United States Air Force - Scientific Advisory Board | 2019-2020

Air Force

Scientific Advisory Board

Biography Book

2019-2020

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- Lt Col Melissa M. Tallent
- Maj Jed E. Sherman
- MSgt Aileen L. Griffith
- SrA Jaedon A. Clarke
- Mr. Raymond H. McJonathan
- Mr. Nicholas A. Stern
- Mr. Steven B. Chambers
- Ms. Kimia L. Blackwell
- Ms. Erika Castedo
- Ms. Sanaa A. Lasher
- Mr. Phillip W. Burnham
- Col Brian K. Beachkofski
- Lt Col Jennifer L. Dahms
- Lt Col Jonathon I. Henry
- Maj Lloyd "Tom" Hunsaker
- Capt Matthew C. Renner
- Capt Young-Jun (Y.J.) Yoon

Section 4: Membership Departure List
Section 1: Mission of the Board

The Air Force Scientific Advisory Board (SAB) was established by General “Hap” Arnold to assist the Air Force in maintaining its “vision into the future” of technology-enabled capabilities. Since 1944, the SAB has served as the Air Force’s principle external advisory body for science and technical matters relating to its mission - to fly, fight and win in Air, Space and Cyberspace. The Board provides a link between the Air Force and the nation's scientific community and provides independent scientific and technical advice to Air Force leadership.

The SAB accomplishes its mission by conducting studies on topics deemed critical by the Secretary and Chief of Staff of the Air Force, by conducting reviews of the Science and Technology portfolio in the Air Force Research Laboratory, and by providing independent technical reviews where needed by SecAF, CSAF, Major Commands, and the Air Force Research Laboratory. The SAB’s mission supports the Air Force in achieving its central strategy of adapting and responding faster than potential adversaries.

SAB members are among the nation's top civilian scientists and engineers from industry, national labs, federal funded research and development centers, academia, and retired general officers. Members are selected to obtain the best, independent advice possible and on the basis of preeminence in scientific fields of interest and importance to the Air Force. It is the broad technical expertise, experience, leadership, and vision of its members that are essential to the Board's ability to provide the type of advice that the Air Force relies on from the SAB.

The Board exists to complement, but not duplicate, the work of the Assistant Secretary of the Air Force for Acquisition, the Air Force Research Laboratory, and other Air Force activities that deal with science and technology issues. The Board is chartered by the Secretary of Defense and reports directly to the Secretary of the Air Force and to the Air Force Chief of Staff.

The SAB operates as a Federal Advisory Committee under the Federal Advisory Committee Act, therefore the Board's function is purely advisory. The Board presents its findings and recommendations to the Secretary and Chief of Staff of the Air Force, as well as other senior leaders. All decisions or actions taken on Board advice or recommendations are made solely by full-time, salaried officers or employees of the Air Force.
Section 2: Member Biographies
Dr. James S. Chow  
RAND Corporation  
Chair, USAF Scientific Advisory Board

**EDUCATION**
Stanford University  
Ph.D., Mechanical Engineering (Fluid Mechanics), 1994  
M.S., Aero/Astro, 1989  
University of California at San Diego  
B.S., Mechanical Engineering, 1988

**WORK EXPERIENCE**
RAND Corporation  
Director, Force Modernization and Employment, Project AIR FORCE, 2018- Present  
Senior Engineer, Engineering and Applied Sciences, 2003-2018  
Assistant to the President for Research on Counterterrorism, 2004-2011  
Program Director (Acting), Force Modernization and Employment, 2008  
Associate Program Director, Force Modernization and Employment, 2006-2010  
Manager, Technology and Applied Sciences, 2000-2003  
Engineer, Technology and Applied Sciences, 1997-2003

Institute for Defense Analyses  
Research Staff Member, Systems Evaluation Division, 1994-1997

NASA Ames Research Center  
Fellowship Researcher, Fluid Mechanics Laboratory, 1990-1994

**AREAS OF EXPERTISE**
Defense systems analysis; management and leadership; future systems and force modernization; aircraft survivability; countering anti-access/area denial, military operations modeling and simulation.

**PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS**
Chief of Staff of the Air Force Award for Exceptional Public Service; Affiliated Faculty Member, Pardee RAND Graduate School; Member, AIAA; Member, Association of Old Crows.
Dr. Nils R. Sandell  
Independent Consultant  
Vice Chair, USAF Scientific Advisory Board

EDUCATION
Massachusetts Institute of Technology  
Ph.D., Electrical Engineering, 1974  
Massachusetts Institute of Technology  
M.S., Electrical Engineering, 1971  
University of Minnesota  
B.S., Electrical Engineering, 1970

WORK EXPERIENCE
Independent Consultant  
2016-Present  
Defense Advanced Research Projects Agency  
Director, Strategic Technologies Office, 2013-2016  
Independent Consultant  
2010-2013  
BAE Systems  
Vice President, Advanced Information Technologies, 2004-2010  
ALPHATECH INC.  
President and CEO, 1979-2004  
Massachusetts Institute of Technology  
Associate Professor, Electrical Engineering and Computer Science, 1976-1979  
Assistant Professor, Electrical Engineering and Computer Science, 1974-1976

AREAS OF EXPERTISE
Command and Control; Communications; Guidance, Navigation & Control; Information Fusion and Management; ISR, Tracking and ID; Low Observables; Modeling, Simulation and Analysis; S&T Management; Systems Engineering.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Eta Kapa Nu; Tau Beta Pi.
Dr. Natalie W. Crawford  
RAND Corporation  
EXCOM Member

EDUCATION
- Pardee RAND Graduate School, Santa Monica, California  
  Public Policy Analysis, Honorary Ph.D., 2018
- Michigan State University  
  Engineering, Honorary Ph.D., 2016
- University of California, Los Angeles  
  Graduate Study, Engineering & Applied Mathematics, 1966-1967  
  B.A., Mathematics, 1961

WORK EXPERIENCE
- RAND Corporation  
  RAND, 1964-Present  
  RAND Senior Fellow, 2006-Present  
  Project AIR FORCE Distinguished Chair in Air and Space Policy, 2014-Present  
  Vice President and Director Project AIR FORCE, 1997-2006  
  Associate Director, Project AIR FORCE, 1995-1997  
  Director, Force Modernization & Employment Program, Project AIR FORCE, 1993-1995  
  Director, Force Structure & Force Modernization Program, Project AIR FORCE, 1992-1993  
  Director, Theater Force Employment Program, Project AIR FORCE, 1988-1993  
  Associate Director, Theater Forces Program, Project AIR FORCE, 1986-1988
- North American Aviation  
  Programmer Analyst, 1961-1964
- Air Force Scientific Advisory Board  
  Co-Chairman, 1996-1999  
  Vice Chairman, 1990-1991  
  Member, 1988-2003; 2005-2014; 2015-Present

AREAS OF EXPERTISE
- Conventional standoff weapons; night/adverse weather attack capabilities; tactical aircraft; aircraft survivability; munitions and targets; tactical air requirements; avionics; aero performance; aircraft survivability; electronic combat; weapons effects; off-board sensor support to combat operations; power projection force structure and assessments; theater air defense; force modernization; space systems; information operations; low observables; directed energy; space situational awareness.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
- AIAA Honorary Fellow (2017), AIAA Fellow (2011); Project AIR FORCE Distinguished Chair in Air & Space Policy (2014); United States Air Force Academy Thomas D. White National Defense Award (2012); Air Force Association Lifetime Achievement Award (2011); OSD Medal for Exceptional Public Service (2006); NDIA Combat Survivability Lifetime Achievement Award (2006); RAND Medal for Excellence (2006); Lifetime Achievement Award, Air Force Analytic Community (2003); Lt Gen Glenn Kent Leadership Award (2003); Decoration for Exceptional Civilian Service, USAF (2003, 1995); Vance R. Wanner Memorial Award, Military Operations Research Society (2003); Kelly Johnson Award, San Fernando Valley Engineers Council (1998); Woman of the Year, Santa Monica Chamber of Commerce Women’s Business Council (1997); Santa Monica High School Hall of Fame (1995); YMCA Woman of the Year, (1983); Who’s Who in the West; Member, JPL Advisory Council (2002 – 2009); Member, Sandia Nuclear Deterrence External Advisory Board (2007 --); Member, National Academy of Engineering (2001).
Gen Donald J. Hoffman, USAF (Ret)
Consultant
EXCOM Member

EDUCATION
University of California, Berkeley
   M.S., Electrical Engineering, 1975
US Air Force Academy
   B.S., Electrical Engineering, 1974

WORK EXPERIENCE
Self-owned company
   Consultant, 2012-Present
US Air Force
   Commander, Air Force Material Command, 2008-2012
   Military Deputy for Acquisition, HQ Air Force, Pentagon, 2005-2008
   Director of Requirements, Air Combat Command, 2002-2005
   Commander, 31st Fighter Wing, 2001-2002

AREAS OF EXPERTISE
Defense Weapon System Requirements, Research, Acquisition, Test, and Sustainment; Strategic Planning;
Personnel Management and Training.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Dr. Andrew G. Alleyne  
University of Illinois, Urbana-Champaign  
S&T Review Chair

EDUCATION
University of California, Berkeley
   Ph.D., Mechanical Engineering, 1994
University of California, Berkeley
   M.S., Mechanical Engineering, 1992
Princeton University
   B.S.E., Aerospace Engineering, 1989

WORK EXPERIENCE
University of Illinois, Urbana-Champaign
   Director, NSF POETS Engineering Research Center, 2015-Present
   Associate Head for Undergraduate Programs in MechSE, 2014-2015
   Associate Dean for Research, College of Engineering, 2008-2012
ETH Zurich
   Visiting Professor, 2012
University of Colorado at Boulder
   FIRST Faculty, 2010
University of Illinois, Urbana-Champaign
   Ralph & Catherine Fisher Professor, College of Engineering, 2002-Present
   Professor, Mechanical Science & Engineering, 2004-Present
   Professor, Coordinated Science Laboratory, 2004-Present
Delft University of Technology
   Prof of Vehicle Mechatronics, Faculty of Design, Engr & Production, 2003

AREAS OF EXPERTISE

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
American Society of Mechanical Engineers, Fellow; Institute of Electrical and Electronic Engineers, Fellow; Society of Automotive Engineers; National Fluid Power Association; International Federation of Automatic Control, American Association for the Advancement of Science; Defense Science Study Group.
Dr. Michael J. Bear  
BAE Systems

EDUCATION
George Mason University  
Ph.D., Computational Physics, 1998  
M.S., Applied Physics, 1994  
Purdue University  
B.S., Applied Physics, 1985

WORK EXPERIENCE
BAE Systems  
Technical Director, C4ISR Solutions, 2015-Present  
Systems Engineering Lead, C4ISR Solutions, 2008-2015

BAE Systems/Lockheed Martin
Managing Engineer for ASIC Design, Space Products, 2000-2007

Lockheed Martin

Lockheed Martin/Loral
Technical Lead of Device Modeling, Space Products, 1995-1998

Loral/IBM
Technical Lead of Reliability Engineering, Space Products, 1990-1995

AREAS OF EXPERTISE
Resilient system design (cyber/physical); Sensor systems; Embedded Cyber; Trusted and assured electronics; Semiconductor/material physics of failure; Plasma and semiconductor modeling; Multi-scale simulations; Radiation effects; Space environments.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
American Physical Society; Institute of Electrical and Electronic Engineers; American Association for the Advancement of Science; Virginia Tech ECE Industry Advisory Board; BAE Systems Chairman’s Award; US Patent Award; Chief of Staff of the Air Force Award for Exceptional Public Service; Phi Beta Kappa.
Dr. Suzanne M. Beers
The MITRE Corporation

EDUCATION
Georgia Institute of Technology
  Ph.D., Electrical Engineering, 1996
New Mexico State University
  M.S., Electrical Engineering, 1994
New Mexico Highlands University
  M.B.A., Business, 1986
Ohio State University
  B.S., Mechanical Engineering, 1983
Miami University
  B.S., Physics, 1982

