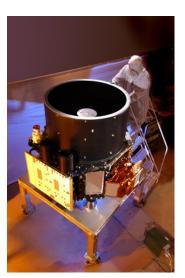
NASA's CloudSat/CALIPSO Satellites Celebrate 10 Years on Orbit Ball on cusp of providing new space LiDAR for the next generation of global weather prediction and climate analysis.

BOULDER, Colo., June 7, 2016 /<u>PRNewswire</u>/ -- Ten years ago today the first images were returned from the CALIPSO and CloudSat atmospheric aerosol LIDAR (Light Detection And Ranging) and cloud-profiling radar missions following their joint launch on April 28, 2006. The satellites joined the A-Train, a coordinated group of international satellites providing simultaneous observation data used by scientists to advance knowledge of Earth-system science.

"Ball Aerospace is proud to have provided innovative technologies for both of these global science missions," said Jim Oschmann, vice president and general manager for Ball's Civil Space business unit. "Ensuring mission success and good value for programs that last far beyond their design life is how we help our customers achieve their missions."

Since launching, <u>CALIPSO</u> has traveled more than 1.6 billion miles, and has fired its laser over 5.8 billion times and is still going strong. The satellite has produced more than 90 terabytes of data, and orbited the Earth 43,000 times to study how clouds and aerosols impact the Earth's climate. Ball built CALIPSO's LiDAR and wide-field camera instruments, data processing and communications equipment, and integrated the instrumentation suite. CALIPSO is a research partnership between NASA's Langley Research Center in Hampton, Virginia and the Centre National d'Etudes Spatiales' (CNES). Originally designed for a life of three years, scientists continue using data from CALIPSO to construct 3-D models of the atmosphere that improve our ability to predict future climate change.



CloudSat launched with capabilities 1,000 times more sensitive than typical weather radar. Ball Aerospace built the CloudSat spacecraft and tested and integrated the Cloud Profiling Radar payload, built by NASA's Jet Propulsion Laboratory. CloudSat uses millimeter-wavelength radar to measure the altitude and properties of clouds to provide scientists never-before-seen 3-D perspectives of Earth's clouds that answer questions about how they form, evolve and affect our weather, climate and freshwater supply. After surpassing its two-year design life, CloudSat's aging batteries began to lose power in April 2011. Ball resolved the problem with creative operations allowing the spacecraft to collect data in daylight. For its mission-saving efforts, Ball's CloudSat team won a NASA Exceptional Public Achievement Award.

CloudSat and CALIPSO launched into a 705-kilometer (438-mile) circular sun-synchronous polar orbit, to fly in orbital formation as part of the A-Train constellation of other Earth Observing satellites including Aqua, Aura, OCO-2 and Centre National d'Etudes Spatiales' (CNES) PARASOL. CALIPSO and CloudSat are highly complementary programs; the LiDAR provides the highest resolution data and the Radar provides data into dense clouds that the LiDAR can't penetrate.

Ball's advanced development of LiDAR measurements from space currently includes new work for NASA's ATHENA OAWL project to provide 3-D wind profiles to improve understanding of weather, water and energy cycles.

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. For more information, visit <u>www.ball.com/aerospace</u> or connect with us on <u>Facebook</u> or <u>Twitter</u>.

Ball Corporation (NYSE:BLL) supplies innovative, sustainable packaging solutions for beverage, food 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 15,200 people worldwide and reported 2015 sales of \$8.0 billion. For more information, visit <u>www.ball.com</u>, or connect with us on <u>Facebook</u> or <u>Twitter</u>.

Forward-Looking Statements

This release contains "forward-looking" statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates" and similar expressions identify forward-looking statements. Such statements are subject to risks and uncertainties, which could cause actual results to differ materially from those expressed or implied. 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 risks and uncertainties 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. Factors that might affect: a) our packaging segments include product demand fluctuations; availability/cost of raw materials; competitive packaging, pricing and substitution; changes in climate and weather; crop yields; competitive activity; failure to achieve productivity improvements or cost reductions; mandatory deposit or other restrictive packaging laws; customer and supplier consolidation, power and supply chain influence; changes in major customer or supplier contracts or loss of a major customer or supplier; political instability and sanctions; and changes in foreign exchange or tax rates; 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: changes in senior management; 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; litigation; strikes; labor cost changes; rates of return on assets of the company's defined benefit retirement plans; pension changes; uncertainties surrounding the U.S. government budget, sequestration and debt limit; reduced cash flow; ability to achieve cost-out initiatives; interest rates affecting our debt; and successful or unsuccessful acquisitions and divestitures, including, with respect to the proposed Rexam PLC acquisition, the effect of the announcement of the acquisition on our business relationships, operating results and business generally; the occurrence of any event or other circumstances that could give rise to the termination of our definitive agreement with Rexam PLC in respect of the acquisition; the outcome of any legal proceedings that may be instituted against us related to the definitive agreement with Rexam PLC; the failure to satisfy conditions to completion of the acquisition of Rexam PLC, including the receipt of all required regulatory approvals; and failure to complete the previously announced sale of certain proposed divested assets in order to obtain such regulatory approvals.

Photo - <u>http://photos.prnewswire.com/prnh/20160607/376289</u> Logo -<u>http://photos.prnewswire.com/prnh/20130108/LA39163LOGO</u>

SOURCE Ball Aerospace

For further information: Roz Brown, 303-939-6146, rbrown@ball.com

https://ball.mediaroom.com/2016-06-07-NASAs-CloudSat-CALIPSO-Satellites-Celebrate-10-Years-on-Orbit

