Aerospace Technology Exposition

The Air Force Association's Aerospace Technology Exposition featured nearly 130 exhibitors, this year.
The BAE Systems booth (at left) illustrates the international flavor evident among exhibitors, whose displays covered more than an acre of floor space. Below, visitors to the EADS booth found a MiG-29 model alongside a model of the new Eurofighter. EADS customers include many European air forces as well as USAF.





Staff photos by Guy Aceto

The Joint Strike Fighter caused a lot of buzz at this show, with competing contractors Lockheed Martin and Boeing promoting their new technologies. Boeing introduced visitors to its system through a notional JSF cockpit, complete with cueing and tracking on the inside of the helmet's visor.





At left, Capts. Dexter Harrison and Gary Town listen to Lockheed representative Johnny Walther explain what the company has to offer the future force. Harrison, from Langley AFB, Va., is chairman of AFA's Junior Officer Advisory Board and Town, from Hurlburt Field, Fla., is a board member. Exposition guests—who numbered nearly 8,500—could also learn about Lockheed's products and services on their own, through laptop computers set up on informal cafe style tables.



dental technican from Langley, signs up to receive more information from one of the exhibitors.





Above, James Callahan, a member of AFA's Audit Committee, speaks with a representative from EADS—CASA, a first-time exhibitor this year.
The Martin—Baker booth, at left, featured several ejection seats, prompting AFA's "All—American Airman" John Alison (right) to tell stories about not using an ejection seat—or even seat belts, for that matter. Joining the AFA national director emeritus at the exhibit are (I-r) William Burdeshaw and Eugene Deatrick.



Aerea S.p.A. from Milan, Italy, displayed its multifunction rail launcher, touted by a company representative as "the most important piece of equipment between the airplane and the weapon." Below, Brig. Gen. Tibor Kiss, Hungarian air attaché, was one of the many international visitors to the three-day event.



Warfighter training personnel from the Air Force Research Laboratory, Human Effectiveness Directorate, linked UAV imagery and F-16 and A-10 simulators at their exhibit with Joint STARS, AWACS, and RAF Tornados in a virtual and realtime environment. At right, between battles visitors get up close to this virtual world. A-10 pilot Maj. Guy Schmidt from the Research Lab gives pointers to Patty Saunders of Rolls Royce North America.





The section devoted to units that entered the Air Force Chief of Staff Excellence Award program is always a highlight. Here, USAF Chief of Staff Gen. Michael Ryan visits with some members of the 109th Airlift Wing (ANG) Team Antarctica, from Schenectady County Airport, N.Y.
The Aerospace Technology Exposition focuses on the best of the best and offers attendees a chance to catch up on the latest technology.

Aerospace Exhibitors in Review Companies represented at the AFA Aerospace Technology Exposition

3M Federal Systems/3M Aerospace and Aircraft Maintenance Department Bonding, joining, and fastening systems, high-performance structural adhesives, paint solutions, and much more.

AAR Cadillac Manufacturing Leading supplier of mobility systems and components for DoD, government agencies, and commercial customers.

ACCOM Real-time nonlinear editor, used to edit Unmanned Aerial Vehicle video imagery

AEREA S.p.A. Specializes in design, development, production, maintenance, and integrated logistic support of aircraft armament equipment.

Aeronautical Systems Center Develops, acquires, modernizes, and sustains the world's best aerospace systems.

Airborne Laser DoD's highest technology and most revolutionary weapon. Air Force Flight Test Center

Air Force History Support Office Commemorating the 50th anniversary of USAF's participation in the Korean War, 1950-53.

Air Force Intelligence Agency The single agency for the performance of Air Force-wide intelligence roles and functions.

Air Force Junior ROTC World's largest aerospace education organization. Air Force Materiel Command AQ Acquistion reform in the Air Force.

Air Force Research Laboratory The latest Air Force technologies with applications in directed energy.

Air Force Research Laboratory, Human Effectiveness Directorate, Warfighter Training Research Division, Mesa, Ariz. Real-time "Training for Dynamic Aerospace Control."

Air Force Weather Agency Develops doctrine, policy, requirements, and standards for weather support.

Alenia Marconi Systems, Inc. USA center for the development of air-tosurface guided weapons, support equipment, and instrumented training range

Anderson Fine Scale Replicas Museum-quality model replicas of aircraft, helicopters, and prototypes. **Armed Forces Bank** "Your Hometown Bank Around the World."

Armed Forces Benefit Association Multifinancial services company offering insurance, banking, and investment products.

Armed Forces Journal International

Army and Air Force Mutual Aid Association A nonprofit organization that provides high-quality, low-cost life insurance values.

Arnold Engineering Development Center World's most advanced and largest complex of flight simulation test facilities.

Atlantic Research Corp. Designs and builds propulsion systems for a range of uses in commercial, space, and military projects.

