NASA LANGLEY FORECAST

NASA Langley employee selected as Space Day spokesperson. NASA Langley Research Center’s Anna-Maria McGowan was chosen as NASA's national spokesperson for Space Day 2003. McGowan will appear in Washington, D.C. on May 1 with Sen. John Glenn, NASA Administrator Sean O'Keefe and other aerospace dignitaries. This year's theme is Space Day 2003 -- Celebrating the Future of Flight. As NASA Langley’s Morphing Program manager, McGowan is looking into the future of flight and developing technologies, systems and materials that will be used in the next generation of aerospace vehicles. Space Day is an award-winning educational initiative dedicated to the extraordinary achievements, benefits and opportunities in the exploration and use of space. For more information, contact Bill Uher at 757-864-3189 or w.c.uher@larc.nasa.gov

NASA small airplane technologies at Sun 'N Fun EAA Fly-In. Technologies being developed for NASA's Small Aircraft Transportation System (SATS) will be on display at the 29th Annual Sun 'N Fun Experimental Aircraft Association (EAA) Fly-In, Lakeland, Fla., April 2-8. Technologies being developed for the NASA research program include near-real-time weather information and displays, synthetic vision for all-weather and nighttime visibility, and a computer-driven visual navigation system called "highway in the sky." Sun 'N Fun organizers expect more than 500 exhibitors for the seven-day celebration of flight. In addition, the annual aircraft fly-in includes static display aircraft, a ladies pavilion, a plane parts mart and a daily air show. For more information on Sun 'N Fun, see http://www.sun-n-fun.org For more information on NASA's SATS program, contact Keith Henry at 757-864-6120 or h.k.henry@larc.nasa.gov

NASA helps celebrate centennial at Festival of Flight. For 11 days in May aviation enthusiasts will turn their attention to Fayetteville, N.C., for the largest planned centennial of flight celebration in the state where the Wright brothers made their first historic trip aloft. NASA will fill a 20,000-square-foot exhibit hall with hands-on aerospace experiences that will culminate in a live satellite hook-up with the International Space Station. More than half-a-million people are expected to attend the Festival of Flight that will run from May 16-26. For more information, contact Kathy Barnstorff at 757-864-9886 or k.a.barnstorff@larc.nasa.gov

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Langley launches experiment on U.S. West Coast. Very small particles in the air called aerosols have the power to change the course of global climate or how much it rains locally. Everyday natural and industrial processes produce aerosols that significantly alter both the local and global environment. To better understand this impact, Langley's atmospheric scientists will launch a field campaign May 19 to June 20, 2003, to test the accuracy of instruments that measure aerosols. Instruments on NASA's DC-8 aircraft will sample dust, sea salt and urban pollution in air masses over the U.S. West Coast during the Langley-led DC-8 Inlet/Instrument Characterization Experiment or DICE. Conducted at NASA's Dryden Flight Research Center, Edwards, Calif., DICE will also support preparations for INTEX-NA or the Intercontinental Chemical Transport Experiment-North America field campaign. Scientists in INTEX-NA, scheduled for summer 2004 and spring 2006, will study the exchange of chemicals and aerosols between the land and the lower atmosphere. For more information, contact Julia Cole at 757-864-4052 or j.h.cole@larc.nasa.gov.

NASA Langley observations improve hurricane forecasts. With the 2003 Atlantic hurricane season starting in June, scientists find NASA observations can significantly improve predictions of both the direction and strength of hurricanes. Moisture measurements collected by Langley's Lidar Atmospheric Sensing Experiment (LASE) instrument can improve computer-predicted estimates of a hurricane's track by 100 kilometers (62 miles) and intensity by 20-25 percent for three-day forecasts. Better forecasts will save money in preparation and evacuation costs as well as increase public confidence in hurricane predictions. The airborne LASE instrument collected the measurements from a DC-8 as the research aircraft flew over, through and around hurricanes Erin, Humberto and Gabrielle during NASA's fourth Convection And Moisture Experiment (CAMEX) in 2001. For more information, contact Chris Rink at 757-864-6786 or c.p.rink@larc.nasa.gov.

NASA working to improve aviation security. NASA researchers are looking at ways to adapt developing aviation technologies to improve aircraft and passenger safety and security. NASA's Aviation Safety and Security Program (AvSSP), managed by Langley Research Center, is focusing on areas where NASA's expertise could make significant contributions to hardening, or increasing the protection of aircraft and their systems; secure air space operation technologies; improved systems to screen passenger and cargo information; and sensors designed to better detect threats. Some of that research will look at an airborne operational concept that would automatically keep airplanes away from national landmarks, security targets and other "protected areas." For information, contact Kathy Barnstorff at 757-864-9886 or k.a.barnstorff@larc.nasa.gov.