

## **NASA's Newest Telescope Returns Stunning Views of Space**

PRNewswire  
WASHINGTON

The first infrared images taken by NASA's Space Infrared Telescope Facility, or SIRTf, were presented today at a press conference at NASA Headquarters in Washington, D.C. SIRTf's ability to see through thick space dust is enabling the telescope to return unprecedented views of our universe, including photos presented today of a glowing stellar nursery and the swirls of a spiral galaxy. The observatory, launched August 25, 2003, uses a unique cryogenically cooled telescope built at Ball Aerospace & Technologies Corp. in Boulder, Colo. to provide the images. Ball Aerospace played a significant role in all four of NASA's Great Observatories by building science instruments, optical systems, cryogenic systems, mechanisms and electronics.

NASA also announced the new name of the powerful telescope at the press conference. The new name, the Spitzer Space Telescope, was chosen to honor Dr. Lyman Spitzer, Jr., a pioneer in astronomy whose efforts to put telescopes in space ultimately led to the creation of SIRTf, as well as the Hubble Space Telescope. The name was selected as part of a contest that drew 7,000 entries from around the world. The winning entry was submitted by Jay Stidolph, 28, of Fort Nelson, British Columbia.

"NASA's investment in the Great Observatories is creating a legacy of science that will be used for generations," says Ball Aerospace & Technologies Corp. President and CEO David L. Taylor. "The magnificent views into deep space are the product of many teams working toward a single goal -- to open our eyes to the vastness of our universe. We are proud and honored to have played a significant role in this great achievement."

The Cryogenic Telescope Assembly, or CTA, built at Ball Aerospace, is the "eyes" of the Spitzer Space Telescope, with a lightweight telescope and cooling technology that allow it to see the faint infrared light produced by cosmic objects. The unique cooling system aboard the CTA allowed the Spitzer Space Telescope to be launched "warm." Once in space, the telescope was cooled to its operating temperature of 5 degrees above absolute zero (about 450 degrees below zero, Fahrenheit). This warm launch technique had never before been used. It greatly reduced the amount of liquid helium coolant needed to enable a mission length of between two and one half years to five years in duration.

Ball Aerospace was also responsible for building two of the Spitzer Space Telescope's three scientific instruments. The Infrared Spectrograph will provide the telescope with low and moderate spectral-resolution spectroscopic capabilities. The Multiband Imaging Photometer is a far-infrared instrument capable of imaging photometry and scan mapping. The detectors used in these instruments are up to 1,000 times more sensitive than those used in any previous space infrared mission.

A part of NASA's Origins program, the Spitzer Space Telescope is the fourth component of NASA's family of Great Observatories, which study a wide variety of astronomical phenomena. The long-wave infrared capability of the Spitzer Space Telescope provides a unique scientific complement to the Hubble Space Telescope, which provides images and data from ultraviolet, visible and short-wave infrared light, and the Chandra X-Ray Observatory. The Compton Gamma Ray Observatory was removed from orbit by NASA in 2000 after a successful nine-year mission that provided data on the high-energy gamma rays. The Spitzer Space Telescope mission is managed by NASA's Jet Propulsion Laboratory in Pasadena, Calif.

Information about the Spitzer Space Telescope is available online at: <http://www.spitzer.caltech.edu/>

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 \$4.9 billion, of which approximately \$4.4 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 November 10, 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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Web site: <http://www.spitzer.caltech.edu/>

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