AVPRO-Avionics Production Division, Robins AFB, Ga. Explicates how the Air Logistics Centers—and avionics—contribute toward the DoD mission.

BAE Systems Offers a range of sophisticated state-of-the-art electronic systems to meet airborne operational requirements from sensor to shooter.

Bell Helicopter Textron, Inc. World's leading manufacturer of vertical flight aircraft for commercial and military customers.

Belleville Shoe Manufacturing Co. A full line of military-style boots. Boeing Co., The World's largest manufacturer of commercial jetliners and military aircraft; provides related services worldwide

Booz•Allen & Hamilton A global leader in management and technology consulting.

Butler Manufacturing Co. World's leading manufacturer of metal buildings and provider of related construction services.

California Industrial Facilities Resources, Inc. A leading manufacturer of rapid deployable military shelters for USAF bare base program and NATO forces.

CDI Technical Services Provider of engineering support and proposal development services, technical staffing, and telecommunications solutions. Cessna Aircraft Co. The premier manufacturer of light and midsize aircraft.

Compaq Computer Corp. The broadest array of products and computing expertise in the industry.

CRM Learning Helps government agencies improve quality and create more productive employees.

Dayton T. Brown A broad range of engineering and testing support in aircraft structures, armament systems, life support systems, and components.

Defense Acquisition University (Defense Systems Management College) Offers DoD acquisition corps a broad range of resident and online courses, publications, and facilities around the country.

Defense Information Systems Agency Provides innovative and integrated information services that provide a fused picture of the battlefield.

Defense Logistics Agency

Defense News A weekly newspaper for defense professionals.

Dowty Aerospace Provides technology solutions to major aircraft and engine manufacturers

DRS Photronics Manufacturer of modern common boresighting systems for both rotary and fixed wing aircraft.

Druck, Inc. Manufactures pressure measurement systems.

 $\textbf{Dupont Co.} \ \textbf{The technology leaders in life protection systems providing flame}$ resistance and ballistic resistance.

DynCorp Technical Services, Inc. Provides on-site aircraft and ground equipment maintenance and modifications as well as logistics and automated management systems.

E.H. Industries The EH101 is the most technologically advanced helicopter in production today.

EADS-CASA Aircraft USA, Inc. Supporting the marketing and sales operation for the military transport aircraft business unit of North America.

EADS Deutschland GmbH Design, manufacture, and support of military and training aircraft.

EDO Marine and Aircraft Systems Suspension and release equipment used to carry internal and external stores on fighter aircraft.

Flight International Weekly magazine for aerospace professionals.

Flight Refueling, Ltd., and Sargent Fletcher, Inc. Underwing cargo pod and common rail launchers

Galaxy Aerospace Co. Markets and supports the Astra SPX transcontinental business jet and the Galaxy intercontinental business jet.

GE Aircraft Engines Engine programs of today's United States Air Force. General Atomics/General Atomics Aeronautical Systems, Inc. Capabilities

in UAVs, advanced repair technologies, and much more. Government-Industry Exchange Program A government-wide system for exchanging technical information between government agencies and contrac-

tors about nonconforming products. Gulfstream Aerospace Corp. Designs, develops, manufactures, and markets intercontinental business jet aircraft.



Gen. Lester Lyles (left), commander of Air Force Materiel Command, enjoys chatting with Col. Jerry Straw, chief of the Warfighter Training Research Division at the Air Force Research Lab. The Aerospace Technology Exposition has been a part of AFA's National Convention since 1964.

A class of cadets from the Colombian air force academy came to the exposition. Here, two of them listen to Mai. Steve Smiley explain the Air Force Airborne Laser program. Special guests from foreign air forces included a class from the Inter-American Defense College and New Zealand's Chief of the Air Staff, Air Vice Marshal Donald M. Hamilton.



Honeywell Global provider of integrated avionics, engines, systems, and service solutions for aircraft manufacturers, military, space, and airport opera-

Hughes Space and Communications A major provider of space systems to US government.

Innovative Concepts, Inc. Tools based on Improved Data Modern technology. Innovative Solutions & Support, Inc. RVSM-compliant air data systems: fuel quantity and flow measurement instruments; and other products.

Jane's Information Group Delivers impartial intelligence for defense security and transportation professionals.

Joint Program Office for Biological Defense Principal advocate and single point of contact for all biological detection and vaccine acquisition efforts for DoD

Kauai Economic Development Board Supports, along with its member businesses, the Pacific Missile Range Facility at Barking Sands, Hawaii—the lead range for Navy theater ballistic missile defense testing.

Kerrigan Media Intl., Inc. Publisher of military information technology and other trade magazines.

Kwajalein Missile Range The US Army's premier missile test range. L-3 Communications A leading merchant supplier of secure communications systems and products.

