Ball Aerospace Delivers Pollution Monitoring Instrument to NASA

The Tropospheric Emissions: Monitoring of Pollution (TEMPO) spectrometer will measure air quality

BOULDER, Colo., Dec. 7, 2018 /PRNewswire/ -- Ball Aerospace has delivered the Tropospheric Emissions: Monitoring of Pollution (TEMPO) spectrometer to NASA after a successful final acceptance review. Once launched, TEMPO will be a space-based ultraviolet/visible light air quality spectrometer in geostationary orbit over greater North America.

"Ball Aerospace has more than 30 years of innovation in advanced spectrometers and expertise in producing cost-effective solutions for Earth observation and remote-sensing missions," said Makenzie Lystrup, vice president and general manager, Civil Space, Ball Aerospace. "Data gathered from TEMPO will advance air quality research, helping to assess and forecast air pollution, by identifying sources and distribution of pollutants in the atmosphere."

The TEMPO instrument will provide hourly daylight measurements of ozone, nitrogen dioxide and other key elements of air pollution across North America, from Mexico City to Canada and from coast-to-coast. TEMPO's high resolution will allow pollution tracking at micro urban scales every hour and is expected to improve air quality prediction accuracy by 50 percent.

Ball is a part of a team that has extensive experience in measuring the components of air quality. Ball built the TEMPO instrument at the company's Boulder, Colo. facility in tandem with the Geostationary Environmental Monitoring Spectrometer (GEMS) in order to capture design efficiencies between the two instruments, which share the same technology. GEMS is a joint development effort by Ball and the Korea Aerospace Research Institute (KARI), South Korea, and is part of a global air quality monitoring constellation that includes TEMPO. The TEMPO team includes the Smithsonian Astrophysical Observatory; NASA's Langley Research Center; NASA's Goddard Space Flight Center; the U.S. Environmental Protection Agency; and several U.S. universities and research organizations.

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Forward-Looking Statements

This release contains "forward-looking" statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates," "believes," "targets," "likely," "positions" and similar expressions typically identify forward-looking statements, which are generally any statements other than statements of historical fact. Such statements are based on current expectations or views of the future and are subject to risks and uncertainties, which could cause actual results or events to differ materially from those expressed or implied. You should therefore not place undue reliance upon any forward-looking

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