WORK EXPERIENCE
The MITRE Corporation
OSD Test & Evaluation Portfolio Manager, Z610 OSD Portfolio Division, 2014-Present
Developmental Evaluation Framework Tech Lead, J610 OSD Project Division, 2013-Present
T&E Group Leader & DASD(DT&E) Space & Missile Defense Task Lead, J610, 2010-2013
DOT&E Project Lead, Center for Acquisition & System Analysis Tech Center, 2008-2010

United States Air Force
Commander, Air Force Operational Test & Evaluation Center, Detachment 4, 2006-2008
Deputy Director, System Engineering Group, National Reconnaissance Office, 2005-2006
Deputy Commander, 50th Network Operations Group, 2004-2005
Chief, AFSCN Sustainment Division, Space & Missile Systems Center, 2001-2004
Deputy Chief, Analysis and Engineering Division, Space Warfare Center, 1999-2001
Advisor to the Chief Scientist, Air Force Operational Test & Evaluation Center, 1996-1999
PhD Student, Air Force Institute of Technology (Georgia Tech), 1994-1996
Advisor to the Chief Scientist, Air Force Operational Test & Evaluation Center, 1993-1994
Cheyenne Mountain Upgrade Test Manager, 1992-1993
SRAM II Lead Analyst & MILSTAR Survivability Analyst, 1990-1992
Ground Launch Cruise Missile Operator & Instructor, 1987-1990
Nuclear Systems Physicist, Air Force Weapons Laboratory, 1983-1987

AREAS OF EXPERTISE
Test & Evaluation; Systems Engineering; Control Theory; Digital Communication; Digital Signal Processing; Fuzzy Logic; Decision Support; Operations Research; System Analysis; AF Missile Operations; Space System Operations; Ground Control Station Sustainment; Nuclear Weapons; Cybersecurity.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Mr. Aaron R. Blow
MITRE Corporation

EDUCATION
California State University at Northridge
  M.S., Physics, 2002
Rensselaer Polytechnic Institute
  B.S., Physics, 1996

WORK EXPERIENCE
MITRE
  Director, Air Force Space, Cyber, and Intelligence Programs, 2007-Present
MIT Lincoln Laboratory
  Technical Staff, ISR Division, 2005-2007
MITRE
  Director, Air Force Strategic and Special Capabilities, 2002-2005
XonTech, Inc.
  Senior Analyst, Special Studies Division, 1997-2002

AREAS OF EXPERTISE
Systems Analysis; Mission Analysis; Space Systems; Intelligence, Surveillance, and Reconnaissance Systems; Signal Processing; Radar System Development; Hyperspectral Systems; Remote Sensing; Communications; Cyber; Multi-Sensor Fusion; Algorithm Development; Multi-Static Radar; Target Detection and Identification; Agile Acquisition; Command and Control; Systems Engineering; Modeling and Simulation; Electronic Warfare.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Member AFA; AUSA; NDIA.
Dr. Robert J. Bontz
Northrop Grumman, Aerospace Systems

EDUCATION
University of Utah
   Ph.D., Theoretical Astrophysics, 1980
Northland College
   B.A., Physics & Mathematics, 1974

WORK EXPERIENCE
Northrop Grumman Aerospace
   Director/Technology Integration, Advanced Programs, 2013-Present
Institute for Defense Analyses
   Project Director, SED, 1985-2013
Center for Naval Analyses
   Research Scientist, 1981-1985
University of Utah
   Instructor, Dept. of Physics, 1980-1981

AREAS OF EXPERTISE
Air Vehicle Design; Multi-Spectral Signature Control; Advanced Sensors; Advanced Weapons; Electronic Warfare; Special Technologies; Military Utility Assessment.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Defense Science Board Consultant.
Dr. Rodney D. W. Bowersox
Texas A&M University

EDUCATION
Virginia Polytechnic Institute and State University
Ph.D., Aerospace Engineering, 1992
Virginia Polytechnic Institute and State University
M.S., Aerospace Engineering, 1990
Virginia Polytechnic Institute and State University
B.S., Aerospace Engineering, 1988

WORK EXPERIENCE
Texas A&M University, College Station TX
   Department Head, Aerospace Engineering, 2013-Present
   Professor, Aerospace Engineering, 2007-Present
   Ford I Professor 2014-Present
   Associate Professor, Aerospace Engineering, 2002-2007
The University of Alabama, Tuscaloosa AL
   Associate Professor, Aerospace Engineering, 2000-2002
   Assistant Professor, Aerospace Engineering, 1997-2000
Air Force Institute of Technology, Aeronautics and Astronautics, WPAFB OH
   Assistant Professor, Aerospace Engineering, 1993-1997

AREAS OF EXPERTISE
Hypersonic viscous (transitional and turbulent) flows; thermochemical non-equilibrium gaseous flows; theoretical hypersonic turbulence modeling and numerical simulation; hypervelocity wind tunnel testing; laser diagnostics; experimental methods; aerodynamics; aero-propulsive flows; scramjets; unsteady flows.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
DoD Vannevar Bush National Security Science and Engineering Faculty Fellow, 2017-2022; American Society of Mechanical Engineers Fellow; American Institute of Aeronautics and Astronautics Associate Fellow; Associate Editor, Journal of Propulsion and Power; Hypersonic Technologies and Aerospace Planes Program Committee Member; US National Committee Member of the International Society of Air Breathing Engines; American Chemical Society Member; American Physical Society Member; Optical Society of America Member; Technical Advisory Board, National Aerospace Solutions, Inc.
Dr. Mark E. Campbell
Cornell University

EDUCATION
Massachusetts Institute of Technology
   Ph.D., Control/Estimation, Aeronautics and Astronautics, 1996
Massachusetts Institute of Technology
   M.S., Aeronautics and Astronautics, 1993
Carnegie Mellon University
   B.S., Mechanical Engineering, 1990

WORK EXPERIENCE
Cornell University
   Professor, Sibley School of Mechanical and Aerospace Engineering, 2011-Present
   Associate Professor, Sibley School of Mechanical and Aerospace Engineering, 2004-2011
   Assistant Professor, Sibley School of Mechanical and Aerospace Engineering, 2001-2004
University of Sydney
   Australian Research Council Int'l Fellow, Australian Centre of Field Robotics, 2006-2005
Insitu Group
   Visiting Research Scientist, Research and Development, 2005-2001
University of Washington
   Assistant Professor, Sibley School of Mechanical and Aerospace Engineering, 1997-2001

AREAS OF EXPERTISE
Spacecraft technologies; control systems; sensor fusion; autonomy; UAV technology; robotics; sensor networks; mixed initiative and human-machine systems.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Associate Fellow AIAA; Member ASME; Fellow IEEE; Member SPIE; Member ASEE.
Dr. Melissa G. Choi
MIT Lincoln Laboratory

EDUCATION
North Carolina State University
  Ph.D., Applied Mathematics, 1999
Ithaca College
  B.A., Mathematics, 1994

WORK EXPERIENCE
MIT Lincoln Laboratory
  Assistant Director, 2019 - Present
  Division Head, Homeland Protection and Air Traffic Control 2014-2019
  Assistant Division Head, ISR and Tactical Systems, 2013-2014
  Group Leader, Active Optical Systems, 2012-2013
  Group Leader, Systems and Analysis, 2009-2012
  Assistant Group Leader, Systems and Analysis, 2008-2009
  Assistant Group Leader, Advanced System Concepts, 2006-2008
  Technical Staff, Advanced System Concepts, 1999-2006

AREAS OF EXPERTISE
Systems analysis; modeling and simulation; intelligence, surveillance & reconnaissance (ISR); active optical systems (laser radar); EO/IR sensor systems; RF sensors; multi-INT architectures; PNT.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Society for Industrial and Applied Mathematics (SIAM), Phi Kappa Phi, Pi Mu Epsilon.
Dr. David J. Coombs
Raytheon

EDUCATION
University of Rochester
  Ph.D., Computer Science, 1992
University of Rochester
  M.S., Computer Science, 1988
Michigan State University
  B.S., Computer Science, 1986

WORK EXPERIENCE
Raytheon Company
  Technical Director, R&D, Intelligence, Information, and Services (IIS), 2014-Present
Intelligence Advanced Research Projects Activity (IARPA)
  Program Manager, Smart Collection Office, 2011-2014
SET Corporation
  Director of Robotics Technologies, 2004-2011
Science Applications International Corporation (SAIC)
  Director of Computer Vision, Reconnaissance & Surveillance Operation, 2001-2004
Cytometrics
  Manager of Image Analysis, 2000-2001
National Institute of Standards and Technology (NIST)
  Computer Scientist, Intelligent Systems Division, 1991-2000

AREAS OF EXPERTISE
Technology development; applied research and development; advanced prototype development; sensor processing; perception; computer vision; real-time video and image processing; exploitation; LADAR; EO/IR; 3D shape; robotics; unmanned systems; UxVs; mission management; planning; guidance navigation and control; tracking; user interface; autonomy; command interfaces; system integration; space technologies; cyber technologies; analytics.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Institute of Electrical and Electronics Engineers (IEEE); IEEE Computer Society; Association for Computing Machinery (ACM).
Dr. Steven T. Cummings  
Raytheon - Retired

EDUCATION
Rensselaer Polytechnic Institute  
Ph.D., Controls and Systems Engineering, 1995
Clarkson University  
Master of Engineering, Communications/Radar, 1981
Clarkson University  
B.S., Electrical and Computer Engineering, 1979

WORK EXPERIENCE
Raytheon Company  
VP Technology Development & Execution, Space & Airborne Systems, 2010-2018
Principal Engineering Fellow, Integrated Defense Systems, 1985-2010
Hughes Aircraft Company  
Group Head, Radar Systems Group, 1981-1985

AREAS OF EXPERTISE
Controls; Systems; Radar; Sensor Netting; C2BMC; Defense Planning; Ballistic Missile Defense; High Energy Laser Weapon Systems; Robotics.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
AIAA; Clarkson Dean's Leadership Council.
Dr. Llewellyn S. Dougherty
Center for Elegant Design

EDUCATION
Air Force Institute of Technology
Ph.D., Digital Systems Engineering, 1978
Massachusetts Institute of Technology
MS, Aeronautics and Astronautics, 1968
US Air Force Academy
BS, Engineering Sciences, 1967

WORK EXPERIENCE
Consultant 2011-present
Raytheon Corporation
Vice President, Special Programs, Raytheon, 2004-2011
Chief Scientist, Raytheon Space and Airborne Systems, 2002-2004
Director of Technology, Raytheon Electronic Systems, 1999-2002
Director of Technology, Raytheon Systems Company, 1998-1999
Hughes Aircraft Company
Director of Technology, Hughes Sensors and Communications Systems Segment, 1994 - 1998
Director, Advanced Technology Programs, Hughes Radar Systems, 1993-1994
Assistant Division Manager, Reconnaissance Systems Division, Hughes Radar Systems, 1992-1993
Defense Advanced Research Projects Agency
Technical Assistant to the Director, 1990-1992
DARPA Program Manager, Deputy Director and Acting Director, Aerospace and Strategic Technology Office, 1987-1990
US Air Force
Deputy Director of Engineering, B2 Program Office, 1983-1987
Program Element Monitor, HQ USAF, 1979-1983
Avionics Systems Engineer, AF Avionics Laboratory, 1975-1976
Flight Test Engineer, AF Missile Development Center, 1968-1973
Thiokol Chemical Corp
Associate Engineer (Solid Rocket Propulsion), 1967

AREAS OF EXPERTISE
Command and control, communications, ISR systems, digital computers, real-time systems, systems architecture, systems engineering, systems safety, solid rockets, military aircraft development, defense acquisition, low observables, special operations, avionics systems and sensors (radar; EO/IR; lasers; CNI); information warfare; mission analysis; signal processing; system security and anti-tamper, special program security.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE, Life Member.
Dr. Robert V. Duncan  
Texas Tech University

