Supply and Demand

Boeing CEO James McNerney told Wall Street analysts his chief concern is making sure the company’s supply chain keeps pace with a planned increase in aircraft production by 36% in 2006. McNerney is acutely aware of a supply chain meltdown that struck Boeing in 1997 and forced an embarrassing shutdown of the 747 series assembly line. He is especially concerned about the ability of lower-tier suppliers to meet demanding schedules, which is one reason Boeing refuses to further increase rates next year to make up for a strike by machinists this past September. McNerney says he also plans to outsource more work to offshore sites to help reduce costs.

Predator Goes Public

The Predator unmanned aerial vehicle chalked another first on Nov. 12-13 when U.S. Air Force operators at Creech AFB, Nev., flew the aircraft over the flightline at nearby Nellis AFB during the Aviation Nation air show. Multiple signal relays allowed real-time Predator imagery of spectators at the event and aircraft on static display to be shown on large outdoor video screens. The UAV capped its air show debut both days by making a low-level pass and simulated missile attack, complete with explosions. Predator video clips were webcast via TVWorldwide.

Northern Exposure

The British Defense Ministry has selected RAF Lossiemouth in northern Scotland as the base for its Lockheed Martin F-35 Joint Strike Fighter. The F-35 is known as the Joint Combat Aircraft (JCA) in the U.K., tentatively scheduled to enter service in 2014 to provide the core of the air wing for two new aircraft carriers. To make space for the JCA, in 2013, some Tornado GR4 jets based at Lossiemouth will relocate to nearby RAF Kinloss. The GR4 will remain in service until about 2025. Kinloss will also be the long-term base for the BAe Systems Nimrod MRA4.

FAA Okay

The FAA has approved Frasca International’s Mentor advanced aviation training device (AATD) for use in teaching student pilot maneuvers and procedures as outlined under certain sections of FAR Parts 61 and 141. The Mentor can be used for up to 20 hr. toward an instrument rating, 2.5 hr. for a private pilot license, 50 hr. toward a commercial license and 25 hr. for an Airline Transport Pilot certificate. The AATD can be used for instrument proficiency checks and special training on equipment such as the Garmin G1000 all-glass, fully-integrated avionic suite and the similar Avidyne Entegra system.

Tech Team

India and Russia recently finalized an agreement on military intellectual property rights. The pact, forged between the India-Russian Inter-Governmental Commission on Military Technical Cooperation, will be signed next month when leaders of the two countries meet. The Commission also signed protocols on cooperation for ship building, aviation and land systems. Development and production of a multi-role transport aircraft are under discussion.

Composite Conundrum

Vacuum-Assisted Resin Transfer Molding (Vartm) could provide low-cost and high-volume readily applicable to large-scale structures, including airframes, according to the Center of Excellence for Composites and Advanced Materials (CCAM) at NIAR. Vartm uses an infusion process whereby a vacuum draws resin into a one-sided mold that is covered to form a seal. Experiments, however, have shown that the process does not currently provide sufficient repeatability or control of variability. CCAM officials say variability must be understood before Vartm can be used to produce aircraft parts on a routine basis. Long-term objectives of the research are aimed at achieving repeatability equivalent to conventional autoclave processing, but at a lower cost. The work at CCAM is part of the FAA’s Joint Advanced Materials and Structures Center of Excellence, in cooperation with several universities.

Blowin’ in the Wind

The Composites Laboratory of the National Institute for Aviation Research (NIAR) at Wichita State University, Wichita, Kan., is assembling 10 prototype blades for an experimental wind turbine as part of a joint project with Wetzel Engineering—an aerospace and wind-power company based in Lawrence, Kan. The blades will be used to rotate a small, 6-kw. turbine currently under development by Wetzel using a $750,000 grant from the U.S. Dept. of Energy. NIAR officials expect to complete the 10 blades by the end of this month, followed by testing at NIAR’s Aircraft Structural Testing and Evaluation Center located on the campus of Raytheon Aircraft Co.

Big Brother

As the Boeing Business Jet program breaks the 100 aircraft sales mark, the company is now offering the 737-900ER, designated as the BBJ 3. The interior will have 1,120 sq. ft.—11% more than the BBJ 2—and the airplane will feature five auxiliary fuel tanks and a range of 4,765 naut. mi. Boeing made the announcement at the Dubai air show last week. Customers in the Middle East account for 26% of the BBJ fleet, which consists primarily of BBJ 2s based on the 737-800. The original BBJ uses the 737-700 airframe.

Blade Builder

MD Helicopters (MDH) and Kaman Aerospace Corp. have signed a multi-year agreement whereby Kaman will supply MDH with rotor blades and related dynamics components for the twin-engine MD Explorer. Kaman will provide similar components for other helicopters manufactured by the Mesa, Ariz.-based company. MDH has teamed with DynCorp to compete the Explorer for the U.S. Army’s Light Utility Helicopter program.