

## Deep Impact Spacecraft Pair Depart for Comet Collision

PRNewswire

CAPE CANAVERAL AIR FORCE STATION, Fla.

The spacecraft pair that will give scientists their first close-up look at the interior of a comet successfully launched today aboard a Delta II rocket from Cape Canaveral Air Force Station, Fla. The Flyby and Impactor spacecraft were launched in their nested flight configuration. After a cruise phase of approximately six months, they will separate to prepare the Impactor for its scheduled July 4 collision with Comet Tempel 1, 83 million miles from Earth. Scientists estimate that both comet and spacecraft will collide at closing speeds of approximately 23,000 miles per hour. The Impactor will likely vaporize during impact, and the collision with the spacecraft is expected to form a crater in the comet, possibly as large as a football stadium, and as deep as 14-stories. Scientists will observe the event via the Flyby's onboard instruments.

The structure of the surface of comets is unknown and could range from a hard, icy crust to thin and fragile ice held together by organic, sticky substances. Deep Impact is the first mission to make contact with a comet's surface, but instead of landing a spacecraft on Tempel 1, the spacecraft will make a crater in the large comet to reveal what is underneath the surface.

Scientists are excited about the prospect of their first view of the core of a comet. Comets contain, in a frozen, well-preserved environment, the interstellar materials that were present at the time our solar system was formed. Comets are gaining interest as a new exploration target because they are believed to have brought the organic materials necessary for life to develop on Earth, which was once a hostile planet with high temperatures and a poisonous atmosphere.

Scientists also expect to learn how comets were formed from the Deep Impact data. Whether the icy objects were created one layer at a time, or all at once by a single event, will provide clues about how planets and smaller bodies form from interstellar materials. Comets are one of the few objects in the solar system that contain intact, materials from the formation of the solar system.

Deep Impact's telescopes, cameras and spectrometer aboard the Flyby spacecraft will witness the impact from a vantage point of about 300 miles and return data on the pristine material in the crater, and the material ejected by the impact. The High Resolution Imager aboard the Flyby spacecraft, the largest interplanetary telescope ever flown, will record the details of the collision. The Impactor spacecraft will also provide close-encounter photos of the comet just prior to impact, giving scientists the most complete view of a comet to date.

Ball Aerospace & Technologies Corp., in association with the University of Maryland and the Jet Propulsion Laboratory (JPL), developed and integrated the Flyby spacecraft, the Impactor spacecraft, and science instruments, including three telescopes, three cameras and a spectrometer for analyzing the interior of the comet. Deep Impact is the eighth mission in NASA's Discovery Program, and the first mission to attempt impact with a comet nucleus in an effort to probe beneath its surface.

For more information about Deep Impact, please visit:

<http://www.ball.com/aerospace/deepimpact.html>  
<http://deepimpact.umd.edu/>  
<http://deepimpact.jpl.nasa.gov/>

Ball Corporation is a supplier of high-quality metal and plastic packaging products and innovative packaging solutions to the beverage and food industries. The company also owns Ball Aerospace & Technologies Corp., which develops sensors, spacecraft, systems and components for government and commercial markets. Ball employs 13,100 people worldwide and reported 2003 sales of \$4.9 billion.

### Forward-Looking Statements

The information in this news release contains "forward-looking" statements and other statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates," and variations of such words and similar expressions are intended to identify forward-looking statements. Forward-looking 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 the company's filings with the Securities and Exchange Commission, especially in Exhibit 99.2 in the most recent Form 10-K. These filings are available at the company's website and at [www.sec.gov](http://www.sec.gov). Factors that might affect the packaging segments of the company include fluctuation in consumer and customer demand; competitive packaging material availability, pricing and substitution; changes in climate and weather; fruit, vegetable and fishing yields; industry productive capacity and competitive activity; lack of productivity improvement or production cost reductions; the German mandatory deposit or other restrictive packaging laws; availability and cost of raw materials, such as resin, steel and aluminum, and the ability to pass on to customers changes in these costs; changes in major customer contracts or the loss of a major customer; international business risks, such as foreign exchange rates and tax rates; and the effect of

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SOURCE: Ball Aerospace & Technologies Corp.

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Web site: <http://www.ball.com/aerospace/deepimpact.html>

Web site: <http://deepimpact.umd.edu/>

Web site: <http://deepimpact.jpl.nasa.gov/>

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