

## **Ball Aerospace Completes Critical Design Review of Methane Monitoring Satellite's Flight System and Instrument**

### **Program can proceed with focal plane selection and hardware assembly**

BOULDER, Colo., Sept. 9, 2020 /PRNewswire/ -- Just six months after preliminary design review, Ball Aerospace successfully completed critical design review (CDR) of the MethaneSAT flight system and advanced spectrometer instrument that will be integrated onto a 350-kilogram satellite for MethaneSAT, LLC, a subsidiary of the non-profit Environmental Defense Fund (EDF). The completion of CDR enables Ball to proceed into part fabrication and assembly.

"MethaneSAT aligns with Ball's commitment to earth science, sustainability and delivering science at any scale," said Dr. Makenzie Lystrup, vice president and general manager, Civil Space, Ball Aerospace. "We have worked closely and collaboratively with the customer and other partners to develop extremely sensitive sensor technology critical to spotting methane emissions that previously would have gone undetected."

The Ball-designed MethaneSAT Instrument will measure a narrow part of the shortwave infrared spectrum where methane absorbs light, allowing it to detect concentrations as low as two parts per billion. From Low-Earth Orbit, the satellite will locate and measure emissions of methane sources almost anywhere on Earth with precision and at fine enough detail to identify these sources. The mission is expected to launch in 2022 to support EDF's stated goal of achieving a 45 percent reduction in methane emissions from the oil and gas sector by 2025.

"This is a complex, technically challenging mission driven by the profound urgency of climate change. An intensive design process up front ensures that we can move quickly from here. The result is a more powerful measurement tool than even we thought possible," said Cassandra Ely, Director at MethaneSAT LLC. "Thanks to the dedicated efforts of our mission partners, MethaneSAT is now moving from the drawing boards and onto the assembly floor."

Ball has more than six decades of experience providing leading-edge systems, delivering instruments that span the electromagnetic spectrum for a wide range of government and commercial applications to help predict the weather, map air quality and monitor the Earth's environment. For example, Ball built LIDAR and wide-field camera instruments for NASA's Cloud-Aerosol LIDAR and Infrared Pathfinder Satellite Observations (CALIPSO) mission; the Tropospheric Emissions: Monitoring of Pollutions (TEMPO) instrument to measure air quality for a NASA mission; and the Ozone Mapping and Profiler Suite (OMPS) of hyperspectral instruments that measure the global distribution and vertical structure of ozone for NASA and NOAA missions.

Powered by endlessly curious people with an unwavering mission focus, **Ball Aerospace** pioneers discoveries that enable our customers to perform beyond expectation and protect what matters most. We create innovative space solutions, enable more accurate weather forecasts, drive insightful observations of our planet, deliver actionable data and intelligence, and ensure those who defend our freedom go forward bravely and return home safely. Go Beyond with Ball.® For more information, visit [www.ball.com/aerospace](http://www.ball.com/aerospace) or connect with us on [Facebook](#) or [Twitter](#).

#### **About Ball Corporation**

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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 statements and any such statements should be read in conjunction with, and, qualified in their entirety by, the cautionary statements referenced below. The company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Key factors, risks and



uncertainties that could cause actual outcomes and results to be different are summarized in filings with the Securities and Exchange Commission, including Exhibit 99 in our Form 10-K, which are available on our website and at [www.sec.gov](http://www.sec.gov). Additional factors that might affect: a) our packaging segments include product capacity, supply, and demand constraints and fluctuations; availability/cost of raw materials and logistics; competitive packaging, pricing and substitution; changes in climate and weather; footprint adjustments and other manufacturing changes, including the start up of new facilities and lines; failure to achieve synergies, productivity improvements or cost reductions; mandatory deposit or other restrictive packaging laws; customer and supplier consolidation; power and supply chain interruptions, including due to virus and disease outbreaks; potential delays and tariffs related to the U.K.'s departure from the EU; changes in major customer or supplier contracts or a loss of a major customer or supplier; political instability and sanctions; currency controls; changes in foreign exchange or tax rates; and tariffs, trade actions, or other governmental actions, including business restrictions and shelter-in-place orders in any country affecting goods produced by us or in our supply chain, including imported raw materials, such as those related to COVID-19 and those pursuant to Section 232 of the U.S. Trade Expansion Act of 1962 or Section 301 of Trade Act of 1974; b) our aerospace segment include funding, authorization, availability and returns of government and commercial contracts; and delays, extensions and technical uncertainties affecting segment contracts; c) the company as a whole include those listed plus: the extent to which sustainability-related opportunities arise and can be capitalized upon; changes in senior management, succession, and the ability to attract and retain skilled labor; regulatory action or issues including tax, environmental, health and workplace safety, including U.S. FDA and other actions or public concerns affecting products filled in our containers, or chemicals or substances used in raw materials or in the manufacturing process; technological developments and innovations; the ability to manage cyber threats and the success of information technology initiatives; litigation; strikes; disease; pandemic; labor cost changes; rates of return on assets of the company's defined benefit retirement plans; pension changes; uncertainties surrounding geopolitical events and governmental policies both in the U.S. and in other countries, including policies, orders and actions related to COVID-19, the U.S. government elections, budget, sequestration and debt limit; reduced cash flow; interest rates affecting our debt; and successful or unsuccessful joint ventures, acquisitions and divestitures, and their effects on our operating results and business generally.

#### SOURCE Ball Aerospace

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