



Air Force Association **Technology**

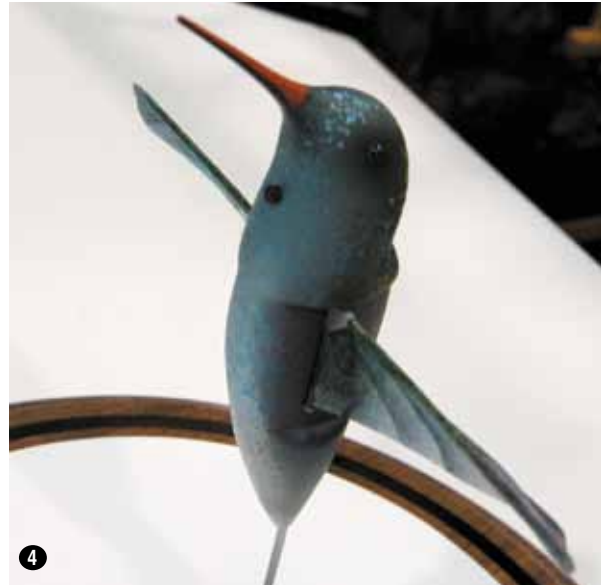
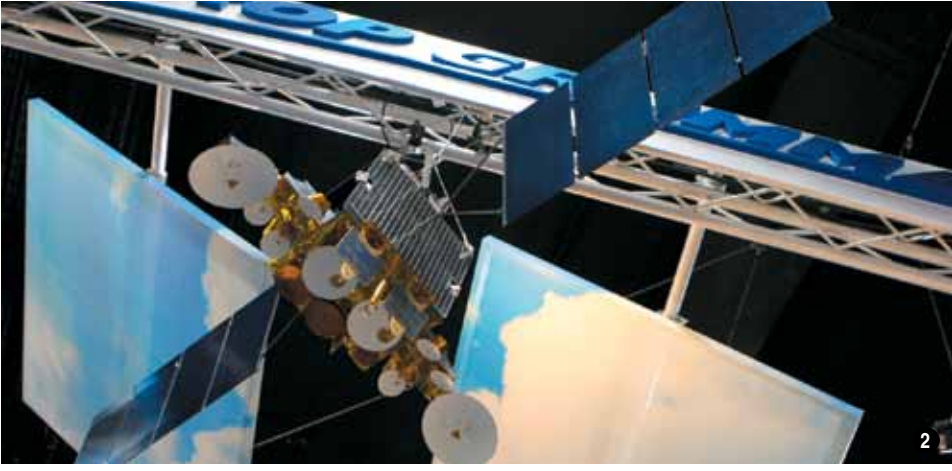
Aerospace technology of the highest order was on display at AFA's annual showcase.

Attendees at the 2011 AFA Technology Exposition were treated to displays of a broad range of equipment offered in anticipation of USAF's future needs, as well as personal gear and services ranging from small arms to insurance products. **1** Finmeccanica displayed its C-27J, now in deliveries to the Air National Guard. **2** Chief of Staff Gen. Norton Schwartz (l) chats with Capt. Ed DeFalcon and SMSgt. Robert DiResta (r) of the New York Air National Guard's 105th Airlift Wing. **3** Coached by Northrop Grumman's Philip Edwards, Maj. Matthew Hannon, aide to USAFE chief Gen. Mark Welsh, gets a feel for the F-35's Distributed Aperture System. **4** Models of Northrop Grumman's RQ-4 Global Hawks, E-8 JSTARS, and B-2 bomber soar above the heads of visitors.



Exposition 2011

Photos by Guy Aceto



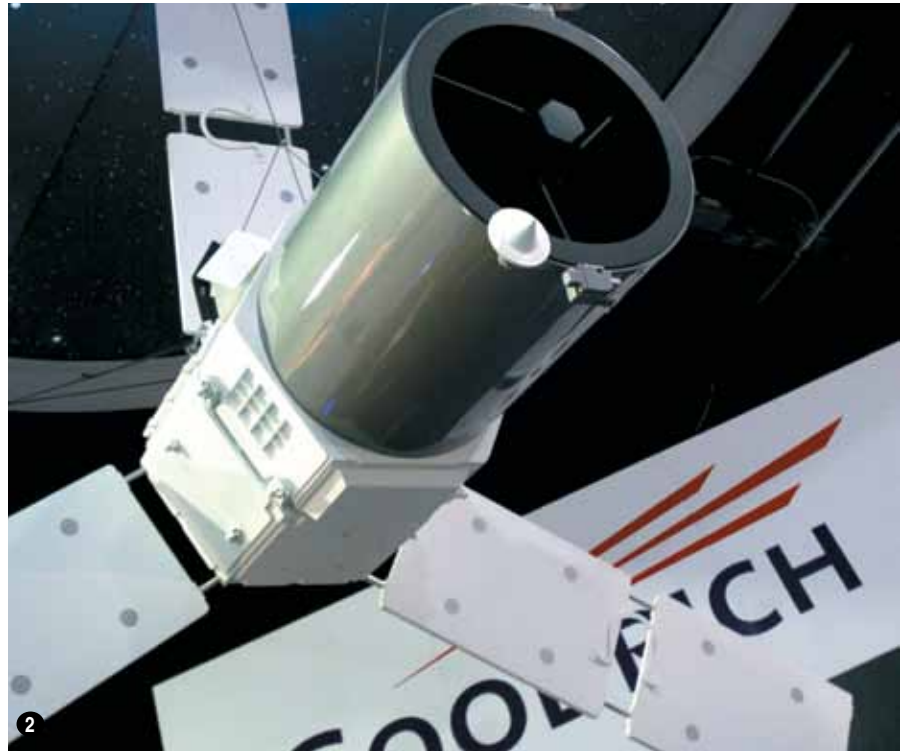
111 A massive model of a special operations MC-130J Combat Shadow II graced the exhibit hall entrance. *121* Northrop Grumman's Advanced Extremely High Frequency spacecraft is USAF's next generation tactical relay satellite. *131* A model of Eurocopter's EC 725 Cougar, shown in a special operations/rescue configuration. *141* AeroVironment's Nano Hummingbird demonstrates how small reconnaissance aircraft are getting. This one, developed under a Defense Advanced Research Projects Agency project, can peek in windows three stories above ground.



