

# 2011 North Carolina Aerospace Supplier Conference



## SHERATON GREENSBORO – JOSEPH S. KOURY CONVENTION CENTER

IMPERIAL BALLROOM

AUGUST 24, 2011

8:30 AM – 6:30 PM

CO-HOSTED BY SENATOR RICHARD  
BURR, NORTH CAROLINA AEROSPACE  
ALLIANCE (NC AA) AND NORTH  
CAROLINA MILITARY BUSINESS  
CENTER (NCMBC)

### KEYNOTES:

SENATOR RICHARD BURR

LT. GEN. MARK D. "SHACK" SHACKELFORD,  
MILITARY DEPUTY, OFFICE OF THE ASSISTANT  
SECRETARY OF THE AIR FORCE FOR ACQUISITION

BARRY ECCLESTON,  
CEO/PRESIDENT AIRBUS AMERICAS

JEFF KRUKIN,  
FORMER EXECUTIVE DIRECTOR OF SPACE  
FRONTIER FOUNDATION

PETE BUNCE,  
CEO/PRESIDENT GENERAL AVIATION  
MANUFACTURERS ASSOCIATION

## Welcome to the 2011 North Carolina Aerospace Suppliers Conference

Thank you for attending the 2011 North Carolina Aerospace Suppliers Conference co-hosted by Senator Richard Burr, the North Carolina Aerospace Alliance (NC AA) and the North Carolina Military Business Center (NCMBC). The goal for this conference is simple. We want to promote and grow our aerospace industry by bringing together North Carolina users, purchasers, manufacturers, and suppliers. Through education and networking, we want to share "best practices" in order to provide job growth, financial stability, and a stronger industry in our state. We hope that your day is informative, productive and enjoyable.

Sincerely,



Ray Jones  
NC Aerospace Alliance



Scott Dorney  
NC Military Business Center

### Senator Richard Burr

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On January 4, 2005, Richard Burr was sworn-in to serve North Carolina in the United States Senate.

Elected to the U.S. House of Representatives in 1994, Richard is committed to promoting job growth by working to restore a vibrant economic environment in North Carolina. He is a vocal advocate for our men and women in the military and their families, and for the growing population of veterans across North Carolina.

In the Senate, Richard serves as Ranking Member of the Senate Veterans' Affairs Committee where he works to improve the quality of health care and services our nation's veterans receive. He also sits on the Health, Education, Labor, and Pensions Committee; the Intelligence Committee; and the Finance Committee.

The son of a minister, Richard and his family moved to Winston-Salem, North Carolina when he was a young child. After graduating from Wake Forest University, he began his career far from the halls of Congress by spending seventeen years in business with Carswell Distributing, a wholesale commercial products company.

He currently serves as a Board Member of Brenner Children's Hospital.

Richard and his wife, Brooke, have two sons.



# 2011 North Carolina Aerospace Suppliers Conference

8/24/2011

Koury Convention Center, Greensboro, NC

7:30 AM	Registration, Check-In, Trade Show Set-Up, Coffee		8:30 AM
8:30 AM	Conference Opening - Ray Jones (NC Aerospace Alliance), Scott Dorney (NC Military Business Center)		8:35 AM
8:35 AM	Welcoming Remarks - NC Deputy Secretary of Commerce Dale Carroll		8:45 AM
8:45 AM	Opening Keynote - U.S. Senator Richard Burr		9:00 AM
9:00 AM	"Trends in Defense Aerospace" Lt. Gen. Mark D. "Shack" Shackelford, Military Deputy, Assistant Secretary of the Air Force for Acquisition		9:40 AM
9:40 AM	Morning Break/Networking		10:00 AM
10:00 AM	"Trends in Commercial Aerospace" Mr. Barry Eccleston, CEO Airbus Americas		10:40 AM
10:40 AM	Panel Discussion - <i>Aerospace Workforce Training at NC Community Colleges</i> Moderators: Maureen Little (NCCCS) and Dave Drugman (Honda)		11:10 AM
11:10 AM	Trade Show/Exhibits Begin		12:00 PM
12:00 PM	Buffet Lunch - Luncheon Remarks  "Trends in Commercial Space," Jeff Krukin Former Executive Director of the Space Frontier Foundation  "Trends in General Aviation Manufacturing," Pete Bunce, President & CEO General Aviation Manufacturers Association, Washington, DC		1:00 PM
1:00 PM	<b>Prime Contractor Presentations</b> <i>"Top Supply Chain or Workforce Headaches"</i> TIMCO, Honda, Triumph Aerospace, AAR	Trade Show/Exhibits	1:50 PM
1:50 PM	Trade Show/Exhibits		2:30 PM
2:30 PM	<b>International Trade/Export Opportunities</b>	Trade Show/Exhibits	2:55 PM
2:55 PM	Trade Show/Exhibits		3:30 PM
3:30 PM	<b>Prime Contractor Presentations</b> <i>"Top Supply Chain or Workforce Headaches"</i> Curtiss Wright, General Dynamics ATP, Goodrich, Turbomecca, GE Aviation	Trade Show/Exhibits	4:20 PM
4:20 PM	Trade Show/Exhibits		6:30 PM
6:30 PM	Adjourn - Exhibitor Break Down		7:00 PM

