LANGLEY STORY OPPORTUNITIES -- OCTOBER 1992

STORIED NASA RESEARCH PILOT HONORED: A NASA engineer and research pilot who test flew more than 200 different types of aircraft over a 40-year career will be honored by the Michigan Aviation Hall of Fame Nov. 7. Among his contributions, aviation pioneer John P. "Jack" Reeder helped develop the P-51 fighter, a highly successful U.S. fighter aircraft of World War II, the British Harrier fighter and modern advanced transport operating systems that have enhanced airport and runway capacity. Jack is available to reflect upon his career and the aircraft he has flown, including a few harrowing experiences as research pilot. Photos and interview opportunity available. 
Public Affairs contact: Keith Henry (804) 864-6124

HELICOPTER SAFETY INNOVATION: Helicopters may fly safer thanks to an economical aerodynamic device that is the winner of a prestigious international award. For pilots, the "Helicopter Anti-Torque System Using Fuselage Strakes" may actually mean the difference between maintaining or losing control of a helicopter. The system involves mounting "strakes," or spoilers, to the tail boom of a helicopter. They reduce the thrust required by the tail rotor, thus helping the pilot maintain directional control in gusty winds. The strakes were chosen by Research and Development magazine as one of the 100 most significant technological advancements of the year. Photos and interview opportunities available. 
Public Affairs contact: Kristina Murden (804) 864-8150

NEW FAMILY OF POLYMERS PATENTED: A less toxic family of polymers, developed in response to a need for a safer and easy-to-process plastic, was selected by Research and Development magazine as one of the
100 most significant technological advancements of the year. The product will provide structurally efficient, advanced composite materials, that are lightweight and have great strength and stiffness. It is suitable for the future High Speed Civil Transport aircraft that will fly at more than twice the speed of sound. It can also be used in a variety of military and commercial aircraft engine components. Photos and interview opportunities available. 

Public Affairs contact: Kristina Murden (804) 864-8150

75TH ANNIVERSARY – LANGLEY OPEN HOUSE OCTOBER 17: Langley continues to celebrate its 75th Anniversary by opening up its facilities to the public on Oct. 17, from 9 a.m. to 4 p.m. Guided tours through wind tunnels, flight simulators in action, and acoustics and robotics laboratories are among the day’s events. The futuristic “space taxi,” the National Aero-Space Plane X-30 mockup, and research aircraft will be there, with a dozen different displays including space exploration, future concepts and windshear avoidance. Buses will take visitors around the Center to 17 tour stops and 19 displays. Admission is free. Photos and video available.

Public Affairs contact: Keith Henry (804) 864-6124

FLEXIBLE WING DEVELOPER HONORED BY SMITHSONIAN: Retired Langley researcher Francis M. Rogallo will receive the National Air and Space Museum Trophy on October 16 for outstanding achievements in the fields of Aerospace Science and Technology. During a long and outstanding career as an inventor of aeronautical devices, Rogallo developed the flexible wing concept as a method for returning spacecraft to Earth. Although never adopted for this purpose, the flexible wing concept led to the development of the modern hang glider, which has made inexpensive recreational flight possible for thousands of people worldwide. Photos available.

Public Affairs contact: Kristina Murden (804) 864-8150

ANTARCTIC OZONE DEPLETION: Loss of protective ozone from the Earth’s stratosphere over the Antarctic region may be greater than in recent years. The so-called ozone hole has once again been measured by NASA scientists using a satellite-borne platform. A manager in Langley’s Atmospheric Science Division, an internationally recognized investigator of this phenomenon, is available to discuss preliminary findings.

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Interview opportunities available.
*Public Affairs contact: Craig Murden (804) 864-3296*

**NEW GLOBAL POLLUTION SOURCE PROBED:** Langley participants in an international expedition to investigate a major new source of harmful ozone have returned to the Center. Senior scientists conducted ground and aircraft measurement of smoke generated by the burning of southern African grasslands. These polluting emissions, discovered far from normal industrial and automotive sources, are being examined for insights about the global impact of biomass burning. Other Langley atmospheric scientists are making complementary analyses in Brazil using satellite, airborne and ground-based measurement platforms. They will complete that work at the end of the month when measurement data from both continents will be compiled for an overall international assessment. Photos and interview opportunities available.
*Public Affairs contact: Craig Murden (804) 864-3296*

**VOLCANO SCARS AIRLINE WINDOWS:** A volcano's effect on airliner windows has been the subject of NASA Langley collaboration with the Boeing Company. Emissions from the 1991 eruption of Mt. Pinatubo in the Philippines caused clouding or crazing of plexiglass windows when commercial airliners flew through the residue. Interview opportunities available.
*Public Affairs contact: Craig Murden (804) 864-3296*

**NASA LANGLEY CONTRIBUTIONS TO SPACE FLIGHT:** A rocket has never been launched from nor has the Shuttle ever landed at this Hampton, Virginia, facility, but NASA Langley claims the title "birthplace of space flight." Langley researchers nurtured and fought for ideas, concepts and technologies that ultimately proved essential to the success of major crewed space projects like Mercury, Gemini, Apollo, Skylab and the Space Shuttle. They spearheaded major robotic exploration projects like Echo, Lunar Orbiter and Viking. And, they developed a reliable, low-cost, solid booster rocket, the Scout, that has put hundreds of scientific research payloads into orbit. Without the fundamental information about space flight that only a basic research organization like NASA Langley can provide, no space program--past, present or future--could hope to succeed. Photos available.
*Public Affairs contact: Marny Skora (804) 864-3315*
ISY EXHIBIT OPENS AT VIRGINIA AIR AND SPACE CENTER: The overall thrust of 1992's International Space Year and NASA Langley's role in the year-long celebration is highlighted in a Langley-developed exhibit on display in the Virginia Air and Space Center's second-floor changing gallery. The display focuses on two of NASA's major initiatives, Mission to Planet Earth—an investigation of our home planet—and Mission from Planet Earth—a return to the Moon and on to Mars.

Public Affairs contact: Marny Skora (804) 864-3315