## F-22 Raptor - A Transformational Weapon That Continues To Meet And Exceed All Key Performance Parameters

PRNewswire-FirstCall FARNBOROUGH, England

The F-22 Raptor, now in production and continuing flight testing in California, continues to meet or exceed all technical performance parameters, Lockheed Martin Aeronautics Company president Dain Hancock confirmed during a press conference today conducted with U.S. Secretary of the Air Force James Roche.

Lockheed Martin Aeronautics Co. is a business area of Lockheed Martin Corp. .

"The Raptor defines what many of you have heard referenced repeatedly in the defense and aerospace communities... transformational combat systems -- meaning the F-22 brings to the fight capabilities far in excess of any foreseeable aircraft system," said Roche.

"Unquestionably, the F-22 is living up to performance expectations as the world's most capable, technologically advanced combat aircraft. The awesome capabilities of the Raptor are being proven and expanded daily in demanding company and customer flight tests at Edwards Air Force Base, where seven F-22s are now achieving test points rapidly," Hancock said.

"We at Lockheed Martin fully understand our responsibility as the prime contractor and weapons systems integrator for the aircraft that will be the lynchpin of aerospace power projection in the 21st century," he said.

At present, seven developmental F-22s are engaged in flight test activities at Edwards AFB, Calif. Another eight follow-on test vehicles are being built to support operational testing and tactics development. Furthermore, Lockheed Martin is operating under two production contracts to build a current total of 23 operational (warfighting) F-22s; President Bush's 2003 defense budget has requested Congress fund an additional 23 operational aircraft.

To help build the jets efficiently Lockheed Martin has spent the last several years -- and about \$28 million -- expanding the existing F-22 production area and incorporating both "lean thinking" and 21st century aerospace manufacturing processes. Furthermore, the company is in the final phases of a \$155 million capital investment effort to build robotic paint barns, radar cross section verification facilities, and other facilities necessary to build large quantities of F-22s for years to come.

One of the pilots responsible for flight testing the F-22, Chief Test Pilot Bret Luedke, provided reporters with his first-hand impressions of the Raptor.

"The aircraft is a dream to fly, but just being easy to fly doesn't make the F-22 transformational," said Luedke. "The Raptor's transformational warfighting capabilities come from its perfectly balanced blend of three revolutionary technologies: stealth, supercruise speed, and advanced integrated avionics."

Luedke went on: "Stealth gives the aircraft the ability to be nearly invisible to enemy sensors by reducing the Raptor's signature to that of a bird or bee. While stealth technology has been employed on other aircraft, the stealth technology the F-22 enjoys is superior in at least one major aspect -- it is a lot easier to maintain and repair. And, unlike other stealth aircraft, the F-22 doesn't need special climate-controlled hangers or to be followed around by lab technicians with chemistry sets to keep the low-observable coatings in pristine condition. Stealth alone has transformed how the U.S. Air Force fights wars, but the F-22 transformation doesn't stop there."

"Supercruise -- the ability to fly faster than 1.5 times the speed of sound without using fuel-guzzling afterburners -- is another amazing technology employed by the F-22," Luedke continued. "Supercruise gives a Raptor pilot the ability to fly very fast, very far, very deep into an enemy's territory, and reduces that enemy's ability to quickly or effectively react to an F-22 attack. Stealth plus supercruise means the F-22 likely won't be seen, but if it is, a Raptor pilot will be able to quickly react when confronted with either surface-to-air missile or airborne threats."

"Lastly, there is the advanced integrated avionics suite -- a drab phrase that usually glosses over the revolutionary technology contained under the skin. It allows a pilot to rapidly access critical information and factor that information into his decision-making process -- who to shoot, where to fly, when to drop a bomb, etc. This revolutionary element -- advanced integrated avionics -- would alone make the F-22 a transformational weapon. With it, the Raptor is a flexible, adaptable, versatile combat aircraft capable of seeing all, knowing all, and shaping all that occurs on or above the battlefield. And do all that while flying supersonic and all but invisible to radar," Luedke added.

Luedke, who made his remarks live via satellite from Edwards Air Force Base in California where F-22 flight testing continues, concluded his remarks in keeping with his role as chief test pilot: "I have one of the world's best jobs -- I get to regularly fly the F-22 Raptor. And despite all that revolutionary and transformational stuff, the F-22 is just flat-out fun to fly."

The F-22 Raptor, the world's first stealthy fighter, is built by Lockheed Martin Aeronautics in partnership with Boeing. The Raptor is powered by Pratt and Whitney engines and is made from parts and subsystems provided by approximately 1,200 subcontractors and suppliers in 46 states. Primary production activities take place at LM Aero facilities in Marietta, Ga., and Fort Worth, Texas, as well as at Boeing's plant in Seattle, Wash. Final assembly and initial flight testing of the Raptor occurs at the Marietta factory, headquarters for the F-22 program's contractor team.

The Raptor will replace the venerable F-15 Eagle as America's premier front-line fighter jet starting in 2005. The F-22's balanced design of stealth, supercruise speed, and super-agility, along with its advanced integrated avionics and overall user-friendliness, will allow the F-22 to help the Pentagon shorten future wars and save American and allied lives. Currently, the U.S. Air Force has an F-22 acquisition goal of 339 aircraft, but has stated its existing force structure requires at least 381 and as many as 762 Raptors.

Lockheed Martin Aeronautics Co., headquartered in Fort Worth, Texas, is a leader in the design, development, systems integration, production, and support of advanced military aircraft and related technologies. Its customers include the military services of the United States and allied countries throughout the world. Products include the F-16, F-22, F-35 JSF, F-117, T-50, C-5, C-130, C-130J, P-3, S-3 and U-2.

Lockheed Martin Aeronautics Co. is a unit of Lockheed Martin Corp., headquartered in Bethesda, Md. Lockheed Martin is a global enterprise principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. Employing about 125,000 people worldwide, Lockheed Martin had 2001 sales of \$24 billion.

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