EDUCATION  
University of California, Santa Barbara  
Ph.D., Physics, 1988  
Massachusetts Institute of Technology (MIT)  
S.B., Physics, 1982

WORK EXPERIENCE  
Texas Tech University  
President’s Distinguished Chair in Physics, 2017-Present  
Senior Vice President for Research, 2014-2017  
University of Missouri  
Vice Chancellor for Research, 2008-2013  
University of New Mexico  
Professor of Physics, then Associate Dean for Research, 1996-2008  
Sandia National Laboratories  
Physicist, then Group Leader (Distinguished Member of Technical Staff), 1988-1996

AREAS OF EXPERTISE  
Low-Temperature, Condensed Matter Physics; Critical Phenomena; Self-Organized Criticality; Metrology; Heat Transport; Orbital Measurements and Hardware Design; Biomedical Instrumentation Development; Research Administration; Physics Education; Technical Innovation and Invention.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS  
Dr. Philip A. Fawcett  
The Aerospace Corporation

EDUCATION  
Georgia Institute of Technology  
Ph.D., Aerospace Engineering, 1992  
Georgia Institute of Technology  
M.S., Aerospace Engineering, 1990  
Georgia Institute of Technology  
B.S., Aerospace Engineering, 1989

WORK EXPERIENCE  
The Aerospace Corporation  
General Manager, Electronic Programs Division, 2018-Present  
Principal Director, Imagery Programs Division, 2015-2018  
Principal Director, Electronic Programs Division, 2013-2015  
Principal Director, Advanced Research and Engineering Directorate, 2008-2013  
Brookings Institute Congressional Fellow, Office of Congressman Tim Ryan, 2007-2008  
Systems Director, Special Projects Directorate, 2001-2007  
Senior Project Engineer, Systems Engineering and Technology Directorate, 1998-2001  
Project Engineer, Space Warfare Center, 1996-1998  
Member of the Technical Staff, Titan Program Office, 1992-1996

AREAS OF EXPERTISE  
Experimental Aerodynamics; Launch Vehicles; Intelligence, Surveillance, & Reconnaissance; Space Systems; Intelligence Missions; Systems Engineering; Project Management; Concept Development; Technology Development and Planning; Government Acquisition Processes.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS  
Sigma Xi Scientific Research Honor Society; Georgia Tech AE School Senior Advisory Council.
**Lt Gen Terry L. Gabreski, USAF (Ret)**
Independent Consultant

**EDUCATION**
Louisiana State University  
B.A., History, 1973
Golden Gate University  
Master’s Degree, Public Administration, 1978

**WORK EXPERIENCE**
Pratt and Whitney  
Consultant, 2013-Present
Northrup Grumman  
Consultant, 2012-2014
AF Scientific Advisory Board  
AF Scientific Advisory Board Member, 2017-Present
National Museum of the United States Air Force  
Heritage Board of Directors, 2010-Present
Falcon Foundation  
Governing Trustee/Board of Trustees, 2011-Present
Rand Corporation  
Adjunct Staff, 2011-Present
USAF Active Duty, 1974-2010

**AREAS OF EXPERTISE**
Sustainment, logistics, aircraft maintenance, training, program management.
Lt Col Dennis P. Gilbert, Jr., USAF (Ret)

Duke Energy

EDUCATION
University of Southern California, Viterbi School of Engineering
   M.S., Systems Management, 1988
Louisiana Tech University
   B.S., Management Information Systems, 1984
Defense Systems Management College
   Advanced Program Management, 1998

WORK EXPERIENCE
Duke Energy
   Vice President, Chief Information Security Officer, 2018-Present
Exelon Corporation
   Vice President, Chief Information Security Officer, 2014-2018
Office of the Secretary of Defense
   Senior Advisor for Cybersecurity to the Chief Information Officer, 2012-2014
Booz Allen Hamilton
   Principal, Federal Sector Cybersecurity, 2008-2012
FGM Inc.
   Vice President, Business Development, 2005-2008
United States Air Force
   National Reconnaissance Office; Mission Integration Office, 2003-2005
   Office of the Secretary of Defense; Command, Control, and Communications, 2000-2003
   Secretary of the Air Force (Acquisition); Space Control & Advanced Technology, 1997-2000
   Space and Missle Systems Center; Advanced Systems Program Office, 1994-1997
   Aeronautical Systems Center; B-2 System Program Office, 1989-1994

AREAS OF EXPERTISE
Cybersecurity operations, architecture, data protection, governance and risk; cyber technologies;
Operational Technology (OT)/Industrial Control Systems (ICS) cybersecurity; information warfare;
information operations; space control; special communications; electronic warfare; energy and power
technologies; systems engineering; program management; defense acquisition.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Air Force Association (Life Member); AFCEA; Edison Electric Institute (EEI) Science & Technology
Executive Advisory Committee; Electricity Subsector Coordinating Council (ESCC) Cyber Mutual
Assistance Executive Committee; American Gas Association (AGA) - Leadership Council; AGA Security
Committee; Security Innovation Network (SINET) - Honorary Chair; Information Systems Audit and
Controls Association (ISACA); University of North Carolina Charlotte (UNCC) - Cooperative Research
Center for Cybersecurity Analytics & Automation - Industry Advisory Board.
Dr. Samuel Graham Jr.
Georgia Institute of Technology

EDUCATION
Georgia Institute of Technology
   PhD, Mechanical Engineering, 1999
Georgia Institute of Technology
   MS, Mechanical Engineering, 1995
Florida State University
   BS, Mechanical Engineering, 1993

WORK EXPERIENCE
Georgia Institute of Technology
   Department Chair, Woodruff School of Mechanical Engineering, 2018- Present
   Associate Chair for Research, 2016-2018
   Professor, 2013-Present
   Courtesy Appointment, 2009-Present
      School Of Materials Science and Engineering
      Georgia Institute of Technology
   Associate Professor, 2008-2013
   Assistant Professor, Mechanical Engineering, 2003-2008
      George W. Woodruff School of Mechanical Engineering
      Georgia Institute of Technology
Oak Ridge National Laboratories
   Joint Appointment, 2009- Present
Sandia National Laboratories
   Senior Member of Technical Staff, 1999-2003

AREAS OF EXPERTISE
Heat transfer, thermal metrology; materials characterization; thermal management; RF electronics,
flexible electronics; organic electronics, electronics packaging.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
ASME Fellow, Member of IEEE, MRS, AAAS, Member of the ESRF Advisory Board for Sandia National
Laboratories, Defense Science Study Group (2014-2016), NSF Career Award, NAE Japan-US Frontiers of
Engineering Symposium participant, NAE U.S. Frontiers of Engineering Symposium participant, SME M.
Eugene Merchant Outstanding Young Manufacturing Engineer Award.
Dr. Jonathan E. Green
Northrop Grumman Mission Systems

EDUCATION
California Institute of Technology
   Ph.D., Chemical Physics, 2007
California Institute of Technology
   M.S., Applied Physics, 2005
University of California Irvine
   B.S., Chemical Physics, 2002

WORK EXPERIENCE
Northrop Grumman
   NG Fellow & Sector Architect for Disruptive Innovation, Chief Scientist Office, 2019-Present
   NG Fellow & Product Architect for Communications and SIGINT, CTO Office, 2017-2018
   Head of Technology Strategy, Avionics and Tactical Networks, 2016-2017
   Chief Engineer, Avionics and Tactical Networks, 2013-2016
   Senior Systems Engineer, Advanced Systems and Products, 2009-2013
   Systems Engineer, Command and Control Systems, 2007-2008
California Institute of Technology
   Undergraduate Research Fellow, Jet Propulsion Laboratory, 2001-2002
United States Army CA National Guard
   Intelligence Sergeant, 40th Infantry Div, 1998-2001
United States Army
   Airborne Fire-Team Leader, 82nd Airborne Div, 1995-1998

AREAS OF EXPERTISE
Digital wireless communications; military tactical communications; Low Probability of Detection communications; RF systems; multifunction systems; electronic warfare; signals intelligence; RF emitter geolocation; quantum communications; physics-based model and simulation; technology strategy; disruptive innovation.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE Communications Society; Northrop Grumman Fellow; Northrop Grumman Technical Fellow Emeritus; Northrop Grumman Corporate Technology Council.
Dr. Eric K. Hall
The Aerospace Corporation

EDUCATION
Georgia Institute of Technology
  Ph.D., Aerospace Engineering, 1991
Georgia Institute of Technology
  M.S., Aerospace Engineering, 1989
University of Delaware
  Bachelor of Mechanical Engineering, 1988

WORK EXPERIENCE
The Aerospace Corporation
  General Manager, Vehicle Systems Division, 2015-Present
  Principal Director, Atlas V Operations, 2011-2015
  Principal Engineer, Atlas V Operations, 2008-2011
  Director, Structures Department, 2004-2008
  Associate Director, Structures Department, 2002-2004
  Manager, Space Structures Section, 2000-2002
  Engineering Specialist, Structural Technology Department, 1997-2000
  Member of Technical Staff, Structural Technology Department, 1991-1997

AREAS OF EXPERTISE
Technical and personnel management; vehicle engineering; mission assurance; risk assessment; launch operations; independent review teams; design and development of launch and space vehicles; large-scale deployable space structures; opto-mechanical systems; lightweight and deployable optical systems; technology development; composite spacecraft; precision structures; finite element analysis; adaptive/smart structures; vibration isolation; structures; and structural dynamics.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Sr. Member, AIAA.
Dr. Peter A. Hancock
University of Central Florida

EDUCATION
Loughborough University
    D.Sc., Human-Machine Systems, 2001
University of Illinois
    Ph.D., Human Performance, 1983
Loughborough University
    M.Sc., Human Biology, 1978
Loughborough University
    B.Ed., Education, 1976

WORK EXPERIENCE
University of Central Florida
    Provost Distinguished Research Professor, 2001-Present
    University Trustee Chair, 2012-Present
University of Minnesota
    Associate Professor, 1989-2001
University of Southern California
    Assistant Professor, 1983-1989

AREAS OF EXPERTISE
Human Factors; Ergonomics; Modelling & Simulation; Applied Psychology; Neuroergonomics; Fatigue; Human-Robot Teams; Stress; Cognitive Workload; Trust; Human-Machine Interaction; Time.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Aerospace Human Factors Association; Aerospace Medical Association; American Association for the Advancement of Science; American Psychological Association; American Society of Heating, Radiation and Air-Conditioning Engineers (Honorary Member); Association for Psychological Science; Augmented Cognition Society; Chartered Institute for Ergonomics - Human Factors (CIEHF); Human Factors and Ergonomics Society; Institute of Electrical and Electronics Engineers (IEEE); Institute of Industrial and Systems Engineers, (Honorary Member); International Academy of Aviation and Space Medicine; International Ergonomics Association; National Academy of Sciences, Committee on Neurosciences in the Army; National Research Council Committee on Interfaces for Ground and Air Military Robots; Psychologic Society; Royal Aeronautical Society; Society of Engineering Psychologists; Society for Human Performance in Extreme Environments.
Dr. Ryan K. Hersey
Georgia Tech Research Institute

EDUCATION
Georgia Institute of Technology
  Ph.D., Electrical and Computer Engineering, 2004
Pennsylvania State University
  M.S., Engineering Mechanics, 2000
Pennsylvania State University
  B.S., Engineering Science, 1998

WORK EXPERIENCE
Georgia Institute of Technology, Georgia Tech Research Institute
  Chief, Intelligence, Surveillance, and Reconnaissance Division, 2016-Present
  Head, Advanced Processing and Algorithms Branch, 2014-2016
  Principal Research Engineer – 2014-Present
  Senior Research Engineer, 2009-2014
  Research Engineer II – 2004-2009
Georgia Institute of Technology, School of Electrical and Computer Engineering
  Graduate Research Assistant, 2000-2004
Pennsylvania State University, Department of Engineering Science and Mechanics
  Graduate Research Assistant, 1998-2000
  Undergraduate Research Assistant, 1996-1998

