

# INDUSTRY OUTLOOK

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## Darpa Vader

A podded radar designed to allow the U.S. Army's General Atomics Sky Warrior unmanned aircraft to track vehicles and people has been flown by Northrop Grumman under the Defense Advanced Research Projects Agency's Vehicle and Dismount Exploitation Radar (Vader) program. Flown on a Britten-Norman Islander testbed, the sensor collected synthetic-aperture radar and ground moving-target indication data that were processed on a ground station to show vehicle motion. The Vader program was launched in 2006 to fly the Hellfire missile-sized radar pod within two years.

## Future Traffic

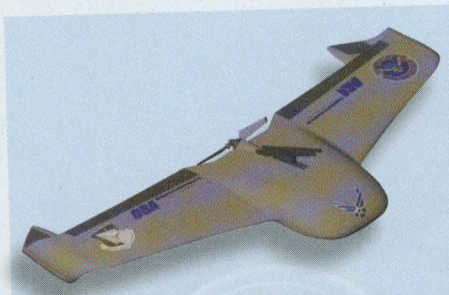
Teams led by Raytheon and Sensis have been awarded 18-month, \$6-million NASA contracts to evaluate the impact that new aircraft types, from very-light jets to supersonic transports, might have on the next-generation air transportation system (NextGen). The two teams will use modeling and simulation to evaluate how the new classes of aircraft could impact air traffic management efficiency, aviation safety and the environment. The studies will provide NASA and its NextGen partners with research and design recommendations. In addition to VLJs and SSTs, the teams will study the impact of unmanned aircraft, super-heavy transports and cruise-efficient short takeoff and landing airliners, as well as new rotorcraft and business aircraft.

## Unison Gets MTU Nod

MTU Aero Engines has tapped Unison Engine Components (formerly Smiths Aerospace Components) to provide flash-butt welded rings for legacy engine programs. Deliveries from Unison's Mountaintop, Pa., facility are to begin next year and run through 2015. Unison specializes in close-tolerance, complex, rotating, thin-wall aeroengine components, particularly flash-welded rings, precision rolling, machining and fabrication.

## Laser Liaison

Elbit and ATK have teamed to develop the Guided Advanced Tactical Rocket-Laser (GATR-L). It's the latest entrant



## DEVILRAY IN THE DETAILS

A flying-wing unmanned air vehicle stable enough to catch a high-voltage power line on the fly, recharge its batteries and continue its mission is being developed by Dayton, Ohio-based Defense Research Associates (DRA) under a contract from the U.S. Air Force Research Laboratory. The DevilRay UAV uses inverse capped-helix winglets to reduce drag and increase lift while also stabilizing the flying wing in pitch and yaw without the need for airfoil reflex or a tail, says DRA. The hand-launched, 6-lb. UAV, which has a 48-in. span, has been flown manually, with autonomous power-line captures planned in about a year. The UAV would find the power line using a magnetometer, clamp on to the high-voltage wire and top up its batteries via inductive charging.

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in the increasingly contested 70-mm. precision rocket sector. GATR-L uses a semi-active laser and builds on insensitive munitions technologies.

## Radar Test Facility

At its Syracuse, N.Y., Radar Systems center, Lockheed Martin has broken ground on a 9,600-sq.-ft. radar test facility to provide it with measurements for large antenna systems. Due to open next summer, the 80-ft.-high structure is an add-on to the existing EP-6 building. It will house a high-precision, spherical near-field test and measurement system for designing, analyzing and characterizing radars in all sizes, including next-generation digital phased arrays. A key component is its electromagnetically-shielded anechoic chamber to suppress potentially interfering external acoustics and frequencies. The facility is being designed and built by MI Technologies of Suwanee, Ga., under a \$9.9-million contract.

## Arrowhead in Arizona

And in Arizona, Lockheed Martin's Missiles and Fire Control Arizona Support Center opened this month in Gilbert. The facility supports special electron-optical repair, modification and testing for legacy and modernized target acquisition designation sight/pilot night-vision sensors known as Arrowhead.

## Merging Flow

The U.S. Federal Trade Commission has accepted a consent decree for Flow International Corp., which makes high-pressure industrial waterjet cutting machines—some of Boeing's 787 composite airframe suppliers are clients—to merge with Omax Corp., which makes abrasive jet systems for general machine shop and manufacturing uses. Both are located in Kent, Wash., a suburb of Seattle. The decree allows Flow to make available to other abrasive waterjet companies royalty-free licenses to specific Omax patents relating to the controllers used in waterjet cutting systems.

## GE Connects in Singapore

GE Aviation has expanded its connections with Singapore Technologies Aerospace through an agreement that includes maintenance, repair and overhaul and on-wing support of GE engines, engine material services, parts and accessory repairs. The agreement calls for GE to support STAero's development in all these fields at its facilities in the Americas, the Asia-Pacific region and Europe. In a related contract, CFM International—a GE-Snecma partnership—has signed a 10-year agreement with STAero for MRO operations on the CFM56-3/5B and 7/B engines.

## Deflate-the-Euro Plea

On July 10, EADS CEO Louis Gallois, Diehl Aerosystems President Rainer Ott and Francois Gayet, secretary general of the Aerospace and Defense Industries Assn. of Europe (ASD) met with European Central Bank President Jean-Claude Trichet to express concern over the impact of the faltering dollar on industry competitiveness. To date, Trichet has remained deaf to entreaties from politicians and business executives that the bank take steps to devalue the euro.