

NASA selects Lockheed Martin to build nextgen spacecraft for NOAA

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Conceptualization of the GeoXO constellation. Credit: NOAA

NASA, on behalf of the National Oceanic and Atmospheric Administration (NOAA), has selected Lockheed Martin Corp. of Littleton, Colorado, to build the spacecraft for NOAA's Geostationary Extended Observations (GeoXO) satellite program.



This cost-plus-award-fee contract is valued at approximately \$2.27 billion. It includes the development of three spacecraft as well as four options for additional spacecraft.

The anticipated period of performance for this contract includes support for 10 years of on-orbit operations and five years of on-orbit storage, for a total of 15 years for each spacecraft. The work will take place at Lockheed Martin's facility in Littleton and NASA's Kennedy Space Center in Florida.

The GeoXO constellation will include three operational satellites—east, west and central. Each geostationary, three-axis stabilized spacecraft is designed to host three instruments. The centrally located spacecraft will carry an infrared sounder and atmospheric composition instrument and can also accommodate a partner payload.

Spacecraft in the east and west positions will carry an imager, lightning mapper, and ocean color instrument. They will also support an auxiliary communication payload for the NOAA Data Collection System relay, dissemination, and commanding.

The contract scope includes the tasks necessary to design, analyze, develop, fabricate, integrate, test, evaluate, and support launch of the GeoXO satellites; provide engineering development units; supply and maintain the ground support equipment and simulators; and support mission operations at the NOAA Satellite Operations Facility in Suitland, Maryland.

NASA and NOAA oversee the development, launch, testing, and operation of all the satellites in the GeoXO program. NOAA funds and manages the program, operations, and data products. On behalf of NOAA, NASA and commercial partners develop and build the instruments and spacecraft and launch the satellites.



As part of NOAA's constellation of geostationary environmental satellites to protect life and property across the Western Hemisphere, the GeoXO program is the follow-on to the Geostationary Operational Environmental Satellites—R (GOES-R) Series Program.

The GeoXO <u>satellite</u> system will advance Earth observations from geostationary orbit. The mission will supply vital information to address major environmental challenges of the future in support of weather, ocean, and climate operations in the United States.

The advanced capabilities from GeoXO will help assess our changing planet and the evolving needs of the nation's data users.

Together, NASA and NOAA are working to ensure GeoXO's critical observations are in place by the early 2030s when the GOES-R Series nears the end of its operational lifetime.

More information: For more information on the GeoXO program, see www.nesdis.noaa.gov/geoxo

Provided by NASA

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