

## Ball Aerospace Successfully Completes Airborne Flights of Small Instruments to Enable Future Landsat Missions

**The two instruments were built for NASA's Sustained Land Imaging-Technology development program**

BOULDER, Colo., Aug. 18, 2020 /PRNewswire/ -- In partnership with NASA, Ball Aerospace is demonstrating the operational Landsat program's next generation technology, having successfully completed the final airborne science flights of two compact, well-calibrated NASA Sustainable Land Imaging (SLI) instruments – the Reduced Envelope Multispectral Imager - Airborne (REMI-AB) and the Compact Hyperspectral Prism Spectrometer - Airborne (CHPS-AB).

Designed to demonstrate improved Landsat mission performance in compact instrument packages, the REMI-AB and CHPS-AB instruments have evolved over nearly four years of development, testing and airborne science flights to demonstrate technologies for potential use in the Landsat Program. The Landsat program is a series of Earth-observing satellite missions jointly managed by NASA and the USGS.



"Working closely with the Land Imaging community, we successfully demonstrated the capabilities of the compact REMI-AB and CHPS-AB instruments," said Dr. Makenzie Lystrup, vice president and general manager, Civil Space, Ball Aerospace. "In our commitment to science at any scale, we continue to innovate new ways to deliver high performing technology in increasingly compact packages."

At a more than 30 percent reduction in size from the Ball-built Operational Land Imager (OLI) currently flying on Landsat 8, the spaceborne CHPS would deliver visible through shortwave infrared data while enabling new science applications such as mineral mapping and categorizing plant species. The spaceborne REMI would yield visible through thermal data that is equivalent to data currently delivered by Landsat's OLI and Thermal Infrared Sensor (TIRS) instruments, while being less than half the size of the combined instruments. These technology demonstrations would enable a flexible and sustainable next generation architecture for the Landsat program.

Ball Aerospace 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. Ball Aerospace has contributed to the continuity of the current Landsat program with the Ball-built OLI flying on the Landsat 8 satellite and having delivered the OLI-2 instrument for Landsat 9.

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### About Ball Corporation

Ball Corporation (NYSE: BLL) supplies innovative, sustainable aluminum packaging solutions for beverage, personal care and household products customers, as well as aerospace and other technologies and services primarily for the U.S. government. Ball Corporation and its subsidiaries employ more than 18,300 people worldwide and reported 2019 net sales of \$11.5 billion. For more information, visit [www.ball.com](http://www.ball.com), or connect with us on [Facebook](#) or [Twitter](#).

### 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, including due to virus and disease outbreaks and responses thereto; 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 startup 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; 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 or jurisdiction 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, stimulus package(s), 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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