Ball Aerospace Chosen to Provide Complex Optical System for NASA's James Webb Space Telescope

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Ball Aerospace today announced that a team led by Northrop Grumman, has selected beryllium for the primary mirror optics on the James Webb Space Telescope (JWST). Beryllium was selected as the material for the 6.5 meter aperture, segmented, telescope mirror because of its low mass, high stiffness and ability to tolerate deep space temperature extremes.

With the announcement, Ball Aerospace will lead a consortium of beryllium manufacturing subcontractors including Brush Wellman, Axsys Technologies, and SSGPO/Tinsley to produce the sophisticated optics. Ball Aerospace, under an existing contract, will now be responsible for the entire optical subsystem that will act as the "eyes" for JWST.

Scheduled for launch in 2011, JWST is designed to observe objects that are very faint, with much of their observable light in the near-infrared region of the spectrum. In order to launch the large optical system that the telescope required, engineers on the JWST team designed a unique approach to the telescope's primary mirror by segmenting it into three, mosaic-patterned sections. The sides of the mirror will be folded back to fit into the launch vehicle, then deployed while in orbit. The primary mirror will be made up of 18 hexagonal, beryllium mirror segments, each measuring more than 1.3 meters (4.3 feet) across.

Named after James Webb, NASA's second administrator, JWST will take approximately three months to reach its destination -- an orbit 1.5 million kilometers (940,000 miles) in space. JWST is expected to provide answers about the formation of galaxies, star formations and the early history of our solar system. The JWST program is led by NASA's Goddard Space Flight Center and consists of an international team involving the European Space Agency, Canadian Space Agency, industry and academia. Northrop Grumman is the prime contractor, leading the design and development effort.

Ball Corporation is one of the world's leading suppliers of metal and plastic packaging to the beverage and food industries. The company also owns Ball Aerospace & Technologies Corp. With the addition of Ball Packaging Europe, acquired in December 2002, Ball expects to report 2003 sales of approximately $5 billion, of which approximately $4.5 billion will come from its two packaging segments and $500 million from its aerospace and technologies segment.

Forward-Looking Statements

The information in this news release contains "forward-looking" statements. Actual results or outcomes may differ materially from those expressed or implied. As time passes, the relevance and accuracy of forward- looking statements contained in this release may change. The company currently does not intend to update any particular forward-looking statement except as it deems necessary at quarterly or annual release of earnings. Please refer to the Form 10-Q filed by Ball Corporation on August 12, 2003, for a summary of key risk factors that could affect actual results or outcomes. Factors that might affect the packaging segments of the company are: fluctuation in consumer and customer demand; competitive packaging material availability, pricing and substitution; the weather; fruit, vegetable and fishing yields; company and industry productive capacity and competitive activity; lack of productivity improvement or production cost reductions; regulatory action or laws, including the German mandatory deposit or other restrictive packaging laws and environmental and workplace safety regulations; availability and cost of raw materials, energy and transportation; the ability or inability to pass on to customers changes in these costs, particularly resin, steel and aluminum; pricing and ability or inability to sell scrap; international business risks (including foreign exchange rates and tax rates) particularly in the United States, Europe and in developing countries such as China and Brazil; and the effect of LIFO accounting on earnings. Factors that may affect the aerospace segment are: funding, authorization and availability of government contracts and the nature and continuation of those contracts; and technical uncertainty associated with aerospace segment contracts. Factors that could affect the company as a whole include those listed plus: successful and unsuccessful acquisitions, joint ventures or divestitures and the integration activities associated therewith including the integration and operation of the business of Schmalbach-Lubeca AG, now known as Ball Packaging Europe; the inability to purchase the company's common stock; insufficient or reduced cash flow; regulatory action or laws including those related to corporate governance and financial reporting, regulations and standards; actual and estimated business consolidation and investment costs and the net realizable value of assets associated with these activities; goodwill impairment; changes in generally accepted accounting principles or their interpretation; litigation; antitrust, intellectual property, consumer and other issues; strikes; boycotts; increases in various employee benefits and labor costs, specifically pension, medical and health care costs incurred in the countries in which Ball has operations; rates of return projected and earned on assets of the company's defined benefit retirement plans; interest rates and level of company debt, including floating rate debt; terrorist activities, war or catastrophic events that disrupt or impact production, supply or pricing of the company's goods and services, including raw materials and energy costs, or disrupt or impact the credit and financing of the company's businesses; and U.S. and foreign economic conditions.

SOURCE: Ball Aerospace & Technologies Corp.

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