Ball News Releases

Manufacturing Milestone Achieved for James Webb Space Telescope

The final segment of the flight primary mirror for NASA's James Webb Space Telescope (JWST) has completed manufacturing and been delivered for grinding and polishing, a major milestone achieved by Ball Aerospace & Technologies, Corp. and its subcontractors.

The beryllium mirror segment, one of 18 segments that comprise the telescope's 6.6-meter primary mirror, was delivered from Axsys Technologies, Inc. in Cullman, Ala, to L-3 Communications SSG-Tinsley in Richmond, Calif.

"We are now moving into a new phase on JWST following 17 months in which the telescope has achieved all testing milestones required for Technology Readiness Level (TRL) 6, including Wavefront Sensing and Control met by Ball Aerospace last month," said David L. Taylor, president and chief executive officer of Ball Aerospace.

One of the lightest of all metals, beryllium has a demonstrated track record of performing on space telescopes at cryogenic temperatures, needed for JWST's infrared observations. Each of the 18 hexagonal-shaped mirror segments measures a little more than 1.3 meters across, and weighs approximately 20 kilograms or 46 pounds after light-weighting. The completed JWST optics will have more than nine times the effective light-collecting area of the Hubble Space Telescope's optics, yet the JWST primary mirror will weigh only about half as much as Hubble's.

Ball Aerospace is the principal optical subcontractor for the JWST program, led by prime contractor Northrop Grumman Space Technology, under a contract from the NASA Goddard Space Flight Center, in Greenbelt, Md. A secondary and tertiary mirror, plus flight spares, will be delivered to Ball Aerospace from its mirror manufacturing team that includes Brush Wellman, in addition to Axsys and L-3 Communications. As each mirror completes grinding and polishing and is delivered to Ball Aerospace during the next four years, it will be mounted onto a lightweight, actuated strong-back assembly and undergo functional and environmental testing.

Upon successful launch in 2013, JWST will study the first stars and galaxies following the Big Bang, the formation of planetary systems, and feature deep imaging and multi-object spectroscopy in the near and mid-infrared portions of the spectrum.

Ball Aerospace & Technologies Corp. supports critical missions of important 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. In the past 50 years, Ball Aerospace has been responsible for numerous technological and scientific 'firsts' and now acts as a technology innovator for the aerospace market.

Ball Corporation is a supplier of high-quality metal and plastic packaging products and owns Ball Aerospace & Technologies Corp. Ball reported 2006 sales of $6.6 billion and employs 15,500 people.

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 99.2 in our Form 10-K, which are available at our Web site and at www.sec.gov. Factors that might affect our packaging segments include fluctuation in consumer and customer demand and preferences; availability and cost of raw materials, including recent significant increases in resin, steel, aluminum and energy costs, and the ability to pass such increases on to customers; competitive packaging availability, pricing and substitution; changes in climate and weather; crop yields; industry productive capacity and competitive activity; failure to achieve anticipated productivity improvements or production cost reductions, including those associated with our beverage can end project; the German mandatory deposit or other restrictive packaging laws; changes in major customer or supplier contracts or loss of a major customer or supplier; changes in foreign exchange rates, tax rates and activities of foreign subsidiaries; the effect of LIFO accounting and any changes to such accounting. 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: accounting changes; successful or unsuccessful acquisitions, joint ventures or divestitures; integration of recently acquired businesses; regulatory action or laws including tax, environmental and workplace safety; governmental investigations; technological developments and innovations; goodwill impairment; antitrust, patent and other litigation; strikes; labor cost changes; rates of return projected and earned on assets of the company's defined benefit retirement plans; pension changes; reduced cash flow; interest rates affecting our debt; and changes to unaudited results due to statutory audits or other effects.

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