



Parker Continues as Strong Leader in Aerospace Industry

December 4, 2003

Click [here](#) for background information on Parker's history in flight.

CLEVELAND, Dec. 4 /PRNewswire-FirstCall/ -- Cleveland-based Parker Hannifin (NYSE: PH) is one of the longest running suppliers to the aerospace industry. And as an industry leader in hydraulic supply systems, fuel management systems and flight controls, Parker's products support the world's airline fleet, military aircraft, general aviation, and virtually everything that flies.

(Logo: <http://www.newscom.com/cgi-bin/prnh/19990816/PHLOGO>)

... And, for that matter, what will be flying. Parker aerospace technologies will be onboard several new aircraft programs that will soon be taking to the sky. The F-35 Joint Strike Fighter program will have an entire Parker fuel system, which includes an onboard inert gas generating system, or OBIGGS, a proven low-cost and light-weight technology that prevents fuel tank explosions.

The system consists of an Air Separation Module (ASM), control valves, and a distribution system. Nitrogen Enriched Air (NEA) is generated by applying pressure to the ASM, which separates oxygen from nitrogen by thousands of hollow hair-like fibers. During this process, the NEA is delivered to the fuel tanks and the oxygen-enriched air is dumped overboard. NEA is produced at less than 12 percent oxygen concentration (air is approximately 21% oxygen, an explosion or fire requires 12% minimum oxygen), making it insufficient to support a fire or explosion in the event of a high-energy projectile or spark in the fuel tank.

The F-35 will also fly with Parker flight controls that use electrohydrostatic actuation technology, a first for production aircraft. Not only does the electrohydrostatic technology reduce overall aircraft weight allowing for a more efficient performance, it also reduces overall aircraft system acquisition and lifecycle costs.

The world's largest airliner going into production, the Airbus A380, as well as one of the smallest, the Eclipse 500 jet, will also take-off with the help of Parker. On the new double-deck 555 passenger Airbus A380, Parker is providing the fuel measurement and management systems. The Parker fuel management system accurately gauges the fuel quantity in the tanks and monitors the distribution of fuel while commanding pumps and valves in the aircraft's fuel system to provide the functions of fuel transfer, center of gravity control, and refuel. On the six-person, twin-engine Eclipse 500 jet, Parker provides a lightweight, complete integrated brake control system. The Eclipse 500 is the first flight-tested aircraft in a new market segment, the "microjet."

Parker's aerospace technology continues to grow with the industry. With the recent acquisition of the aircraft business of Control By Light (CBL) Systems, Parker is also providing control and communication electronics that use fiber-optic technology to address aircraft safety and security. This technology is applicable to virtually every military, commercial and corporate aircraft flying today.

In addition to marking the 100th anniversary of the Wright Brothers' first flight, this year also marked the 75th anniversary of Charles Lindbergh's Atlantic crossing, a journey made possible in part by a Parker fuel system.

With annual sales exceeding \$6 billion, Cleveland-based Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of commercial, mobile, industrial and aerospace markets. The company employs more than 46,000 people in 44 countries around the world. For more information, visit the company's web site at www.parker.com or its investor information site at www.phstock.com .

SOURCE Parker Hannifin Corporation
12/04/2003

CONTACT: Media, Lorrie Paul Crum, Vice President - Corporate Communications of Parker Hannifin Corporation,
+1-216-896-2750, or lcrum@parker.com

Web site: <http://www.parker.com>
<http://www.phstock.com>
(PH)