AREAS OF EXPERTISE
Sensors; distributed sensing; autonomous sensing; signal processing; physics-based modeling and simulation; machine learning and intelligent systems; open-system architectures; real-time processing; radar; synthetic aperture radar (SAR); ground moving target indication (GMTI); electronic warfare; electronic protection; SIGINT; automatic target recognition; ultrasonic non-destructive evaluation; ISR; fire-control systems.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE AESS Fred Nathanson Memorial Radar Award (2016); Senior Member IEEE (2013); Best Paper Award Tri-Service Radar Symposium (2011); Best Paper Award Tri-Service Radar Symposium (2009); Best Student Paper Award IEEE Radar Conference (2002); President's Fellow, Georgia Institute of Technology (2000-2004); Dean's Fellow, Pennsylvania State University (1998-2000).
Dr. Juliana J. Hsu
Lawrence Livermore National Laboratory

EDUCATION
Massachusetts Institute Technology
  Ph.D., Physics, 1991
University of Hawaii at Manoa
  B.S., Physics, 1985
University of Hawaii at Manoa
  B.S., Mathematics, 1985

WORK EXPERIENCE
Lawrence Livermore National Laboratory
  Deputy Program Director, Weapon Physics and Design, 2016-Present
  Distinguished Member of Technical Staff Emeritus, 2016-Present
  Distinguished Member of Technical Staff, 2013-2015
  Lead Primary Designer, Joint W78/W88-1 Warhead Life Extension Program, 2010-2014
  Point of Contact for Primary Design, Advanced Certification Campaign, 2007-2015
  Lead Primary Designer, Reliable Replacement Warhead Program, 2005-2007
  Designer on the Primary Design Team, W80-3 Left Extension Program, 1999-2005

AREAS OF EXPERTISE
Nuclear Weapon Design; nuclear weapon physics; weapon systems design; high explosives; integrated experiments; simulation tools and application.
Dr. Eric K. Jones
Systems & Technology Research

EDUCATION
Yale University
- Ph.D., Computer Science, 1992
- M.Phil., Computer Science, 1987
- M.S., Computer Science, 1986
University of Otago, New Zealand
- B.Sc. (Hons, 1st), Mathematics, 1984
- B.A., Geography, 1983

WORK EXPERIENCE
Systems & Technology Research, LLC
- Vice President, Analysis and Decision Systems, 2011-Present
BAE Systems, Inc.
- Technology Group Director, Analysis and Decision Systems, 2009-2011
- Division Manager, Intelligent Systems Division, 2004-2009
ALPHATECH, Inc.
- Division Manager, Intelligent Systems Division, 2004
- Associate Division Manager, Intelligence and Decision Systems Division, 2003-2004
- Director, Knowledge-Based Systems, 2000-2003
- Senior Member of the Technical Staff, 1997-2000
Victoria University of Wellington, New Zealand
- Assistant Professor, 1992-1996

AREAS OF EXPERTISE
Command and control; multi-intelligence exploitation; natural language processing and text analytics; machine learning; artificial intelligence; model-based design; modeling and simulation; software and systems engineering technologies.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Association of Computing Machinery (ACM); Association for the Advancement of Artificial Intelligence (AAAI); Institute of Electrical and Electronic Engineers (IEEE).
Dr. Ann R. Karagozian  
University of California, Los Angeles

EDUCATION
California Institute of Technology  
Ph.D., Mechanical Engineering, 1982
California Institute of Technology  
M.S., Mechanical Engineering, 1979
University of California, Los Angeles  
B.S., Engineering, 1978

WORK EXPERIENCE
University of California, Los Angeles  
Distinguished Professor, Mechanical & Aerospace Engineering, 2016-Present
Interim Vice Chancellor for Research, 2016-2017
Professor, Mechanical & Aerospace Engineering, 1993-2016
Associate Professor, Mechanical & Aerospace Engineering, 1988-1993
Assistant Professor, Mechanical & Aerospace Engineering, 1982-1988

Institute for Defense Analyses  
Member, Board of Trustees, 2011-Present
Mentor, Defense Science Study Group, 2014-Present
Member, Defense Science Study Group, 1994-1995

Sandia National Laboratories  
Consultant, 2003-2005

Pacific-Sierra Research Corporation  
Consultant, 1985-1987

RAND Corporation  
Consultant, 1979-1983

Aerospace Corporation  
Associate Member, Technical Staff, 1978

Hughes Aircraft Company  
Engineering Intern, 1976-1978

AREAS OF EXPERTISE
Fluid mechanics; combustion; air-breathing and rocket propulsion; energy generation systems.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Member of the U.S. National Academy of Engineering; Fellow of the American Physical Society; Fellow of the American Institute of Aeronautics and Astronautics; Fellow of the American Society of Mechanical Engineers; Air Force Decoration for Exceptional Civilian Service (2010, 2001); UCLA Samueli and TRW Excellence in Teaching Awards; Phi Beta Kappa; Tau Beta Pi; Combustion Institute; Society for Industrial & Applied Mathematics.
Dr. Leo C. Kempel  
Michigan State University  
Vice Chair, S&T Reviews

EDUCATION
University of Michigan  
Ph.D., Electrical Engineering, 1994
University of Michigan  
M.S., Electrical Engineering, 1990
University of Cincinnati  
B.S., Electrical Engineering, 1989

WORK EXPERIENCE
Michigan State University
Dean of Engineering, 2014-Present
Acting Dean of Engineering, 2013-2014
Associate Dean for Research, 2008-2013
Associate Dean for Special Initiatives, 2006-2008
Professor, Electrical and Computer Engineering, 2006
Director, High Performance Computing Center, 2004-2006
Associate Professor, Electrical and Computer Engineering, 2002-2006
Assistant Professor, Electrical and Computer Engineering, 1998-2002

Air Force Research Laboratory
IPA (50%), Sensors Directorate, WPAFB, OH, 2004-2008

Mission Research Corporation
Senior Research Engineer, Valparaiso, FL, 1994-1998

AREAS OF EXPERTISE
Applied Electromagnetics; conformal apertures; computational electromagnetics; low observables; directed energy; modeling and simulations; materials for radio frequency applications.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Institute of Electrical and Electronics Engineers, Fellow; Applied Computational Electromagnetics Society, Fellow; Engineering Society of Detroit, Fellow.
Dr. Brian Michael Kent  
Applied Research Associates

EDUCATION
The Ohio State University  
Ph.D. Electromagnetics-Math Minor/Electrical Engineering, 1984  
The Ohio State University  
M.S. RF Materials Metrology/Electrical Engineering, 1981  
Michigan State University  
B.S. Microwaves-Antenna/Electrical Engineering, 1980

WORK EXPERIENCE
Applied Research Associates  
Chief Scientist, BRD Division, 2017-Present  
Senior Scientist for EM/RF Sensing, ECD Division, 2014-2017

United States Air Force – Air Force Research Laboratory  
Chief Technology Officer, 2013-2014  
Chief Scientist, Sensors Directorate, 2011-2013  
Chief Technologist (Acting), 2010-2011  
Chief Scientist, Sensors Directorate, 2008-2010  
Senior Scientist, Low Observables and Electromagnetics, 2006-2008  
Research Fellow, Shuttle Investigation/Return-to-Flight Co-assignment (NASA), 2003-2006  
Research Fellow (Low Observables), 1994-2006  
RF Research Engineer (Various Assignments), 1977-1994

AREAS OF EXPERTISE
Radio Frequency (RF) Systems; RF Sensing; RF Antennas/Measurements; RF signal processing; RF Emissions; RF device technologies; RF Space sensing; Low Observable (LO) measurements; LO diagnostics; LO Sensor integration; LO design; LO Education/Training; Radar detection; Radar imaging; Synthetic Aperture Radar; Dynamic aircraft radar measurements; rocket ascent debris radar; Passive/active Electronic Warfare (EW); Passive RF Emissions Measurements.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
OPM Distinguished Presidential Rank Award Finalist; Michigan State University College of Engineering Distinguished Alumni; IEEE International Distinguished Lecturer; OPM Meritorious Presidential Rank Award, ARA Associate (Highest ARA Technical Award), Fellow of the Antenna Measurement Technique Association (AMTA); Fellow, Institute of Electrical and Electronics Engineers (IEEE); Fellow of the Air Force Research Laboratory; NASA Space Flight Awareness Award; Past President (AMTA); Feature Editor (IEEE/APS Magazine); Technical Reviewer (IEEE Transactions on Antennas and Propagation), Adjunct Professor of Electrical Engineering (Michigan State University).
Dr. Tadayoshi Kohno  
University of Washington

EDUCATION
University of California San Diego  
Ph.D., Computer Science, 2006  
University of California San Diego  
M.S., Computer Science, 2004  
University of Colorado  
B.S., Computer Science, 1999

WORK EXPERIENCE
University of Washington  
Professor, Computer Science & Engineering, 2016-present  
Associate Professor, Computer Science & Engineering, 2011-2016  
Assistant Professor, Computer Science & Engineering, 2006-2011
Microsoft  
Visiting Researcher, Microsoft Research, 2014-2014
Cigital  
Cryptographer, Software Security Group, 2000-2001
Counterpane Systems  
Cryptographer, Security Consultant Group, 1999-2000

AREAS OF EXPERTISE
Computer security; computer privacy; cyber security; applied cryptography; cloud security; cyber-physical systems security; cyber security for emerging technologies; embedded systems security; mobile device security; usable security; threat modeling; web security.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Inaugural Member, Forum on Cyber Resilience, The National Academies of Sciences, Engineering, and Medicine, 2014-present; Founding Member, IEEE Center for Security Design, 2014-present; Member, Defense Science Study Group, 2014-2015; Senior Member, Institute of Electrical and Electronics Engineers (IEEE), 2012-present; Steering Committee Member, USENIX Security Symposium, 2012-present; Steering Committee Member, Network and Distributed Systems Security Symposium, 2011-2014.
Mr. William (Glenn) Kuller
Lockheed Martin

EDUCATION
Central Michigan University
   M.S., Management, 1988
Defense Systems Management College - Program Manager, 1986
USAF Test Pilot School - Flight Test Engineer, 1982
University New Mexico
   M.S., Mechanical Engineering, 1981
University of Utah
   B.S., Mechanical Engineering, 1976

WORK EXPERIENCE
Lockheed Martin - Missiles and Fire Control
   VP, Advanced / Special Programs, 2012-Present Director,
   Advanced Program, 2005-2012
   Program Manager, Classified Program, 2003-2005
   Director, JASSM Development, 2000-2003
Hughes / Raytheon Missile Systems
   Director, Air-Launched Strike, 1996-2000
   Program Manager, AMRAAM (AIM-120B P31), 1994-1996 USAF
   Multiple, 1972-1995
   Director, F-117A Development System Program Office 1991-1994
   Strategic Air Command, Officer - Airborne Reconnaissance - 1987-1990
   Flight Test Engineer - Eglin AFB -1983-1986
   Airman — 1972-1976

AREAS OF EXPERTISE
Acquisition; Flight Test; Special Access Programs; Advanced Technology; Aircraft; Air Vehicles;
Autonomy; Signature Management; Directed Energy, Systems Engineering; Conventional Weapons
Technology / Missiles; Sensors; Cyber; Satellites / Spacecraft; Modeling and Simulation / Operational
Analysis.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Air Force Association; Association of the United Army; Surface Navy Association; AIM (Assoc Fellow
pending); Lockheed Martin Management Club.
Gen Lester L. Lyles, USAF (Ret)  
General Dynamics Corporation

EDUCATION
Urbana University  
Honorary Doctorate of Law, 2009
New Mexico State University  
Honorary Doctorate of Law, 2002
National War College  
Master’s Degree, 1985
Air Force Institute of Technology  
M.S., 1981
Armed Forces Staff College  
Master’s Degree, 1981
Defense Systems Management College  
Master’s Degree, 1980
New Mexico State University  
M.S., Mechanical Engineering, 1969
Howard University  
Bachelor’s Degree, Mechanical Engineering, 1968

