agency Satellite Division (JASD) within its Science Mission Directorate to manage the NASA role as NOAA's acquisition agent for JPSS systems. Specifically, JASD was charged with managing the transition of NPOESS to the new JPSS, as well as for formulation and implementation of all JPSS missions and their associated elements, including instruments, spacecraft, launch services, the ground segment, and post-launch support. Since that time, NASA has worked with NOAA to put in place a high-caliber team of experienced personnel from both agencies to implement JPSS, and this team is working well.

**JPSS Organization**

NASA and NOAA have been partners for over 40 years in developing the Nation's polar and geosynchronous weather satellites. With the President's direction last year, NASA and NOAA have returned to this successful partnership where NASA serves as the acquisition agent. The establishment of dedicated teams at both NASA Headquarters and the NASA Goddard Space Flight Center in Greenbelt, Maryland, has enabled a smooth transition to the new JPSS program.

NASA and NOAA have established joint program management boards to direct JPSS, and have integrated their decision-making processes to efficiently and effectively manage this cooperative activity. The NASA and NOAA teams have demonstrated a strong working relationship over the last 18 months.

## **NPP**

The initial focus of the JPSS team has been to complete the activities required to support the launch of the NASA NPOESS Preparatory Project (NPP) satellite. NPP was originally designed as a technology demonstration for NPOESS and to provide data continuity between key elements of the NASA Earth Observing System (EOS) satellites and the first NPOESS satellite. NPP will fly the first copies of a new generation of Earth observing instruments, and we will spend the first 18 months comparing their performance with legacy sensors flying on NASA and NOAA satellites currently in orbit. The NPP mission is intended to characterize performance of these new sensors, providing feedback to improve the development of the operational sensors that will fly on JPSS. As these sensors are characterized and calibrated against the legacy sensors, data products from these sensors will be made available to the research and operational weather communities. While NPP was not intended to be used as an operational asset, our plan is to make data available to the NOAA operational weather community as soon as is practical, to serve as a bridge from the current polar weather satellites to the first JPSS mission in FY 2017.

In support of the NPP mission, JPSS is providing engineering support for three critical instruments provided by the NPOESS program and is continuing the development of the ground system that will operate NPP (as well as subsequent JPSS and the Defense Weather Satellite System (DWSS) spacecraft) and process the instrument data products. Last year, one of our major concerns with the transition from NPOESS to JPSS was the readiness of the JPSS ground system to support the NPP mission schedule. Upon the launch of NPP, the ground system will be responsible for command, control, communications, and data processing. I am pleased to report that the NASA-NOAA team has made significant progress over the past 12 months to ensure the JPSS ground system will enable NPP to launch next month as planned.

Since the ground system contracts were transferred last year from the Department of Defense (DOD) to NASA, the JPSS program has certified close to 1,500 products ready for launch, completed twenty software releases, completed numerous operational exercises totaling almost 400 hours of spacecraft interface time and has closed more than 4,000 work requests.

While the ground system was being readied for the launch of NPP, the JPSS program has fulfilled commitments previously made to both the DoD and European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), including refurbishment of the MG1 antenna in McMurdo Station in Antarctica, to allow it to receive X-band data for EUMETSAT's Meteorological Operational satellite programme (MetOp), cutting the data latency in half for the mid-morning orbit. The program also installed the first of the JPSS receptor sites in McMurdo,

modified using DoD funds, allowing the Defense Meteorological Satellite Program (DMSP) to receive their mission data at McMurdo as well. These capabilities will also be used by the JPSS-1 mission when it launches in FY 2017.

### **JPSS Transition Status**

In addition to supporting the NPP mission, the JPSS team has focused for the last 12 months on completing the transition from the NPOESS program and contracts to the new JPSS program and contracts. The transition to JPSS is now complete and NASA, as NOAA's acquisition agent, is in control of, and managing, all of the JPSS instrument and ground system contracts, including a new NASA contract to produce the Advanced Technology Microwave Sounder (ATMS) signed last week. The change to NASA-held and managed contracts has been beneficial for a number of reasons, including, NASA's expertise as an experienced space acquisition organization and government management of separate contracts for each major element (spacecraft, instruments and ground segments). Through the transition, the instrument vendors continued to make progress in the development of the flight units for JPSS-1, and a spacecraft contract was awarded to Ball Aerospace for JPSS-1. Assuming full funding of the President's FY 2012 budget request for NOAA, it is anticipated that JPSS-1 will be ready to launch in the first quarter of FY 2017, five years after the planned October launch of NPP.