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## BIOGRAPHY

### UNITED STATES AIR FORCE

#### LIEUTENANT GENERAL MARK D. "SHACK" SHACKELFORD

Retiring effective Oct 31, 2011.

Lt. Gen. Mark D. "Shack" Shackelford is the Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition, the Pentagon, Washington, D.C. He is responsible for research and development, test, production, and modernization of Air Force programs worth \$40 billion annually.

General Shackelford entered the Air Force in 1977 as a distinguished graduate of the U.S. Air Force Academy. He has more than 2,700 flight hours in 40 aircraft types with operational experience in the F-4 and F-16. The general was an experimental test pilot in the F-16 and the first Air Force pilot to fly the YF-22 Advanced Tactical Fighter prototype. He managed the F-22 Cockpit Development Program and directed the T-38, F-5, F-16 and F-22 programs. The general commanded a test squadron at Ogden Air Logistics Center, Hill Air Force Base, Utah, and the test wing at the Air Armament Center, Eglin AFB, Fla. He also served as Deputy, Test and Assessment, for the Missile Defense Agency, and then Director of Plans and Requirements, Headquarters Air Force Space Command, Peterson AFB, Colo. Prior to his current assignment, he was the Director, Global Power Programs, Office of the Assistant Secretary of the Air Force for Acquisition, Headquarters U.S. Air Force, Washington, D.C



General Shackelford holds Department of Defense Acquisition Corps Level III certifications in Test and Evaluation; Program Management; and Systems Planning, Research, Development and Engineering. He holds master level certification in the Space Professional Development Program. The general is a distinguished graduate of undergraduate pilot training, F-16 Fighter Weapons School and the U.S. Air Force Test Pilot School.

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#### EDUCATION

1977 Bachelor of Science degree in astronautical engineering, U.S. Air Force Academy, Colorado Springs, Colo.

1977 Squadron Officer School, by correspondence

1984 F-16 Fighter Weapons School, Nellis AFB, Nev.

1985 Air Command and Staff College, by correspondence

1987 U.S. Air Force Test Pilot School, Edwards AFB, Calif.

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1990 Master of Science degree in mechanical engineering, California State University, Fresno  
1991 Program Management Course, Defense Systems Management College, Fort Belvoir, Va.  
1995 Air War College, Maxwell AFB, Ala.  
2000 Defense Systems Management College, Fort Belvoir, Va.  
2000 Advanced Management Program, Carnegie-Mellon University, Pittsburgh, Pa.  
2008 Program for Executives in Logistics and Technology, University of North Carolina at Chapel Hill  
2008 Enterprise Leadership Seminar, University of North Carolina at Chapel Hill

