## Ball Aerospace Selected to Build Key Instrument Component for NASA's WFIRST Observatory

BOULDER, Colo., May 30, 2018 /PRNewswire/ -- Ball Aerospace has been chosen to develop and build the Wide Field Instrument (WFI) Optical Mechanical Assembly (WOMA) for NASA's Wide Field Infrared Survey Telescope (WFIRST). WFIRST is a NASA observatory designed to answer essential questions in the areas of dark energy, exoplanets and infrared astrophysics using the WFI.

"WFIRST was identified as a top priority of the most recent Decadal Survey in 2010 and Ball supports the decadal process, which builds a community consensus for science priorities," said Jim Oschmann, vice president and general manager for Civil Space, Ball Aerospace. "The science WFIRST will provide is unprecedented as the wide-field imaging of distant galaxies will unlock the mysterious effects of dark energy, which may fundamentally change our understanding of physics."

The WFI consists of WOMA and key subassemblies provided by NASA Goddard Space Flight Center. Ball and NASA will work together to integrate and test the WFI. The WFI will be about the size of an upright piano, and with Ball's WOMA design, provides exquisite stability and structural repeatability. When launched in the mid-2020s, WFIRST will have a field of view 100 times larger than Hubble Space Telescope's Advanced Camera for Surveys, allowing scientists to efficiently answer the most fundamental science questions – with the capability to collect data in days that once took months or years.



For nearly 60 years, Ball has been developing instruments for NASA. For example, Ball built seven science instruments for the Hubble Space Telescope, including building the Wide-field Camera 3 (WFC3) alongside Goddard Space Flight Center, as well as two star trackers, five major leave-behind equipment subsystems and more than eight custom tools to support astronauts during servicing missions. Ball designed and built the advanced optical technology and lightweight mirror system for the James Webb Space Telescope. Overall, Ball has contributed to all of NASA's Great Observatories – Compton Gamma Ray, Hubble, Chandra X-Ray, Spitzer Space Telescope and Webb – and WFIRST will continue that tradition.

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## **Forward-Looking Statements**

This release contains "forward-looking" statements concerning future events and financial performance. Words such as "expects," "anticipates," "estimates," "believes," "targets," "likely" and similar expressions typically identify forward-looking statements, which are generally any statements other than statements of historical fact. Such statements are based on current expectations or views of the future and are subject to risks and uncertainties, which could cause actual results or events to differ materially from those expressed or implied. You should therefore not place undue reliance upon any forward-looking statements and any of such statements should be read in conjunction with, and, qualified in their entirety by, the cautionary statements referenced below. 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 factors, risks and uncertainties that could cause actual outcomes and results to be different 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. Additional factors that might affect: a) our packaging segments include product demand fluctuations; availability/cost of raw materials; competitive packaging, pricing and substitution; changes in climate and weather; competitive activity; failure to achieve synergies, productivity improvements or cost reductions; mandatory deposit or other restrictive packaging laws; customer and supplier consolidation, power and supply chain influence; changes in major customer or supplier contracts or a loss of a major customer or supplier; political instability and sanctions; currency controls; changes in foreign exchange or tax rates,

including due to the effects of the 2017 U.S. Tax Cuts and Jobs Act; and tariffs or other governmental actions in any country affecting goods produced by us or in our supply chain, including imported raw materials, such as pursuant to section 232 of the U.S. Trade Expansion Act of 1962; b) our aerospace segment include funding, authorization, availability and returns of government and commercial contracts; and delays, extensions and technical uncertainties affecting segment contracts; c) the company as a whole include those listed plus: changes in senior management; regulatory action or issues including tax, environmental, health and workplace safety, including U.S. FDA and other actions or public concerns affecting products filled in our containers, or chemicals or substances used in raw materials or in the manufacturing process; technological developments and innovations; litigation; strikes; labor cost changes; rates of return on assets of the company's defined benefit retirement plans; pension changes; uncertainties surrounding geopolitical events and governmental policies both in the U.S. and in other countries, including the U.S. government elections, budget, sequestration and debt limit; reduced cash flow; ability to achieve cost-out initiatives and synergies; interest rates affecting our debt; and successful or unsuccessful joint ventures, acquisitions and divestitures, including with respect to the Rexam PLC acquisition and its integration, or the associated divestiture; the effect of the acquisition or the divestiture on our business relationships, operating results and business generally.

## SOURCE Ball Aerospace

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