



August 26, 2003

Aerojet Tests Advanced Hydrogen Peroxide Rocket Engine Injector

SACRAMENTO, Calif., Aug. 26 /PRNewswire-FirstCall/ -- Aerojet, a GenCorp Inc. (NYSE: GY) company, announced recently the successful hot fire test of a full-scale Tri-Fluid Injector. The Tri-Fluid injector is a component of the Advanced Reusable Rocket Engine (ARRE) that Aerojet is developing for the Air Force's in-space reusable propulsion and maneuvering requirements. This main combustion device enables the closed-cycle configuration of the ARRE which provides for higher performance and greater throttling capability. Injector combustion is accomplished by mixing non-toxic hydrogen peroxide and jet fuel with ARRE's decomposed peroxide turbine exhaust, providing higher performance and deep throttling capability.

(Logo: <http://www.newscom.com/cgi-bin/prnh/19990913/CLM002>)

The test, which consists of the full-scale Tri-Fluid Injector, a workhorse chamber, a turbine simulator, and a 98 percent hydrogen peroxide catalyst bed provided by General Kinetics, was performed under sea-level conditions. This initial test is the first of many over the next several weeks to demonstrate the Tri-Fluid Injector's performance, operability and throttleability. Additional heat transfer data will be acquired to apply towards the technology readiness of the ARRE's peroxide-cooled thrust chamber.

"We are extremely pleased with the results of this initial test which represents the hard work and innovative engineering from our ARRE team over several years," said Scott Jennings, Aerojet Advanced Reusable Rocket Engine program manager. "This test, which is a significant technology achievement for the Air Force, will also support the continued development of the ARRE, which is representative of the kind of space propulsion enabling technologies being pursued in the Department of Defense's new National Aerospace Initiative."

Aerojet is conducting the Tri-Fluid Injector test in its new, state-of-the-art hydrogen peroxide engine test facility, which was built for hands-on development of rocket engines containing environmentally friendly hydrogen peroxide propellants. This facility, which is also being used to test NASA's Integrated System Test of an Airbreathing Rocket injectors and other Aerojet research and development efforts, is capable of testing rocket engines up to 100,000 pounds of thrust and provides both sea level and altitude test conditions. "Since its grand opening in January 2002, we have had continuous use of this facility which is providing Aerojet with valuable safety and handling experience with hydrogen peroxide as a propellant," said Rick Simonsen, Manager of Aerojet's Test Operations. The peroxide test facility, which is located at Aerojet's Sacramento plant, allows for close coordination between Aerojet's engineering and test operations personnel.

Aerojet's Advanced Reusable Rocket Engine utilizes non-toxic hydrogen peroxide and closed-cycle rocket engine technologies to improve engine reusability, operability and performance for future Air Force in-space vehicle operations.

Aerojet is a world-recognized aerospace and defense leader principally serving the missile and space propulsion, and defense and armaments markets. GenCorp Inc. is a multi-national, technology-based manufacturer with leading positions in the automotive, aerospace, defense and pharmaceutical fine chemicals industries. For more information, please visit <http://www.aerojet.com> and <http://www.gencorp.com> .

SOURCE Aerojet

CONTACT: Susan Bassett of Aerojet

916-355-2310

or susan.bassett@aerojet.com

or Linda Cutler of GenCorp

916-351-8650

or linda.cutler@gencorp.com

Photo: NewsCom: <http://www.newscom.com/cgi-bin/prnh/19990913/CLM002>

AP Archive: <http://photoarchive.ap.org>

PRN Photo Desk, +1-888-776-6555 or +1-212-782-2840

Web site: <http://www.gencorp.com>

Web site: <http://www.aerojet.com>