

Ball Aerospace Orion Cameras Installed by Lockheed Martin for EFT-1

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BOULDER, Colo., July 17, 2013 /PRNewswire/ -- Three Ball Aerospace & Technologies Corp. flight cameras have been installed on the Orion Exploration Flight Test (EFT-1) crew module by prime contractor Lockheed Martin. Ball's cameras are the first avionics hardware completed for the EFT-1, which is scheduled to launch in September 2014.

(Photo: <http://photos.prnewswire.com/prnh/20130717/LA48510>)

(Logo: <http://photos.prnewswire.com/prnh/20130108/LA39163LOGO>)

Orion is the nation's first interplanetary spacecraft designed to carry astronauts beyond low-Earth orbit on long-duration. Orion's Testing and Verification program at Lockheed Martin continues to validate hardware and software integration, test subsystems and refine production operations to ensure the Orion team builds the safest, most reliable spacecraft possible to successfully execute a series of increasingly challenging human exploration missions on the path to Mars.

The Ball cameras are based on the design of the docking camera that flew aboard the STS-134 Sensor Test for Orion Relative Navigation Risk Mitigation (STORRM) mission in 2011. STORRM was an innovative technology development effort led by NASA's Multi-Purpose Crew Vehicle Project Office at NASA Johnson Space Center in partnership with NASA Langley Research Center, Lockheed Martin, and Ball Aerospace. The on-orbit test validated the performance of the navigation sensor suite for Orion and other future spacecraft by demonstrating a robust relative navigation design that provided the required docking accuracy and range capability necessary to meet crew safety, mass, volume and power requirements for a wide variety of future NASA missions, including those into deep space.

The new ultra-wide-field cameras built by Ball for Orion EFT-1 have enhanced software and exposure controls, and will be positioned in various windows on the spacecraft in order to monitor the test flight as different procedures are carried out.

Variations of the Ball cameras are planned for each Orion flight. In addition to providing test and docking cameras, Ball is producing the conformal phased array antennas and star trackers that will be installed on each Orion launch system. The first human-rated Orion mission is slated for 2021.

Ball Aerospace & Technologies Corp. supports critical missions for national agencies such as the Department of Defense, NASA, NOAA and other U.S. government and commercial entities. The company develops and manufactures spacecraft, advanced instruments and sensors, components, data exploitation systems and RF solutions for strategic, tactical and scientific applications. For more information, visit www.ballaerospace.com.

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 15,000 people worldwide and reported 2012 sales of more than \$8.7 billion. For more information, visit 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" and similar expressions are intended to 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 our packaging segments include fluctuation in product demand and preferences; availability and 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; 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. Factors that might affect our aerospace segment include: funding, authorization, availability and returns of government and commercial contracts; and delays, extensions and technical uncertainties affecting segment contracts. Factors that might affect the company as a whole include those listed plus: changes in senior management; successful or unsuccessful acquisitions and divestitures; regulatory action or laws including tax, environmental, health and workplace safety, including U.S. FDA and other actions affecting products filled in our containers, or chemicals or substances used in raw materials or in the manufacturing process; technological developments and innovations; goodwill impairment; litigation; strikes; labor cost changes; rates of return projected and earned on assets of the company's defined benefit retirement plans; pension changes; uncertainties surrounding the U.S. government budget and debt limit; reduced cash flow; ability to achieve cost-out initiatives; and interest rates affecting our debt.

SOURCE Ball Aerospace

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