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Statement of
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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. Chairmen and Members of the Subcommittees, thank you for the opportunity to appear today to provide you information regarding the NASA role in, and commitment to, the National Oceanic and Atmospheric Administration (NOAA) Joint Polar Satellite System (JPSS) and Geostationary Operational Environmental Satellite-R Series (GOES-R) Programs. The JPSS and GOES-R Programs are critical to the Nation's weather forecasting system, climate monitoring and research activities.

JPSS Organization is Working Well

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 in 2010, NASA and NOAA returned to this successful partnership for JPSS. The NASA program management office for JPSS has been established and is close to being fully staffed with a complement of 89 NASA civil servants and 225 support contractors. NOAA and NASA have established joint program management councils to oversee JPSS, and have integrated their decision-making processes to efficiently and effectively manage this cooperative activity. The NASA and NOAA teams have strengthened their working relationship over the last 2 years.

Suomi NPP Launch, Activation, and Initial Checkout are Complete

The National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) satellite – now renamed the "Suomi National Polar-orbiting Partnership," or "Suomi-NPP" - was developed to extend the record of key observations from the NASA Earth Observing System (EOS) series of satellites and to demonstrate technologies for the next generation of operational polar-orbiting meteorological satellites. I am pleased to report that the NASA-NOAA JPSS team completed development of Suomi NPP and it was successfully

launched on October 28, 2011. Suomi NPP activation and initial checkout are now complete and the JPSS program has assumed operational control of the satellite.

We are now in the middle of a planned, intensive 18-month validation period, during which we are comparing the performance of the new sensors both with data from on-orbit legacy instruments, and with high-quality ground-based and airborne calibration standards. As we characterize the performance of these new sensors, Suomi NPP provides feedback to improve the development of the operational instruments that will fly on JPSS.

While the satellite was not originally intended to be used as an operational asset, NOAA will be using Suomi NPP data in its operational weather forecasting models. As a measure of how well the Suomi NPP mission is progressing, NOAA meteorologists are already using data products from the Advanced Technology Microwave Sounder (ATMS) instrument in their weather forecasts, and our analyses are indicating that we are getting excellent performance from the Visible Infrared Imager Radiometer Suite (VIIRS) instrument as well as the other instruments on Suomi NPP.

JPSS Transition is Complete and JPSS-1 is on Track

In addition to the successful Suomi NPP launch, the transition from the NPOESS program to the new JPSS program is now complete. Consistent with the President's FY13 budget request, NOAA and NASA have committed to deploy and operate JPSS through FY 2028 within a total life cycle cost of $12.9 billion. Of this total, $4.3 billion are costs through FY 2012, including development of the Suomi NPP instruments under the former NPOESS program and the development of the common ground system. The remaining $8.6 billion will fund the development and operations of the JPSS-1, JPSS-2, Free Flyer-1 and Free Flyer-2 satellites, instruments (including climate sensors), and launch vehicles, as well as development of the updated ground system. This updated ground system will provide operations and sustainment for Suomi NPP, JPSS-1, and -2 and access to data from the Japan Aerospace Exploration Agency's Global Change Observation Mission.

NASA, as NOAA's acquisition agent, now manages all of the JPSS instrument, spacecraft, and ground system contracts. The first JPSS satellite, JPSS-1, will be a copy of Suomi NPP with upgrades to meet the JPSS Level 1 requirements. The instrument vendors continue to make progress in the manufacture of the flight units for JPSS-1, and the spacecraft is currently in development at Ball Aerospace. The launch vehicle proposals are being evaluated, and selection is currently expected later this summer. If the Congress fully funds the President's FY 2013 budget request for NOAA, it is anticipated that JPSS-1 will be ready to launch before the end of the second quarter of FY 2017, close to five years after the October launch of Suomi NPP.

In May 2012, the JPSS Program conducted its first milestone review for the entire program since transition. The program successfully completed its Systems Requirements Review (SRR), conducted by an independent, non-advocate board, with a recommendation to continue

formulation heading towards establishment of a formal program baseline in the summer of 2013. The Joint NOAA and NASA Program Management Council will convene for the JPSS program Key Decision Point -1, which will establish a formal program baseline.

GOES-R Series Program Continues to Make Progress

The GOES-R Series Program of four geosynchronous satellites continues to make progress toward launching GOES-R, the first satellite of the series, in the October 2015 timeframe. In May of this year, the GOES-R Series Program successfully completed its formulation phase by conducting a Joint NOAA and NASA Program Management Council Key Decision Point- C (KDP-C) meeting to formally baseline the life cycle cost and launch readiness dates for the program. NASA conducts a KDP-C meeting to determine whether a program or project is ready to proceed from the formulation phase to the implementation phase.

While the program was completing its Preliminary Design Review phase, the GOES-R Series Flight Project conducted a successful critical design review for the spacecraft and awarded launch vehicle task orders for United Launch Alliance to utilize the Atlas V series of launch vehicle to place GOES-R in orbit. Additionally, all flight instrument critical design reviews are complete, and all of the flight instruments are in flight hardware fabrication, integration or test. At this time, it is anticipated that all instruments will be delivered to the spacecraft vendor for integration on the spacecraft by the end of fiscal year 2013. Capping off a successful and busy year, the GOES-R Series Program is planning a Mission Critical Design Review to be conducted in August.

Conclusion

NASA and NOAA are committed to the JPSS and GOES-R programs, and ensuring the success of these programs is essential to both agencies and the Nation. The NASA and NOAA teams have established strong working relationships and 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 launch of Suomi NPP in October 2011, the first fruits of the NASA-NOAA partnership for JPSS are being realized. With your continued support, NASA and NOAA expect this partnership to successfully develop and deliver the JPSS-1 mission on time for launch in FY 2017, thus ensuring continued support of NOAA's weather and environmental monitoring program.

Mr. Chairmen, I appreciate the continued support of these Subcommittees and the Congress, and I would be pleased to respond to any questions you or the other Members of the Subcommittees may have.