## ASSIGNMENTS

1. November 1977 - October 1978, student, undergraduate pilot training, Columbus AFB, Miss.
2. November 1978 - February 1979, student, fighter lead-in training, 436th Tactical Fighter Training Squadron, Holloman AFB, N.M.
3. February 1979 - September 1979, student, F-4 training, 306th Tactical Fighter Training Squadron, Homestead AFB, Fla.
4. September 1979 - November 1980, F-4E aircraft commander, 68th Tactical Fighter Squadron, Moody AFB, Ga.
5. December 1980 - August 1981, F-4D aircraft commander, 80th Tactical Fighter Squadron, Kunsan Air Base, South Korea
6. January 1982 - July 1982, F-16 fighter pilot, 35th Tactical Fighter Squadron, Kunsan AB, South Korea
7. August 1982 - June 1986, F-16 instructor pilot, and weapons and tactics officer, 72nd Tactical Fighter Training Squadron, MacDill AFB, Fla.
8. July 1986 - June 1987, student, U.S. Air Force Test Pilot School, Edwards AFB, Calif.
9. July 1987 - September 1987, experimental test pilot, 6512th Test Squadron, Edwards AFB, Calif.
10. September 1987 - March 1989, experimental test pilot, F-16 Combined Test Force, Edwards AFB, Calif.
11. March 1989 - January 1991, YF-22A project test pilot, Advanced Tactical Fighter Combined Test Force, 6511th Flight Test Squadron, Edwards AFB, Calif.
12. January 1991 - June 1991, student, Defense Systems Management College, Fort Belvoir, Va.
13. August 1991 - August 1993, Chief, Cockpit Integrated Product Team, F-22 System Program Office, Wright-Patterson AFB, Ohio
14. August 1993 - June 1994, Commander, 514th Flight Test Squadron, Hill AFB, Utah
15. July 1994 - June 1995, student, Air War College, Maxwell AFB, Ala.
16. July 1995 - August 1997, Director, Fighter and Trainer Directorate, San Antonio ALC, Kelly AFB, Texas
17. August 1997 - August 1999, Commander, 46th Test Wing, Eglin AFB, Fla.
18. August 1999 - June 2000, Deputy Director, Directorate of Plans and Programs, Headquarters Air Force Materiel Command, Wright-Patterson AFB, Ohio
19. June 2000 - May 2002, Director, F-16 System Program Office, Aeronautical Systems Center, Wright-Patterson AFB, Ohio
20. May 2002 - November 2002, Director, F-22 SPO, ASC, Wright-Patterson AFB, Ohio
21. November 2002 - January 2003, special assistant to the Commander, ASC, Wright-Patterson AFB, Ohio
22. February 2003 - May 2005, Deputy, Test and Assessment, Missile Defense Agency, Office of the Secretary of Defense, Washington, D.C.
23. May 2005 - April 2007, Director of Plans and Requirements, Headquarters Air Force Space Command, Peterson AFB, Colo.
24. April 2007 - October 2008, Director, Global Power Programs, Office of the Assistant Secretary of the Air Force for Acquisition, Headquarters U.S. Air Force, Washington, D.C.
25. October 2008 - present, Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition, the Pentagon, Washington, D.C.

## SUMMARY OF JOINT ASSIGNMENTS

1. February 2003 - May 2005, Deputy, Test and Assessment, Missile Defense Agency, Office of the Secretary of Defense, Washington, D.C., as a brigadier general

## FLIGHT INFORMATION

Rating: Command pilot

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Flight hours: More than 2,700

Aircraft flown: F-4, F-16 and 40 aircraft types

## **MAJOR AWARDS AND DECORATIONS**

Distinguished Service Medal

Defense Superior Service Medal

Legion of Merit with oak leaf cluster

Meritorious Service Medal with three oak leaf clusters

Air Medal with two oak leaf clusters

Joint Service Commendation Medal

Air Force Commendation Medal with two oak leaf clusters

## **OTHER ACHIEVEMENTS**

1977 Outstanding Cadet in Astronautical Engineering, U.S. Air Force Academy

1978 Air Training Command Commander's Trophy, Undergraduate Pilot Training

1978 Orville Wright Achievement Award, Order of Daedalians

1987 Liethen-Tittle Award, U.S. Air Force Test Pilot School

1988 Lieutenant General Bobby Bond Memorial Aviators Award

## **EFFECTIVE DATES OF PROMOTION**

Second Lieutenant June 1, 1977

First Lieutenant June 1, 1979

Captain June 1, 1981

Major March 1, 1988

Lieutenant Colonel July 1, 1991

Colonel Feb. 1, 1995

Brigadier General April 1, 2002

Major General Nov. 1, 2005

Lieutenant General Oct. 6, 2008

(Current as of July 2011)

# 2011 North Carolina Aerospace Suppliers Conference

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## Welcoming Remarks

Presented by: Dale Carroll, NC Deputy Secretary of Commerce

Time: 8:35 – 8:45 am

**Biography:** When Dale Carroll was appointed by Gov. Bev Perdue as the deputy secretary of the North Carolina Department of Commerce in January 2009, he brought three decades of business management and executive leadership to the position.

Prior to joining Commerce, Carroll served for 12 years as the chief executive officer of AdvantageWest, an economic development partnership that serves 23 counties in the western part of the state. Before that, he worked for 18 years with Carolina Power & Light (now Progress Energy) in roles that ranged from energy services engineer to manager of economic development.

During his tenure at AdvantageWest, Carroll's board and staff were recognized for excellence by the U.S. Department of Commerce, National Association of Manufacturers, Southeast Tourism Society, *Entrepreneur* Magazine and Southern Economic Development Council.

He is a past president of the North Carolina Economic Developers Association and has served on the state's Economic Development Board and the North Carolina Biotechnology Center's Advisory Committee for Biotechnology in Western North Carolina.