WORK EXPERIENCE
General Dynamics Corporation  
Director, Member of Nominating & Corporate Governance Committee and Member of Audit Committee, 2003-Present
BAE Systems Science & Technology, Inc.  
Director, 2003-Present
DPL, Inc.  
Director, Vice Chairman of Nominating & Corporate Governance Committee 2004-Present  
Member of Compensation Committee & Director of the Dayton Power & Light Company 2004-Present
United Services Automobile Association  
Chairman, 2004-Present

AREAS OF EXPERTISE
Aircraft, air vehicles, and air platforms; Air breathing propulsion.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Air Force Scientific Advisory Board.
Dr. Kevin C. Massey  
Leidos

EDUCATION
Georgia Institute of Technology  
Ph.D., Aerospace Engineering, 1997
Georgia Institute of Technology  
M.S., Aerospace Engineering, 1994
Georgia Institute of Technology  
B.S., Aerospace Engineering, 1992

WORK EXPERIENCE
Leidos  
Senior Supervisory Engineer, Hypersonics and High Speed Weapons, Leidos Innovation Center, 2018-Present
Raytheon  
Director Science and Technology, US Business Development, 2016-2018
Defense Advanced Research Projects Agency (DARPA)  
Program Manager, Tactical Technology Office, 2013-2016
RMIT University  
Department Head for Aerospace and Aviation, School of Engineering, 2011-2013
Georgia Tech Research Institute  
Senior Research Engineer, Aerospace, Transportation and Advanced Systems Lab, 2001-2011

AREAS OF EXPERTISE
Guided Projectiles; Smart Projectiles; Hypersonics; Lethality; Survivability; 6-DOF Simulation; Wind Tunnel Testing; Jet Noise; Aeroacoustics; Propeller Noise; Vibration; Flight Test; Signal Processing; Low Observables; Ground Vehicle Performance; Blast Testing; Systems Engineering; Jet Propulsion; Rocket Propulsion; Small Space; Ballistics; Flapping Wing Flight; Systems of Systems; IEDs, Rocket, Artillery and Mortars; Automobile Noise, Air Intake Systems; Flux Capacitors.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Mr. Thomas E. McNeil  
Georgia Tech Research Institute GTRI)

EDUCATION
Air Force Institute of Technology  
M.S., Engineering Physics 1986  
Georgia Institute of Technology  
B.S., Applied Physics 1982

WORK EXPERIENCE
Georgia Institute of Technology, Georgia Tech Research Institute  
Associate Director, Advanced Concepts Laboratory, 2018-Present  
Division Chief, Signals and Systems, Advanced Concepts Laboratory 2013-2018  
Principal Research Scientist, Signatures Technology Laboratory, 2010-2013  
CommScope, Inc.  
Director, Federal Programs, 2004-2010  
OFS-Fitel  
General Manager, Federal Systems, 2003-2004  
Senior Manager, Customer Support Engineering, 2002-2003  
Lucent Technologies  
Senior Manager, Applications Engineering and Marketing, Network Products, 2000-2002  
Senior Manager, Enterprise Networks Offer Management, Network Products, 1998-2000  
Manager, Enterprise Networks Optical Offers, Network Systems, 1997-1998  
Member of Technical Staff, Bell Laboratories, 1996-1997  
Molex Fiber Optics  
Regional Fiber Optic Sales Manager & Applications Engineer, 1995-1996  
Computer Communications Specialists, Inc.  
Senior Account Executive, 1994-1995  
United States Air Force  
Assistant Professor of Physics and Course Director, US Air Force Academy, 1987-1989  
Graduate Student, Air Force Institute of Technology, 1985-1986  
Combat Survivability Design Engineer, Aeronautical Systems Division, 1982-1985

AREAS OF EXPERTISE
Modeling, Simulation and Analysis; Electronic Warfare; Information Operations; RF Systems; EO/IR Systems; Threat Systems Projection; Operational Analysis; Multi-Domain Operations; Advanced Kill-Chains; 5th and 6th Generation Capabilities; Systems Acquisition.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Institute of Electrical and Electronics Engineers (IEEE), Air Force Association (AFA), Association of Old Crows (AOC), Military Officers Association of America (MOAA).
Dr. Todd D. Murphey
Northwestern University

EDUCATION
California Institute of Technology
  Ph.D., Control and Dynamical Systems, 2002
University of Arizona
  B.S., Mathematics, 1997

WORK EXPERIENCE
Northwestern University
  Professor, Mechanical Engineering, 2017-Present
  Associate Professor, Mechanical Engineering, 2011-2017
  Assistant Professor, Mechanical Engineering, 2009-2011
University of Colorado
  Assistant Professor, Electrical and Computer Engineering, 2004-2008
Aerospace Corporation
  Senior Technical Staff, Control Systems, 2003-2004

AREAS OF EXPERTISE
Robotics; automation; autonomy; control systems; human-in-the-loop systems; assistive and rehabilitative devices; machine learning

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS
IEEE; ASME; AAAS.
Dr. Kenneth R. Olson  
The Johns Hopkins Applied Physics Laboratory

EDUCATION
University of Wisconsin  
Ph.D. Dissertation: Time Dependent Neutral Particle Transport, 1999  
M.S., Nuclear Engineering and Engineering Physics, 1996  
B.S., Nuclear Engineering and Engineering Physics, 1994

WORK EXPERIENCE
Johns Hopkins University Applied Physics Laboratory  
Program Manager: OSD/CAPE TACAIR Red Team, 2014-Present  
Principle Analyst, IADS-CCT USAF ACC/A8Z, 2012-Present  
Chief Analyst, OSD/CAPE TACAIR Red Team, 2008-2014  
Modeling Lead, USN PMA-234 JATO modeling and simulation, 2008-2011  
Principle Analyst, AFRL investigation of novel electronic attack systems, 2008-Present  
Modeling SME, USN Naval CONEMPs / HICAP working group 2008-Present  
Principle Analyst, USN Next Generation Jammer, 2009-Present

Massachusetts Institute of Technology, Lincoln Laboratory  
Staff, MIT Rapid Capabilities Office Red Team, 1999-2007  
Analyst, USAF Red Team, Operation Allied Force after-action study, 1999-2003

AREAS OF EXPERTISE
Survivability of legacy and advanced aircraft and weapons in an A2AD environment; Effectiveness of current and future electronic attack and protection; High fidelity engagement / mission level modeling effectiveness and optimization; Capabilities and limitations of ISR and reconnaissance systems; Vulnerability of PGM to threats; Capabilities and CONOPS of potential threat systems.

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS
Association of Old Crows, American Nuclear Society.
Dr. Alfred Anthony (Tony) Pandiscio
Raytheon Company

EDUCATION
University of Massachusetts Amherst
  B.S., Control Systems/Electrical Engineering, 1983
Harvard University
  M.S., Control Systems/Applied Mathematics, 1986
University of Massachusetts Amherst
  B.S., Control Systems/Electrical Engineering, 1983
Brown University
  Ph.D., Control Systems/Electrical Engineering, 1994
  M.S., Control Systems/Electrical Engineering, 1994

WORK EXPERIENCE
Raytheon Company
  Technical Director, Systems Technology, Corporate, 2012-Present

AREAS OF EXPERTISE
Control Systems; Missile Guidance Navigation & Control; Sensor Netting; Operations Analysis;
Estimation Theory; Air Defense Systems; Modeling & Simulation; Systems Engineering.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Member, IEEE; Past chairman of the Boston Chapter IEEE Control Systems Society.
Dr. Patric L. Patterson
Utah State University

EDUCATION
Utah State University
  Ph.D., Space Systems/Electrical Engineering, 2005
  M.S., Electrical Engineering, 1990
  B.S., Electrical Engineering, 1989

WORK EXPERIENCE
Space Dynamics Laboratory, Utah State University
  Director, Advanced Concepts, 2015-Present
  Director, Military Space & Technology Innovation, 1998-2015
  Sensor Systems Engineer, 1997-1998
  Experiment Director, U.S.A.F. Phillips Laboratory, 1993-1997
  Electrical Engineer, 1992-1993
Utah State University Research Foundation
  Chairman, AIAA/USU Conference on Small Satellites, 2000-present
Utah State University/Electrical and Computer Engineering Department
  Adjunct Assistant Professor, 2008-present
Utah State University
  Program Coordinator, NASA Affiliated Research Center, 1998-1999
  Chief of Staff, Rocky Mountain Space Grant Consortium, 1992-1993
Honeywell Inc.
  Systems Engineer, 1990-1992

AREAS OF EXPERTISE
Space Systems; Small Satellite Technologies; Space Situational Awareness; Rendezvous and Proximity Operations; Laser Operations; Controls; Astrodynamics; EO/IR Sensors.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Chairman, AIAA/USU Conference on Small Satellites (2000-Present); Technical Committee Member, European Space Agency Small Satellites Systems and Services Conference (2008-Present); Scientific Program Committee Member, International Academy of Astronautics, Small Satellites for Earth Observation Symposium (2009-Present); Advisory Board Member, Electrical and Computer Engineering Department, Utah State University (2009-Present); Senior Member, International Academy of Astronautics, (2001-Present); Committee Member, AIAA Small Satellite Technical Committee (2015-Present); Council of Institutions Member, Universities Space Research Association (2009-2014); Committee Member, AIAA Space Systems Technical Committee Member (2002-2005).
Dr. Alan J. Pue  
John Hopkins Applied Physics Laboratory

EDUCATION
University of Maryland  
Ph.D., Electrical Engineering, 1981  
Cornell University  
M.Eng., Electrical Engineering, 1974  
Cornell University  
B.S., Electrical Engineering, 1973

WORK EXPERIENCE
John Hopkins Applied Physics Laboratory  
Sector Chief Scientist, Air and Missile Defense Sector, 2010-Present  
Director, Interceptor Knowledge Center, Missile Defense Agency, 2008-2010  
Supervisor, Guidance Navigation and Control Group, Air and Missile Defense Department, 2000-2008  
Assistant Supervisor, Guidance and Navigation Group, Power Projection Department, 1996-2000  
Assistant Supervisor, Missile Guidance, Control, and Navigation Group, Fleet Systems Department, 1994-1996  
Section Supervisor, Navigation System Analysis Section, Missile Guidance, Control, and Navigation Group, Fleet Systems Department, 1987-1994  
Assistant Section Supervisor, Inertial and Pointing Systems Section, Missile Guidance, Control, and Navigation Group, Fleet Systems Department, 1981-1987  
Staff Member, Dynamics Analysis, Fleet Systems Department, 1974-1981

AREAS OF EXPERTISE
System Engineering; Weapon System Concept Development; Requirements Development; Missile Flight Test and Evaluation; Weapon System Performance Analysis; Guidance, Navigation, and Control System Design and Analysis.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
AIAA.
Dr. Helen L. Reed
Texas A&M University

EDUCATION
Virginia Tech
  Ph.D., Engineering Mechanics, 1981
Virginia Tech
  M.S., Engineering Mechanics, 1980
Goucher College
  A.B., Mathematics, 1977

WORK EXPERIENCE
Texas A&M University
  Edward “Pete” Aldridge `60 Professorship, Aerospace Engineering, 2014-present
  Regents Professor (in perpetuity), 2013/14-present
  Presidential Professor for Teaching Excellence (in perpetuity), 2013-present
  Department Head, Aerospace Engineering, 2004-2008
  Professor, Aerospace Engineering, 2004-present
Chandah Space Technologies
  Co-Founder, Chief Technology Officer, Board of Directors, 2012-present
Arizona State University
  Professor, Mechanical & Aerospace Engineering, 1992-2004
  Associate Professor, Mechanical & Aerospace Engineering, 1985-1992
  Director, Aerospace Research Center, College of Engineering & Applied Sciences, 1993-1996
Tohoku University, Sendai, Japan
  Associate Professor, Institute of Fluid Sciences, 1991-1992
Stanford University
  Assistant Professor, Mechanical Engineering, 1982-1985
NASA Langley Research Center
  Aerospace Technologist, 1977-1978
  Mathematics Aid, 1976