### **Conclusion**

NASA and NOAA are committed to the JPSS program, and ensuring the success of this program is essential to both agencies and the Nation. The requirements are defined, the program is in place, and with the requested funding NASA and NOAA are confident that the agencies can implement the JPSS program as planned. NOAA and NASA are striving to ensure that weather and environmental requirements are met on the most efficient and predictable schedule without reducing system capabilities or further increasing risk.

With the delivery of the NPP satellite to Vandenberg Air Force Base in Lompoc, California, on August 30, 2011, the first fruits of the NASA-NOAA partnership for JPSS are undergoing final preparations for a planned launch on October 25, 2011. With your continued support, NASA expects this partnership to successfully develop and deliver the JPSS-1 mission for launch in FY 2017, thus ensuring continued support of NOAA's weather and environmental monitoring program.

Mr. Chairman, thank you for the opportunity to testify today. I appreciate the continued support of this Subcommittee and the Congress, and I would be pleased to respond to any questions you or the other Members of the Subcommittee may have.



Christopher Scolese is the Associate Administrator of the National Aeronautics and Space Administration, and oversees the planning, directing, organization and control of the day-to-day Agency technical and programmatic operations. He has direct oversight of the Agency's mission directorates, field centers, and technical mission support offices, and is responsible for integrating the technical and programmatic elements of the Agency.

Scolese was formerly the NASA Chief Engineer. In that position he was responsible for the overall review and technical readiness of all NASA programs. NASA's Office of the Chief Engineer assures that the development efforts and missions operations are being planned and conducted on a sound engineering basis with proper controls and management.

Formerly, Scolese was the Deputy Director of the Goddard Space Flight Center where he assisted the Director, Dr. Edward Weiler, in overseeing all activities. He also served as the Deputy Associate Administrator in the Office of Space Science at NASA Headquarters. In this position, he was responsible for the management, direction and oversight of NASA's space

science flight program, mission studies, technology development and overall contract management of the Jet Propulsion Laboratory.

Scolese also served as the EOS Program Manager and the Deputy Director of Flight Programs and Projects for Earth Science at the Goddard Space Flight Center. In this position he was responsible for the operation and development of all Earth Science missions assigned to the Goddard Space Flight Center. At Goddard, he also served as the EOS Terra Project Manager responsible for the development of all EOS-AM instruments, the CERES instrument for TRMM, the EOS-AM spacecraft, the interface with the Earth Science Data and Information System and the integration and launch of these elements. In addition, Scolese was the EOS Systems Manager responsible for the EOS system architecture and the integration of all facets of the project. During his tenure at Goddard, which began in 1987, he chaired the EOS Blue Team that re-scoped the EOS Program; he supported the EOS investigators in the development of the EOS payloads in the restructured EOS; and he has been responsible for the adoption of common data system architecture on EOS and some other earth orbiting spacecraft.

Prior to his 1987 appointment at Goddard, Scolese's experience included work in industry and government. While a senior analyst at the General Research Corporation of McLean, Va., he participated in several SDIO programs. He was selected by Admiral Hyman Rickover to serve at Naval Reactors where he was associated with the development of instrumentation, instrument systems and multi-processor systems for the U.S. Navy and the DOE while working for NAVSEA.

Scolese is the recipient of several honors including the Presidential Rank Award of Meritorious Executive, Goddard Outstanding Leadership, two NASA Outstanding Leadership Medals and the American Institute of Aeronautics and Astronautics (AIAA) National Capital Section Young Engineer/Scientist of the Year award. He was recognized as one of the outstanding young men in America in 1986, was a member of college honor societies including Eta Kappa Nu and Tau Beta Pi, and was recipient of the 1973 Calspan Aeronautics award. He is an Associate Fellow of the AIAA and a member of the Institute of Electrical and Electronics Engineers. He also served as a member of the AIAA Astrodynamics Technical Committee and chaired the National Capitol Section Guidance Navigation and Control Technical Committee.