Carroll received a bachelor of science degree from North Carolina State University and a master's degree in management and human relations from Webster University in St. Louis.

## Opening Keynote

Presented by: U.S. Senator Richard Burr

Time: 8:45 – 9:00 am

Opening remarks from Senator Burr will provide an overview of the importance of the aerospace industry to NC, in regards to jobs, technology, and investment. He will also discuss how his office coordinates aerospace and defense outreach efforts with the other Congressional Representatives from NC, as well as the Governor's office and NC Commerce.

## Trends in Defense Aerospace

Presented by: Lt. Gen. Mark D. "Shack" Shackelford, Military Deputy, Assistant Secretary of the Air Force for Acquisition

Time: 9:00 – 9:40 am

This session will discuss the trends in Air Force aviation over the next 10 years, including unmanned air systems, manned bombers, the F-35 fighter, light attack aircraft, and space systems. Full biography can be found within this packet.

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## Trends in Commercial Aerospace

Presented by: Barry Eccleston, President/CEO Airbus Americas

Time: 10:00 – 10:40 am

This session will discuss the trends in civilian aviation, especially the larger airplane commercial market. Mr. Eccleston will discuss competition with Boeing, the rise of a third (China) and perhaps a fourth (Russia) competitor, his outlook for Airbus's future, and Airbus's efforts to revamp its supply chain.

**Biography.** Barry Eccleston was appointed president and chief executive officer of Airbus North America in August 2005. In this position, he oversees all efforts of Airbus in North and South America and in the Caribbean, including sales and marketing, engineering, service and training.

Mr. Eccleston joined Airbus from Honeywell's Engines, Systems and Services division, where he served as vice president and general manager of the Propulsion Systems Enterprise. He held that position for nearly two years, with responsibility for the \$1.4 billion business aviation, turboprop, regional fan, and military engines businesses. Prior to that position, Mr. Eccleston served as Honeywell's Vice President of Commercial Aerospace for Europe, the Middle East and Africa. Before Honeywell, he spent four years at Fairchild Dornier Corporation, as Executive Vice President for Business Development for two years, preceded by a two-year role as Senior Vice President of Sales and Marketing.

Mr. Eccleston's career in aviation and aerospace began at Rolls-Royce where he started as a flight test engineer and held increasingly senior positions with the company for 29 years, including President and CEO Rolls-Royce Ind Canada, and culminating in his role as President and CEO of International Aero Engines, where Rolls-Royce is one of the major shareholders.

Mr. Eccleston holds a bachelor's degree, with honors, in aeronautical engineering from Loughborough University in England and completed the International Executive program at the Institute of Management Development in Switzerland.

He was born in the United Kingdom in February 1947 and is married with a son and a daughter. Mr. Eccleston became a U.S. citizen in 1997. He is a private pilot, and an executive committee member of the Flight Safety Foundation Board of Governors.

## Panel Discussion – Aerospace Workforce Training at NC Community Colleges

Moderated by: Maureen Little (NCCCS) and Dave Drugman (Honda)

Time: 10:40 – 11:10 am

The Aerospace Workforce Panel will identify the aerospace-focused workforce training courses offered within the NC Community Colleges System. Panel discussion will also include NC University involvement in aerospace training - including engineering and materials specialties - and address efforts in North Carolina to foster STEM education initiatives in grades K-12.

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## Trends in Commercial Space

Presented by: Jeff Krukin, Former Executive Director Space Frontier Foundation

Time: Noon – 12:30 pm

This session will cover the business prospects for commercial space and sub-orbital space. Now that NASA has retired the Space Shuttle and is now focused on deep space exploration, the sub-orbital tasks are being picked up by commercial companies such as SpaceX, XCor, Bigelow, Sierra Nevada, Orbital Sciences and others.

**Biography.** Jeff Krukin's space-based career included NASA's Johnson Space Center (IBM Systems Engineer), Executive Director of the Space Frontier Foundation, grant-funded economic development work, and now a NewSpace Business Development practice. Mr. Krukin has given numerous talks on government space programs, and the emerging entrepreneurial space industry (NewSpace) and its impact on society as hundreds and then thousands of people travel into space.

Mr. Krukin has spoken at conferences across the United States and Europe, and in Canada, Australia, Singapore and Hong Kong. He has been interviewed by newspapers, magazines, radio, and television from Los Angeles to Houston to West Palm Beach, as well as in Europe and Asia.