AREAS OF EXPERTISE
Boundary-layer laminar-to-turbulent transition, aerothermodynamics, flow control – low speed to hypersonic; energy efficient aircraft; quiet supersonic platform; computational fluid dynamics; small-satellite design/operations; on-orbit rendezvous/proximity operations; space situational awareness.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Dr. William C. Regli
The University of Maryland

EDUCATION
The University of Maryland
  Ph.D., Computer Science, 1995
The University of Maryland
  M.S., Computer Science, 1994
Saint Joseph's University
  B.S., Mathematics, 1989

WORK EXPERIENCE
The University of Maryland at College Park
  Director, Applied Research Laboratory for Intelligence and Security, 2018-Present
  Director, Institute for Systems Research, 2018-2019
  Professor, Department of Computer Science, 2018-Present
Defense Advanced Research Projects Agency (DARPA), United States Department of Defense
  Special Assistant, Office of the Director, 2017
  Acting Director, Defense Sciences Office, 2017
  Deputy Director, Defense Sciences Office, 2014-2017
United States Department of Energy
  Scientific Adviser, Office of Stockpile Services, 2010-2014; 2018-Present
Drakontas LLC
  Founder and Scientific Adviser, 2003-Present.
Drexel University
  Associate Dean for Research, College of Computing and Informatics, 2010-2014
  Director, Applied Communications & Information Networking Institute, 2008-2010
  Deputy Director, Applied Communications & Information Networking Institute, 2003-2008
  Assistant, Associate and Full Professor of Computer Science, 1997-2014

AREAS OF EXPERTISE
Artificial Intelligence and Autonomy; Graphics, Modeling and Simulation; Engineering Design and Manufacturing; Military and wireless communications networks; Data-driven methods for science and engineering.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE (Fellow 2017); ACM (Senior Member); AAAI (Senior Member); AAAS.
Mr. David W. Robbins
Leidos

EDUCATION
Rensselaer Polytechnic Institute
  M. Eng., Electrical Engineering, 1977
Rensselaer Polytechnic Institute
  B.S., Electrical Engineering, 1976

WORK EXPERIENCE
Leidos
  Sr. Vice President and Director, Leidos Innovations Center, 2019-Present
  Sr. Vice President and Manager, Sensors and Phenomenology Operation, 2014 –2018
  Vice President and Manager, Sensor Technology Division, 2005–2013
  Vice President and Deputy Division Manager, Sensor Design Division, 1997–2005
PAR Government Systems
  Vice President/San Diego Technology Center Manager, 1987–1997
  Section Manager/Program Manager, 1977–1987

AREAS OF EXPERTISE
Space-based EO/IR sensing; satellite technology, IR search and track systems; radar, electronic warfare; signature control; unattended ground sensing; directed energy; portable radiography systems; DNA-based human ID; bio threat detection.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Institute of Electrical and Electronic Engineers, American Association for the Advancement of Science, Association of Old Crows, Air Force Association, Association for Unmanned Vehicle Systems International.
Dr. Kevin J. Saeger  
Los Alamos National Laboratory

EDUCATION
Massachusetts Institute of Technology
  Ph.D., Aeronautics and Astronautics, 1989
Massachusetts Institute of Technology
  M.S., Aeronautics and Astronautics, 1986
Tri-State University
  B.S., Aerospace Engineering, 1984

WORK EXPERIENCE
Los Alamos National Laboratory
  Division Leader, Intelligence and Space Research, 2010-Present
  Group Leader, Decision Applications Division, 2005-2010
  Various, Decision Applications Division, 2001-2005
Office of the Secretary of Defense/Program Analysis and Evaluation
  Director (SES), Planning and Analytical Support, 1997-2001
  Director (GS-15), Simulation and Analysis Center, 1996-1997
  Analyst, Land Forces Division, 1995-1996
Institute for Defense Analyses
  Staff Member, System Evaluation Division, 1989-1996

AREAS OF EXPERTISE
Space Systems; Survivability; Remote Sensing; Modeling and Simulation; Weapons Effects; Structural Mechanics; Materials; C4ISR; Optimization; Nuclear Detection; Operations Research; Systems Analysis; Space Situational Awareness.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Associate Editor, Military Operations Research Journal.
Dr. Lara S. Schmidt  
RAND Corporation

EDUCATION
The American University  
Ph.D., Mathematical Statistics, 2001
West Virginia University  
M.S., Mathematics, 1993
Shepherd College  
B.S., Mathematics, 1991

WORK EXPERIENCE
The Aerospace Corporation  
Principal Director, Strategic and Global Awareness Directorate, 2019-present
RAND Corporation  
Director, RAND Homeland Security Operational Analysis Center FFRDC, Strategy, Policy and Operations Program, 2016-Present  
Associate Director, RAND Project AIR FORCE FFRDC, 2011-2016  
Associate Director, Force Modernization and Employment, 2010-2011  
Senior Statistician, 2003-Present
U.S. Naval Observatory  
Mathematician, 1995-2003

AREAS OF EXPERTISE
Intelligence analysis and threats to national security space systems. Policy and technology analysis to include the following areas: offensive and defensive cyberspace operations; risk analysis; operational employment of technology and effects on warfighting operations; methodological approaches to policy analysis; cyber-manoever analyses; space and satellite systems; atomic timekeeping; GPS and navigation; cybersecurity of industrial control systems; cyber effects estimation; quality assurance; weapon system acquisition; requirements analysis; cyber testing; cybersecurity practices; cyber operations planning.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Member, American Statistical Association. Board of Advisors, Harvard Data Science Review.
Dr. Gregory E. Shannon  
Carnegie Mellon University

EDUCATION
Harvard University  
Certificate, National International Security Policy for Senior Executives 2012
Purdue University  
Ph.D., Computer Sciences, Purdue University, 1988
Iowa State University  
B.S, Computer Science, Iowa State University, 1982

WORK EXPERIENCE
Carnegie Mellon University  
Chief Scientist, CERT Division, 2010-Present
Science Applications International Corp. (SAIC)  
Chief Scientist, Cyber Security, Science Engineering and Technology Corporation, 2008-2010
CounterStorm, Inc.,  
Chief Scientist, New York, NY, 2003-2008
Lucent Technologies, Inc.  
Manager, Technology and Business Strategist, Columbus, OH, 1997-2003
Spanning Tree Technologies, Inc.  
Founder and Chief Scientist, Ames, IA, 1994-1997
Indiana University  
Assistant Professor, Bloomington, IN, 1988-1995

AREAS OF EXPERTISE
Cybersecurity, resilience, artificial intelligence, software, and science of security.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE, Senior Member; Association of Computing Machinery, Member; Women in Cyber Security (WiCyS) Conference, Steering Committee Member.
Mr. Gregory J. Simer  
Northrop Grumman Mission Systems

EDUCATION
Johns Hopkins University
   M.S., Electro-Optical Engineering, 2001
Virginia Tech
   B.S., Electrical Engineering, 1999

WORK EXPERIENCE
Northrop Grumman
   Director, Air Dominance, 2017-Present
   Director, Advanced EO/IR Systems, 2014-2017
   Program Manager, EO/IR & Distributed Systems, 2007-2014
   Senior Systems Engineer, 2003-2007
Independent Consultant 2002-2004
University of Maryland
   Research Scientist, Army Research Lab, 2003
Yafo Networks
   Systems Engineer, 2000-2002
Gould Fiber Optics
   Engineer, 1995-2000

AREAS OF EXPERTISE
EO/IR Systems; Infrared Search and Track, Laser Radar; Fiber Optics; Lasers; Focal Plane Arrays, Optical Windows; Airborne System Integration; Flight Test; Low Observable Technologies; Radar, Optical Communication systems; ISR; Fire-control; Tracking and ID.
Dr. Katherine M. Simonson
Sandia National Laboratories

EDUCATION
Princeton University
   Ph.D., Statistics, 1989
Princeton University
   M.A., Statistics, 1986
Middlebury College
   B.A., Mathematics, 1984

WORK EXPERIENCE
Sandia National Laboratories
   Senior Scientist, Systems Mission Engineering, 2015-present
   Distinguished Member of Technical Staff, Data Analysis & Exploitation, 2002-2015
   Principal Member of Technical Staff, Sensor Exploitation Applications, 1995-2002
   Senior Member of Technical Staff, Statistics & Human Factors, 1989-1995

AREAS OF EXPERTISE
Statistics; Data Analytics; Automatic Target Recognition; Synthetic Aperture Radar; Image Processing; Intelligence, Surveillance and Reconnaissance.

PROFESSIONAL / SCIENTIFIC/HONORARY AFFILIATIONS
Association for Women in Mathematics; Automatic Target Recognizer Working Group; Phi Beta Kappa.
Dr. Annette L. Sobel  
Texas Tech University Health Sciences Center

EDUCATION
Wright State University  
M.S., Aerospace Medicine/Human Factors Engineering, 1992
Duke University  
Family Medicine Residency, 1986
Case Western Reserve School of Medicine  
M.D., Medicine, 1983
Rutgers University  
B.S., Biochemistry/Computer Science, 1979

WORK EXPERIENCE
Texas Tech University Health Sciences Center  
Associate Professor, Medical Education, 2013-present
Adjunct Professor  
Electrical and Computer Engineering, 2013-present
University of Missouri  
Assistant to the Provost for Strategic Opportunities, 2008-2013
Sandia National Laboratories  
Distinguished Member of the Technical Staff, 1992-2008

AREAS OF EXPERTISE
Aerospace Medicine; Human Factors Engineering; Virtual Reality/Augmented Reality; Simulation; Informatics; Disease Surveillance; Intelligence Fusion; CBRNE; Homeland Defense and Security; Humanitarian Assistance/Disaster Response; Automatic Target Recognition; One Health.

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS
Fellow, Aerospace Medical Association; Fellow, American Academy of Family Physicians; USGIF; IEEE; Association of Military Surgeons; Association of Old Crows; Human Factors and Ergonomics Society; AFCEA International.
Dr. Lindley T. Specht  
Raytheon

EDUCATION
University of Illinois at Urbana-Champaign
Ph.D., Electrical Engineering, 1981
University of Illinois at Urbana-Champaign
M.S., Electrical Engineering, 1978
University of Florida
B.S., Chemistry, 1974

WORK EXPERIENCE
Raytheon
Subject Matter Expert, RayTech, 2015-Present
Senior Principal Engineering Fellow, Integrated Defense Systems, 2009-2014
Engineering Fellow, Raytheon Electronic Systems, 1999-2003
Manager/Lead Scientist, Raytheon Systems Company, 1998-1999
Manager/Principal Engineer, Raytheon Electronic Systems, 1995-1998
Manager/Principal Scientist, Corporate Research Division, 1989-1995
Senior Scientist, Corporate Research Division, 1981-1989

AREAS OF EXPERTISE
Electro-Optics; Infrared Focal Plane Arrays; Lasers including HEL/DEW; Advanced Materials and Material/Chemical Science; MEMS, Nanotechnology; RF Devices, Semiconductor Materials and Device Fabrication; IC Design; Computer Systems; Signature Management; Sensor Systems; System Design and Analysis; Emerging Technology Development; Commercial Technology Applications.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
IEEE; ACS; ARRL.
Dr. Stefanie Tompkins
Colorado School of Mines

EDUCATION
Brown University,
    Ph.D, Geological Sciences, 1997
Brown University
    M.Sc., Geological Sciences, 1993
Princeton University
    B.A., Geological and Geophysical Sciences, 1987