111 Many exhibitors displayed offerings for USAF's upcoming T-X competition to replace the T-38. To save on development, USAF will likely choose an off-the-shelf aircraft. BAE Systems brought this trailer, bedecked with artwork, to show off the qualities of its Hawk trainer. 121 The ORS-1 satellite from Goodrich offers a highly sensitive electro-optical and infrared sensor system.



131 Mini- and micro-remotely piloted aircraft appeared at many booths in the expo. MSgt. Rick Bouwhuis, MSgt. James Nordin, and TSgt. Mike Galbraith examine an Aurora Flight Sciences lightweight RPA. 141 ATK showed this Darth Vader-like helmet and aircrew protection system.





111 MSgt. Alan Beltz (rear), an MH-53 Pave Low veteran, checks out an AgustaWestland AW139, one of the full-scale aircraft displayed at the expo, with Lieutenant Christopher Thomas in the right seat. 121 Lighter-than-air concepts are gaining interest in the lift community. Here, Maj. Glen Roberts and Maj. Mike Andrews, both from Air Mobility Command headquarters at Scott AFB, Ill., look over an Aeros concept for a heavy lifter with Munir Jojo-Verge, aerospace-flight control systems engineer for the company.



131 Gen. Gary North (r), head of Pacific Air Forces, greets noted aviation artist Keith Ferris, who autographed posters of his latest F-35 painting, as William Begert, Pratt & Whitney's vice president of military business development and after-

market services (center), and Jim Reed, P&W's director of advanced engine programs, look on. 141 Some Air Force agencies also displayed at the expo. As part of the Chief of Staff Team Excellence Awards competition, the Air Force Evasion and

Conduct team brought this diorama of an airman confined in a barbed-wire cage. The diorama illustrated the plight of POWs and MIAs from a number of conflicts and discussed the Air Force Code.



111 The European Aeronautic Defense and Space Co. booth displayed an A400M airlifter model in USAF livery. **121** AgustaWestland's AW139 is visited by "Huff," an ambassador of Paws for Purple Hearts. The program helps injured troops in two ways: Those with post-traumatic stress disorder train dogs to serve as helpers for disabled vets.



131 A1C Jamie Richter of Ramstein Air Base's Cyber Animals Team talks with Schwartz as Maj. Gen. Duane Jones, director of resource integration for USAF's installations and logistics directorate, looks on. Richter's team won a Chief of Staff Excellence Award. **141** Cobham's TeleMAX robot, used for explosive ordnance disposal missions, demonstrates its utility by fetching an ice cream treat for a visitor.