His most frequently requested topics include:

- The NewSpace industry, its sectors and companies, and jobs being created by entrepreneurs
- The challenges of being an entrepreneur... in any industry... and how to overcome them and succeed
- NASA has hindered the human migration into space. What happened after Apollo?
- Is it legal to own land on the Moon, or an entire asteroid? How will this be regulated?
- How is space essential to our prosperity?
- Who enforces what laws in space?

He is also a writer, with his first space article published in 1981. His articles and Op-Ed's have appeared on numerous websites and in publications such as Space News, the Houston Chronicle, the Raleigh News & Observer, Ad Astra, the Houston Business Journal, and Journal for Space Development. His first book of essays were published in Spring 2005 in "Tackling Tomorrow Today: Moving Along, Far Ahead," part of a book series written for high school students.

Mr. Krukin received the ProSpace Activist of the Year award in 1998, Attachmate Corp. North America Systems Engineer of the Year award in 1999, and others during his Information Technology career. NASA and the US Dept. of Commerce's Office of Space Commercialization have requested his participation in their strategic planning efforts.

He serves on the Steering Committee of the International Association of Space Entrepreneurs, is the NewSpace Advisor to the North Carolina Aerospace Alliance, has conducted extensive grant-funded space economic development work, consulted for companies as diverse as Caterpillar, SpaceWorks Engineering, Presence Displays VOF, and Third Millennium Publishing LLC, and is an expert at TechCast: A Virtual Think Tank Tracking the Technology Revolution.

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## Trends in General Aviation Manufacturing

Presented by: Pete Bunce, President/CEO General Aviation Manufacturers Association

Time: 12:30 – 1:00 pm

This session will discuss the state of General Aviation in the U.S. and overseas. After many high-flying years, the industry experienced a severe downturn beginning in 2008, with massive layoffs. He will be discussing the outlook for general aviation and business aviation over the next 5-10 years.

**Biography.** In April 2005, Peter (Pete) Bunce became President and CEO of the General Aviation Manufacturers Association (GAMA) which is headquartered in Washington, D.C. with additional offices in Brussels, Belgium. He and the GAMA staff travel worldwide engaging regulators, policy makers and elected officials to promote general aviation and advance the interests of GAMA's international membership of more than 65 airframe, avionics, engine and component manufacturers.

Mr. Bunce retired from the United States Air Force in March 2005, with his last assignment as the Director of the Air Force Congressional Budget and Appropriations Liaison. During his 26 year Air Force career, Mr. Bunce flew F-15s and A-10s, while commanding several large operational fighter units.

A Wisconsin native, Mr. Bunce learned to fly as a teenager in the skies over southern Wisconsin. He entered the Air Force in 1979 as an honor graduate of the United States Air Force Academy. He received his master's degree in International Affairs from Troy State University in 1988 and was an International Affairs Fellow at Harvard University in 1996-97.

Mr. Bunce is an active pilot with more than 5,700 hours in military fighter and training aircraft as well as civil piston, turboprop and business jet aircraft. He holds FAA multi-engine, seaplane and instrument ratings and serves on the board of directors of Veterans Airlift Command, the International Council of Airshows, the Aviation Accreditation Board International and Build a Plane.

Mr. Bunce was named the 2007 Aviation Industry Leader of the Year by the Living Legends of Aviation. In December 2009, Mr. Bunce was awarded the ICAS Sword of Excellence, the air show industry's premier annual award. In January 2010, he was inducted as one of the seventy Living Legends of Aviation. Mr. Bunce and his wife Patty reside in Arlington, Virginia and have six children.

## Prime Contractor Presentations

Time: 1:00 – 1:50 pm, 3:30 – 4:20 pm

This series is dedicated to prime contractor presentations that will cover "Top Supply Chain or Workforce Headaches." Aerospace prime contractor presentations will be given by: TIMCO, Honda, Triumph Aerospace, AAR, Curtiss Wright, General Dynamics ATP, Goodrich, Turbomeca, and GE Aviation. Questions and solutions from the audience are encouraged.

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## International Trade/Export Opportunities

Presented by: Rick Hill (Aerospace Trade Specialist, NC Commerce) and Stephanie Heckel (Senior Trade Specialist)

Time: 2:30 – 2:55 pm

Presented by a series of speakers, this session will discuss how the regulatory reform initiatives in Congress will impact the aerospace industry's export opportunities. Discussion will also include NC's involvement in the recent Paris Air Show and opportunities that NC Commerce will be supporting in 2012 (Rick Hill, Aerospace Trade Specialist, NC Commerce). The session will conclude with a brief discussion explaining what the U.S. Department of Commerce can do to assist companies in finding foreign partners (Stephanie Heckel, Senior Trade Specialist, and member of the USDOC Aerospace Team).