WORK EXPERIENCE
Colorado School of Mines
    Vice President for Research and Technology Transfer, 2018-Present
X (formerly Google X)
    Advisor to X, 2018-present
Defense Advanced Research Projects Agency (DARPA)
    Acting Deputy Director, 2017-2018
    Director, Defense Sciences Office, 2014-2017
    Chief of Staff, 2013-2014
    Deputy Director, Strategic Technology Office, 2012-2013
    Program Manager, 2007-2012
Science Applications International Corporation
    Deputy Operations Manager, Reconnaissance and Surveillance Operation, 2006-2007
    Division Manager, Advanced Technology Applications Division, 2003-2006
    Senior Staff Scientist, 1996-2003
SETS Technology, Inc.
    Associate Scientist, 1993-1996
U.S. Army (Military Intelligence)
    Commissioned Officer, 1987-1991

AREAS OF EXPERTISE
Reflectance spectroscopy; imaging spectroscopy (hyperspectral imaging) and remote sensing; positioning, navigation, and timing; geology and detection of underground structures.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Member, Sigma Xi.
Dr. Vyshnavi Suntharalingam
MIT Lincoln Laboratory

EDUCATION
Pennsylvania State University
  Ph.D., Engineering Science and Mechanics, 1996
Yale University
  B.S., Electrical Engineering, 1989

WORK EXPERIENCE
MIT Lincoln Laboratory
  Senior Staff, Space Systems & Technology, 2014-Present
  Group Leader, Advanced Imaging and Silicon Technology, 2010-2014
  Senior Staff, Advanced Imaging Technology, 2005-2010
  Assistant Group Leader, Advanced Silicon Technology, 2000-2005
  Technical Staff, Advanced Technology, 1996-2000

AREAS OF EXPERTISE
EO/IR components, sensors, systems; advanced materials and materials science; microelectronics; satellites and space system technologies; manufacturing technologies; RF components and sensors.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Mr. Lee A. Venturino
First Principles Inc.

EDUCATION
California State University, Fullerton
M.S., Communications, Electrical Engineering, 1991
Pennsylvania State University
B.S., Electrical Engineering, 1987

WORK EXPERIENCE
First Principles Incorporated
President and CEO, Founder, 2004-Present
Dynamic Analytics and Test
President and Co-Founder, 1999-2004
USAFR
Program Subject Matter Expert, SAF/AQL, 1999-2007
USAF
Branch Chief, Advanced Strike Technologies, SAF/AQLR 1996-1999
Test Program Manager, Det 3, 1992-1996
Advanced Technology Program Manager, Ballistic Missile Office, 1988-1992

AREAS OF EXPERTISE
Aircraft survivability, Aircraft Lethality, Electronic Warfare, Electronic Protection, Low Observables, Countermeasures, Towed Decoys, Ballistic Missiles, Satellite survivability.

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS
Dr. Steve Warner  
Institute for Defense Analyses

EDUCATION
Massachusetts Institute of Technology  
Ph.D., Inorganic Chemistry, 1986  
State University of New York, Stony Brook  
B.S., Chemistry/Minor Mathematics, 1982

WORK EXPERIENCE
Institute for Defense Analyses  
Director, System Evaluation Division, 2008-Present  
Assistant Director, System Evaluation Division, 2005-2008  
Research Staff Member, Operational Evaluation Division, 1986-2005

Massachusetts Institute of Technology  
Research and Teaching Assistant, Chemistry Department, 1982-1986

AREAS OF EXPERTISE
Assessments of Weapon System Performance (missiles, sensors, torpedoes, countermeasures); Mission- and Force-Level Modeling and Simulation; Test and Evaluation of Military Systems; Evaluation of Tools for Predicting Atmospheric Transport and Dispersion (chemical-biological agent defense, nuclear effects, hazardous materials), Electronic Warfare (counter-improved explosive device and air warfare); Evaluation of Undersea and Antisubmarine Systems; Operational Assessment of Counterdrug Operations and Coast Guard Law Enforcement Activities.
Dr. Peter M. Wegner  
Spaceflight Industries  

EDUCATION  
University of Wyoming  
Ph.D., Composite Materials/Mechanical Engineering, 1999  
Stanford University  
M.S., Aerospace Engineering, 1993  
University of Arizona  
B.S., Aerospace Engineering, 1992  

WORK EXPERIENCE  
Spaceflight Industries  
Chief Technology Officer, 2014-Present  
USU/Space Dynamics Laboratory  
Director of Advanced Concepts, 2012-2014  
USAF  
Director of Operationally Responsive Space Office, 2008-2012  
Air Force Research Laboratory, 1993-2007  

AREAS OF EXPERTISE  
Satellites; Rockets; Remote Sensing; Ground Systems; Data Analytics; Cloud Processing.  

PROFESSIONAL / SCIENTIFIC / HONORARY AFFILIATIONS  
Associate Fellow AIAA; USAF Harold Brown Award; Rotary NASA Award.
Mr. Alan R. Wiechman  
Eagle Aerie Inc.

EDUCATION
California Polytechnic State University  
B.S., Electrical Engineering, 1972

WORK EXPERIENCE
Eagle Aerie Inc.  
Chief Technology Officer, 2014-Present  
Contractor for MTSI, 2015-Present  
Contractor for MIT/LL, 2015-Present
Boeing  
Vice President Special Technology Integration, 2009-2014  
Vice President Advance Combat Systems, 2004-2006  
Division Director, Special Assignment, 2000-2004  
Director Proprietary Professional Grounds Managements, 1985-2000  
Deposition Technology, Brunswick, 1985-1985  
LO Section Chief, McDonnell Douglas 1981-1985  
LO Engineer, Lockheed Skunks Works 1977-1981  
Electronic Engineer, Vitro Labs, Naval Upgrades 1971-1977

AREAS OF EXPERTISE
Low Observables, Radar Cross Section/ Radiant Intensity/ Acoustics/ Visual/ Electromagnetic Emissions,  
Prop, Aero, Materials, Mission Systems, Structures, Codes.

PROFESSIONAL/ SCIENTIFIC/ HONORARY AFFILIATIONS
AIAA, Aerospace Design Award; National Defense Industrial Association Combat Survivability Award,  
Tech Achievement; Pioneer of Stealth Award; Tulare Western High School (First Ever Wall of Fame);  
College of Sequoias (Hall of Fame).
Dr. Yadunath B. Zambre  
Lockheed Martin

EDUCATION
Stanford University  
Ph.D., Applied Physics, 1987
Yale University  
M.S., Engineering and Applied Science, 1979
Yale University  
B.S., Engineering and Applied Science, 1979

WORK EXPERIENCE
Lockheed Martin  
Director & Chief Technologist, New Ventures, 2018- Present
Chief Scientist, Advanced Technology Center, Space Systems, 2012-2017
Chief Scientist, Information Systems and Global Services, Defense Engineering, 2009-2012
Senior Fellow, 2011-Present
Fellow, Information Systems and Global Services, 2008-2011
Principal Engineer, Information Systems and Global Services, 2005-2008
UTtrue, Inc.  
Chief Technology Officer, 2003-2005
R.B. Webber & Company  
Principal, 2002-2003
Atomic Tangerine  
Chief Technology Officer, 2000-2002
Stanford Research Institute  
Principal Consultant, SRI Consulting, 1997-2000

AREAS OF EXPERTISE
Cyber security; communications; networking; systems architecture; space systems; business models; technology incubation; technology commercialization.

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS
Member, IEEE.
Section 3: Air Staff and Secretariat Biographies
Lt Gen Duke Z. Richardson
SAB Military Director

Lt. Gen. Duke Z. Richardson is the Military Deputy, Office of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics, the Pentagon, Arlington, Virginia. He is responsible for research and development, test, production, product support, and modernization of Air Force programs worth more than $60 billion annually.

Gen. Richardson enlisted in the Air Force in 1983 as an avionics technician, and later received his commission via Officer Training School. In addition to four Program Executive Officer leadership tours, Gen. Richardson has held a breadth of materiel-related assignments within Program Offices, the Air Force Research Laboratory, Headquarters Air Force Life Cycle Management Center, Headquarters Air Force Materiel Command, Headquarters Air Force, U.S. Special Operations Command and the Office of the Secretary of Defense.

In his previous assignment, he was the Air Force Program Executive Officer for Presidential & Executive Airlift, where he oversaw the planning and execution of all life cycle activities for programs including the Air Force One recapitalization, current Air Force One, C-12, C-21, C-32, C-37, C-40 and E-4B.

EDUCATION
1989 Bachelor of Science, Electrical Engineering, Arizona State University, Tempe
1993 Master of Science, Electrical Engineering, University of New Mexico, Albuquerque
1997 Squadron Officer School, Maxwell Air Force Base, Ala.
2001 Air Command and Staff College, Maxwell AFB, Ala.
2006 Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C.
2006 Senior Acquisition Course, Fort Lesley J. McNair, Washington, D.C.
2012 Executive Program Manager’s Course, Fort Belvoir, Va.
2016 Advanced Senior Leader Development Program, Warrenton, Va.

ASSIGNMENTS
2. October 1989 - May 1993, Space Electronics Engineer, Air Force Research Laboratory (formerly Phillips Laboratory and Weapons Laboratory), Kirtland AFB, N.M.
5. July 1997 - June 1999, F-15 Suite 4 Program Manager, F-15 System Program Office, Wright-Patterson AFB, Ohio
6. July 1999 - July 2000, Designated Acquisition Commander Staff Officer, Aeronautical Systems Center, Wright-Patterson AFB, Ohio
16. August 2012 - September 2013, Vice Commander, Air Force Life Cycle Management Center, Wright-Patterson AFB, Ohio
17. September 2013 - September 2014, Director, Logistics and Sustainment, Headquarters Air Force Materiel Command, Wright-Patterson AFB, Ohio
20. September 2018 - June 2019, Air Force Program Executive Officer for Presidential & Executive Airlift, PE Directorate, Air Force Life Cycle Management Center, Wright-Patterson AFB, Ohio

MAJOR AWARDS AND DECORATIONS
Defense Superior Service Medal
Legion of Merit with oak leaf cluster
Meritorious Service Medal with five oak leaf clusters
Air Force Commendation Medal
Air Force Achievement Medal

OTHER ACHIEVEMENTS
1991 Weapons Laboratory Young Scientist/Engineer of the Year
1995 Outstanding Academy Educator, Department of Mathematical Sciences
1997 Distinguished Graduate, Squadron Officer School
2001 Distinguished Graduate, Air Command and Staff College
2006 Distinguished Graduate, Industrial College of the Armed Forces

EFFECTIVE DATES OF PROMOTION
Second Lieutenant Sept. 28, 1989
First Lieutenant Sept. 28, 1991
Captain Sept. 28, 1993
Major July 1, 1999
Lieutenant Colonel March 1, 2003
Colonel Jan. 1, 2007
Brigadier General Aug. 2, 2013
Major General July 3, 2017
Lieutenant General June 20, 2019

(Current as of June 2019)
Dr. Richard J. Joseph  
Air Force Chief Scientist  
Ex-Officio Member

Dr. Richard J. Joseph is the Chief Scientist of the United States Air Force, Washington, D.C. He serves as the chief scientific adviser to the Chief of Staff and Secretary of the Air Force, and provides assessments on a wide range of scientific and technical issues affecting the Air Force mission. In this role, he identifies and analyzes technical issues and brings them to the attention of Air Force leaders, and interacts with other Air Staff principals, operational commanders, combatant commands, acquisition and science and technology communities to address cross-organizational technical issues and solutions. He also interacts with other services and the Office of the Secretary of Defense on issues affecting the Air Force technical enterprise. He serves on the Executive Committee of the Air Force Scientific Advisory Board. He is the principal science and technology representative of the Air Force to the civilian scientific and engineering community and to the public at large.

Dr. Joseph has more than 40 years of experience as a physicist, directed energy researcher, senior program manager, national security advisor and executive. Prior to assuming his current position, Dr. Joseph was the Chief Executive Officer for Earthstar LLC, a small consulting firm he founded in 1998. In this position, he has served government agencies, national laboratories and public companies on the development and management of programs in a broad range of technical areas.