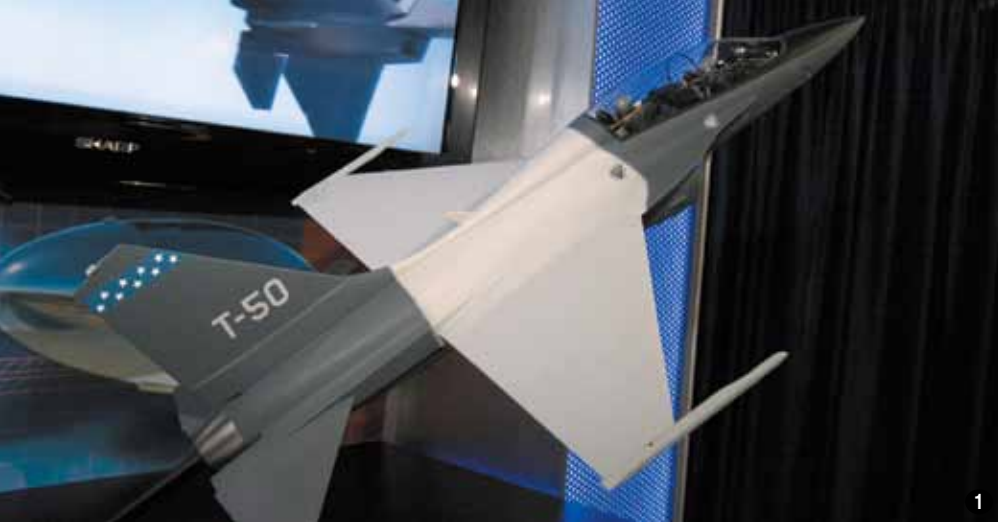


111 Alenia North America is offering its T-100 tandem jet aircraft and Integrated Training System for the upcoming T-X competition. The program to replace the T-38 is the only new small jet aircraft project on USAF's books in the coming years. 121 Col. John Quintas, 48th Fighter Wing commander, has his copy of Bury Us Upside Down signed by Paul Robinson, Misty 45. A seminar about the Misty FACs at the conference served to rally many veterans of the campaign for a reunion. Retired Gen. Ronald Fogleman, former Chief of Staff, accepted an AFA award on behalf of the group.



131 AgustaWestland showed a minty new AW139, with just 100 hours of flight time. Chaff and flare dispensers are prominent at the goodbye end. The full-size aircraft is vying for USAF's Common Vertical Lift Support Platform, which seeks to replace Vietnam-era UH-1 Hueys for

several missions. 141 The Joint Program Office for Chemical and Biological Defense displayed this and other aircrew defensive ensembles.



11 Lockheed Martin is also entering the T-X fray, with the T-50. The weapons-capable trainer, which bears a strong resemblance to the F-16, is the product of a partnership with Korea Aerospace Industries. South Korea operates both the F-16 and the T-50. 121 Maj. Brian Stahl of the Air Staff, who works on F-22 and F-35 issues, takes a turn at a BAE Systems cockpit simulator. Stahl was previously an F-22 demo pilot.

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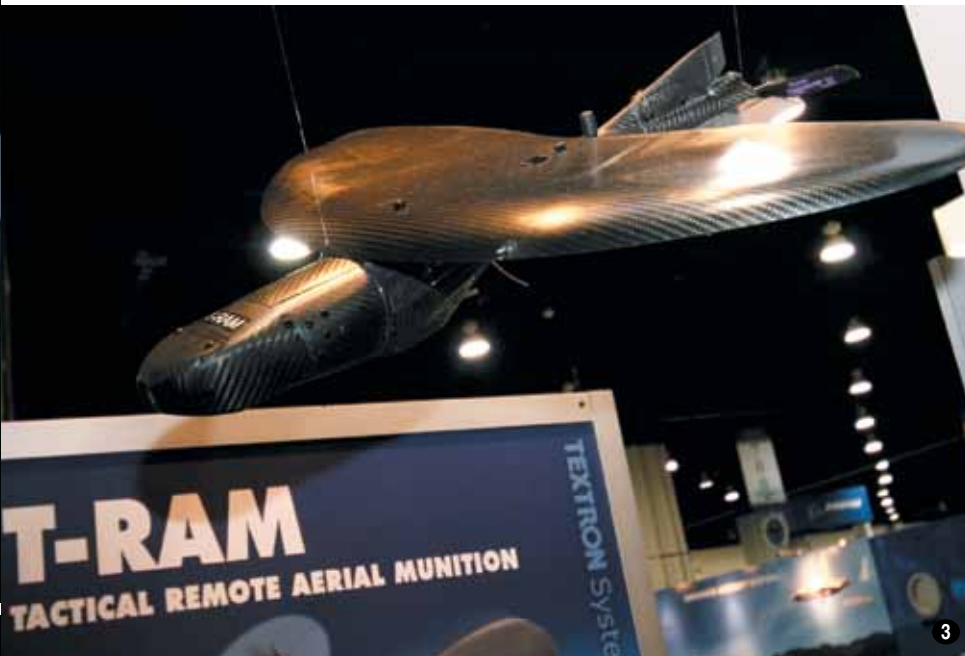


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13 Goodrich's booth emphasized sensors and intelligence, surveillance, and reconnaissance products. 14 Lockheed Martin erected a full-size TPS-79 Expeditionary Air Surveillance Radar in the exhibit hall. It can be operated from a mobile shelter or a remote site. Ample space in the exhibit hall makes possible large displays such as this.



11 This F-35 model in Royal Air Force markings dominated the MBDA exhibit. It carries a formidable array of MBDA weapons, including the ASRAAM and Meteor air-to-air missiles and the Taurus air launched cruise missile. *12* Lockheed Martin reminded attendees of its status as USAF's current fighter-maker with these large F-22 and F-35 models, which seemed to circle around each other. *13* Textron showed a full-scale remotely piloted attack aircraft called the Tactical Remote Aerial Munition. The T-RAM can carry grenades and can hit fixed or moving targets. It unfolds from a tube launcher. *14* Air National Guard Director Lt. Gen. Harry Wyatt (center) listens to exhibitors at Beechcraft, among them Jay Gibson (l). Dozens of Air Force officials toured the exhibit hall, many from the Air National Guard, USAF headquarters, and Air Force Materiel Command. ■