Litton Industries

Advanced Systems Electronic warfare receivers for rapid passive threat radar geolocation, radar warning, targeting, and situational awareness

Data Systems Latest correlation fusion engine; single integrated air picture; theater air control system.

Guidance and Control Systems Smart multifunction displays and the ring laser inertial navigation system and fiber-optic inertial navigation system. TASC, Inc. Providers of high-end information technology solutions.

Lockheed Martin A global enterprise engaged in research, design, development, manufacture, and integration of advanced technology systems, products, and services.

maingate.com Online quality-of-life network for military communities. Martin-Baker Aircraft Co., Ltd. US16B ejection seat being developed for the Joint Strike Fighter.

Military.com Offers members daily service-specific news, extensive resources, and unique online services.

Military Retirement Center, The Financial planning for military retirement. Miltope Corp. Design, development, and production of complete line of rugged computer products for commercial, industrial, airborne, and military applications.

Minolta-QMS, Inc. Develops and manufactures document-imaging solutions for demanding applications.

Motorola, Inc. Provides integrated communications solutions and embedded electronic solutions for military programs.

National Imagery and Mapping Agency Provides timely and accurate imagery, intelligence, and geospatial information in support of the nation's military, policy-makers, and civil users.

Northrop Grumman Corp. Provides technologies and core competencies in systems integration, defense electronics, and information technology. Orbital, Fairchild Defense Contractor in the design, development, production, integration, and test of advanced digital electronics and avionics systems. Pacific Missile Range Facility Supports a wide variety of exercises and development tests involving space, air, surface, and subsurface units. Parker Aerospace Designs, manufactures, and services hydraulic, fuel, and pneumatic components.

Pentagon Federal Credit Union One of the largest and safest credit unions

serving Army, Air Force, and DoD personnel worldwide.

Pratt & Whitney A United Technologies Company.

P&W Canada Full-scale PT6 cutaway engine.

P&W Military Engines Military engines F100, F119, JSF119, and the F117. P&W Space Propulsion Designs, develops, tests, and supports space propulsion systems, providing industry with solid, liquid, and hypersonic propulsion.

Rafael USA, Inc. Python 4 air-to-air missile; Have Lite air-to-ground missile for single cockpit; Litening II day/night navigation targeting pod for fighter aircraft. **Raytheon Co.** Air-to-air missiles, AIM-9 Sidewinder, AMRAAM, Strike system—HARM, HARM Targeting System, JSOW, Maverick, Paveway laser-guided bomb, JSF sensor suite, AESA radar, ATFLIR system.

Rolls Royce North America A global company providing power on land, sea, and air

Saab AB Gripen aircraft and the BOL airborne countermeasures dispenser system.

Smiths Industries Aerospace Flight management system which leads the way for Global Air Traffic Management.

TEAC America World's leading supplier of mil-qualified airborne video recorders for military and aerospace.

Teal Group Corp. Forecasts developments in the aerospace/defense industry for strategic planners, market researchers, and business executives.

Team SBL IFX Program designed to advance and assess feasibility of developing and deploying a space-based laser missile defense and its required technologies.

Textron Systems Smart warfare solutions. Anti-combat vehicle, area coverage munitions, sensor fuzed weapon, and JSOW; JDAM and AIM-9X control systems; airborne surveillance and UAV payloads.

Themis Computer OEM supplier of single board computers and systems based on Sun ultraSPARC technology for the embedded systems market. Thiokol Propulsion World's leading solid propellant rocket developer and manufacturer

Toys and Models Corp. Aerospace display models for promotional purposes, awards, gifts, and collectibles.

Trimble Navigation Industry leader in SAASM and GRAM compliant receiver development.

TRW, Inc. Advanced space and software systems and technologies for spacebased surveillance, communications, and remote sensing; command and control; national missile defense; and directed energy.

US Army Corps of Engineers

Ultra Electronics A leader in design, manufacture, and support of miniature air compressors for military aircraft.

United Technologies Corp. Provides broad range of high-technology products and support services to the building systems and aerospace industries. **US Army Space and Missile Defense Command**

USAA Services offered include auto and property insurance, life and health insurance, investments, banking services, and travel and merchandise services. USAF Joint Direct Attack Munitions Office JDAM provides an improved, autonomous, adverse weather, aerial delivery capability for existing warheads. VSI/USAF ASC/SMH JHMCS VSI is designer and producer of the Joint Helmet Mounted Cueing System selected for F-15, F-16, F/A-18, and F-22 aircraft

Wah Chang, an Allegheny Technologies Co. Produces hafnium, niobium, titanium, vanadium, and zirconium alloys in mill product forms and custom

W.L. Gore & Associates Gore-Tex products: head-to-toe weather protection. WorldCom Government Markets A leader in providing advanced telecommunication solutions worldwide.

Z Microsystems Ruggedized, field-ready, deployable computing solutions.