TESTIMONY

TO THE

SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES, AND COAST GUARD
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
U.S. SENATE

DECEMBER 12, 2013

MR. A THOMAS YOUNG

I am pleased to have the opportunity to present the results of an independent review of the United States civil weather satellite enterprise.

I had the privilege to chair the initial independent review in 2012 and a follow-up review in 2013. Findings and recommendations are documented in publicly available reports dated July 20, 2012, and November 8, 2013.

Data provided by National Oceanic and Atmospheric Administration (NOAA) satellites in geosynchronous and polar orbits are mandatory to have accurate / reliable weather forecasting and severe storm warnings. Without accurate / reliable forecasts and warnings lives, property and the U.S. economy are at risk.

For more than four decades the United States has had a robust satellite program that has provided the data to support our incredible weather forecasting system. We have come to take for granted this exceptional capability that has become a critical element of the fabric of our society.

Today, this robust capability continues for the geosynchronous system. Current operating systems and the future system under development, the Geostationary Operational Environmental Satellite (GOES) -R series, will serve our Nation well. The GOES-R series is dependent upon funding to maintain schedule to assure there is no gap in the continuity of data.

The status of the polar orbiting system is more precarious. Currently, our weather and severe storm forecasting capability is dependent upon satellites that are operating beyond their design life and a research and development (R&D) satellite whose data is now used operationally. Future capability is dependent upon the Joint Polar-orbiting Satellite System, JPSS, which is under development. JPSS is the only approved future United States polar-orbiting weather satellite program. Numerous previous decisions have resulted in a fragile, non-robust polar-orbiting architecture. Some of the decisions were made with the best of intentions but resulted in negative unintended – some highly adverse – consequences. Current plans for JPSS will result in several years of operation that is one failure from a gap in providing data for weather and severe storm forecasting. This is an unacceptable position for data so critical to lives, property, and the economy.

There is an unacceptably high probability of a gap in JPSS polar-orbiting satellite data that could have a duration of months or years. The severe implications of such a gap make it mandatory that a gap filler satellite program be initiated immediately and urgent changes in the JPSS program be implemented to establish a robust program with a “two failure to have a gap” criterion.

Thank you.

A. Thomas Young

A. Thomas Young joined NASA in 1961. He was Mission Director for the Viking Project, Director of the Planetary Program, Deputy Director of the Ames Research Center and Director of the Goddard Space Flight Center.

Mr. Young joined the Martin Marietta Corporation in 1982. He is the former President and COO of Martin Marietta. He retired from Lockheed Martin in 1995.

Following retirement, he has been on Corporate Boards and lead numerous Committees and Review Teams associated with national security and civil space.

Mr. Young is the former Chairman of SAIC.

Mr. Young is a member of the National Academy of Engineering.