Upon leaving active duty, Dr. Joseph joined Los Alamos National Laboratory in the Accelerator Technology group. In 1985 he was chosen as the Neutral Particle Beam program manager in the Strategic Defense Initiative Office's Directed Energy Office. While in this role he instituted and directed three major spacecraft-based programs.

In 1987 he divided his time between serving as a senior advisor to the Defense and Space Delegation in the Nuclear and Space Talks with the Soviet Union in Geneva, acting as a senior policy analyst for national security at the White House Office of Science and Technology Policy, and directing a large study on deployment of an initial missile defense capability for the Secretary of Defense.

Between 1988 and 1990 Dr. Joseph led multiple research programs in laser remote sensing to include an airborne laser system capable of detecting biological warfare agents at LANL. This system, designed to support Operation Desert Storm, was built and successfully tested in 28 days.

In 1992 Dr. Joseph took a leave of absence to join the National Aeronautics and Space Administration where he was part of a small group of senior managers directing the restructuring of the agency. While at NASA he also led an interagency task force on remote sensing that moved the agency from using very large satellites for the Earth Observing System to constellations of smaller platforms.

Upon returning to Los Alamos in 1993, he directed the Laboratory's missile defense programs and in 1995 he joined the Accelerator Production of Tritium program which intended to use a new approach in a new production plant to produce material for the nuclear weapons program.
EDUCATION
1970 Bachelor of Science Physics, Georgetown University, Washington D.C.
1979 Ph.D. Physics, University of Texas, Austin

CAREER CHRONOLOGY
1983 – 1985, Program manager, Neutral Particle Beam program, SDIO Directed Energy Office
1986 – 1987, Director, Missile Defense Study, Office of the Secretary of Defense, the Pentagon, Washington, D.C.
1993 – 1995, Missile Defense Program Director, LANL, N.M.
1995 – 1998, Accelerator Production of Tritium program, Department of Energy, LANL, N.M.
1998 – 2017, Owner, Earthstar LLC, LANL, N.M.

BOARDS AND ADVISORY GROUPS (Recent)
Oak Ridge National Laboratory, Global Security Advisory Group
Oak Ridge National Laboratory, Nuclear Science and Engineering Advisory Board
Argonne National Laboratory, Global Security Advisory Group
Nevada Test Site, Senior Advisory Group

(Current as of February 2018)
Lt Col Elizabeth D. Sorrells
Executive Director

Lt Col Elizabeth Sorrells is the Executive Director, Air Force Scientific Advisory Board, Office of the Assistant Secretary of the Air Force for Acquisition, the Pentagon, Washington, D.C. She is responsible for the 20-person Secretariat at Headquarters Air Force, which supports over 50 leading scientists and engineers from industry, FFRDCs, national labs, and academia who perform in-depth reviews of Air Force science and technology programs and conduct major studies on topics deemed critical by the Air Force. Prior to her current assignment, Lieutenant Colonel Sorrells was assigned to Headquarters Defense Threat Reduction Agency where she finished up her tour there as the Deputy Chief, Chemical Biological Radiological Nuclear (CBRN) Preparedness and Response Division.

Lt Col Sorrells graduated from Arizona State University in 2002 with a Bachelor of Science Degree in Chemical Engineering and commissioned as a second lieutenant through the Reserve Officer Training Corps. Her first assignment was at the Air Force Research Laboratory at Edwards AFB CA, where she worked on research identifying and testing new liquid hydrocarbon rocket fuels. At the Air Force Technical Applications Center she supported the nuclear surveillance mission through chemical research and development. While assigned to AFTAC, Lt Col Sorrells deployed with the Defense Intelligence Agency (DIA) to Baghdad, Iraq, leading their analysis laboratory and participating in CBRNE technical collection missions supporting the intelligence mission.

Lt Col Sorrells was then assigned to DIA as the deputy chief for Irregular Warfare and Weapons of Mass Destruction requirements branch, assessing cutting edge technology to support technical collection teams. She then took over as the DIA Program Manager for agency R&D efforts leveraging laboratory and industry partner R&D funding. She also worked closely with CIA and InQTel, accessing and influencing cutting edge technologies of small business startups. At the Space and Missile Systems Center, she supported the Military Satellite Communications (MILSATCOM) Directorate, looking at future MILSATCOM technologies and satellite architectures. After ACSC, Lt Col Sorrells was assigned to the Defense Threat Reduction Agency, where her initial position was as the NORTHCOM Country Lead for the Chemical Biological Radiological Nuclear (CBRN) Preparedness Program, assisting Partner Nations build the capability to respond to CBRN incidents.

EDUCATION
2002 Bachelor of Science in Engineering, Chemical Engineering, Arizona State University, Tempe, Ariz.
2002 Air and Space Basic Course, Maxwell Air Force Base, Ala.
2006 Squadron Officer School, Maxwell AFB, Ala., by correspondence
2007 Squadron Officer School, Maxwell AFB, Ala.,
2010 Master of Arts in Procurement and Acquisition Management, Webster University
2013 Air Command and Staff College, Maxwell AFB, Ala., by correspondence
2016 Master of Military Operational Art and Science, Air Command and Staff College, Maxwell AFB, Ala.

ASSIGNMENTS
10. June 2015–June 2016, Student, Air Command and Staff College, Maxwell AFB, AL.

MAJOR AWARDS AND DECORATIONS
Defense Meritorious Service Medal
Meritorious Service Medal
Joint Service Commendation Medal with oak leaf cluster
Air Force Commendation Medal
National Defense Service Medal
Iraq Campaign Medal

EFFECTIVE DATES OF PROMOTION
Second Lieutenant May 29, 2002
First Lieutenant May 29, 2004
Captain May 29, 2006
Major June 1, 2012
Lieutenant Colonel April 1, 2017

(Current as of July 2019)
Mr. Evan G. Buschmann
Deputy Executive Director

EDUCATION
University Illinois Champaign-Urbana
B.S., General Engineering, 2005

AREA OF EXPERTISE
Acquisition Program Management; Systems Engineering; Continuous Process Improvement; Aircraft Survivability and Mission Effectiveness Engineering and Test.

ASSIGNMENTS
USAF Life Cycle Management Center (ASC/WWJP), F-35 Joint Program Office (Arlington, VA)
F-35 Strategic Initiatives Lead, 2016-2017
F-35 Block 3i Deputy Capability Manager, 2014-2016
F-35 Deputy Program Manager for Production Planning, 2012-2014

NAV AIR/NAWCAD AIR-4.1.8 (Patuxent River Naval Air Station, MD)
F-35 Survivability and Mission Effectiveness Verification Lead, 2010-2012
F-35 RF/IR Signature Engineer, 2010
VH-71 Presidential Helicopter Survivability Engineer, 2008-2010
HX-21 Rotary Wing Flight Test Engineer, 2007-2008
AH-1W/Z and UH-1N/Y Aircraft Survivability Engineer, 2005-2007

Lt Col Melissa M. Tallent
Chief of SAB Studies

EDUCATION
Old Dominion University
M.P.A., Public Administration, 2000
James Madison University
B.S., Political Science, 1996

AREA OF EXPERTISE

ASSIGNMENTS
(Pentagon, VA, 2018-Present) Office of the Assistant Secretary of the Air Force (Acquisition); (Pentagon, VA) Chief Air& Space Branch, Joint Staff J-8, Joint Requirements and Assessments Division; (PACOM, Camp Smith, HI) Deputy Chief Headquarters Command, Control, Communications and Cyber Services Division; (Langley AFB, VA) Flight Commander, C4 Systems; (FLARNG) Battalion Signal Officer; (USAREUR) Operations Officer; (MDARNG) Signal Platoon Leader.
Maj Jed E. Sherman  
Chief of S&T Reviews

EDUCATION
Georgetown University  
M.S., Infectious Diseases
American Military University  
M.A., National Security Studies
West Liberty University  
B.S., Biology

AREAS OF EXPERTISE
Program Management; Special Military Operations; Air Mobility.

ASSIGNMENTS
(Pentagon, VA 2016-present) Office of the Assistant Secretary of the Air Force (Acquisition); (Hurlburt Field) Formal Training Unit Instructor/Evaluator & Flight Commander U-28A; (Dyess AFB) Instructor Navigator C-130 E/H.

MSgt Aileen L. Griffith  
Superintendent

EDUCATION
Ashford University  
Bachelors of Administration, Organizational Management
Community College of the Air Force  
Community College of the Air Force  
Associates, Aerospace Ground Equipment (AGE) -Maintenance
Master Resiliency Trainer
Professional Manager Certification
USAF Senior Non-Commissioned Officer Academy (Distant Learning)
Non-Commissioned Officer Academy (In-residence, Germany)
Joint Senior Non-Commissioned Officer Academy (Distant Learning)
Airman Leadership School (In-residence, LA)

AREAS OF EXPERTISE
Office management; Human Resource Actions; Defense Travel System; Resource Management; Project Management; Event Planning; Development & Mentoring Airmen; Resiliency Training; Military Professional Development Classes; Process improvement; Protocol.

ASSIGNMENTS
SrA Jaedon A. Clarke  
Exec Admin & Security Manager

EDUCATION
University of Maryland University College  
Currently pursuing - B.S, Social Science/Art Minor,

AREAS OF EXPERTISE
Security Manager; Command Support Section; decorations; evaluations; promotions and ceremonies; administrative-related duties; skilled painter.

ASSIGNMENTS
(Pentagon, DC, 2019-Present), Office of the Assistant Secretary of the Air Force (Acquisition), Security Manager/Administrator; (Joint Base San Antonio (JBSA) Kelly AFB, Texas, 2018) Air Force Information Mission Support Center HQ, Command Support Staff; (JBSA Lackland AFB, Texas, 2016-2018) 68th Network Warfare Squadron, Command Support Staff.

Mr. Raymond H. McJonathan  
Budget Officer

EDUCATION
Airman Leadership School  
Non Commissioned Officer Academy  
Senior Non Commissioned Officer Academy

AREAS OF EXPERTISE
Military finance, personnel, and travel; SAF/AQB budget and fiscal integrity.

ASSIGNMENTS
(Pentagon, VA, 2002-present) Office of the Assistant Secretary of the Air Force (Acquisition); (Robins AFB) 78th Comptroller Squadron – AF Reserve; (Wright Patterson AFB) HQ AFMC Logistics Support Office; (Bolling AFB) 11th Wing Financial Management; (Robins AFB) Warner Robins Air Logistics Center; (Kelly AFB) San Antonio Air Logistics Center; (Dover AFB) 436th Comptroller Squadron; (Offutt AFB) 55th Comptroller Squadron.
Mr. Nicholas A. Stern  
Senior Program Analyst

EDUCATION
Virginia Commonwealth University
B.A., History / Anthropology

AREAS OF EXPERTISE
Strategic Planning; Force Management; Program Management; Supply Chain Logistics; Budget Analysis; Database Management; Mortuary Affairs; Historical Archaeology.

ASSIGNMENTS
(Fort Bragg, NC, 2016 – 2017) Strategic Planner, 1st Sustainment Command (Theater); (Fort Lee, VA, 2014 – 2016) Battalion S-3 (FWD), 82nd Special Troops Battalion.

Mr. Steven B. Chambers  
Senior Program Analyst

EDUCATION
Joint Forces Staff College Norfolk Virginia
International Relations (Graduate)
Command and General Staff College
PRINCE II Practitioner
Practitioner Certified
Army Systems Automation Management School, 2006
CISCO Academy Cert
University of Texas at San Antonio
B.S., Geopolitics, 1986

AREAS OF EXPERTISE

ASSIGNMENTS
Ms. Kimia L. Blackwell
Analyst

EDUCATION
Annandale High School
   General Studies
Woodson Technical Program
   Cosmotology Program

AREAS OF EXPERTISE
Providing exceptional commitment to administrative support and
customer service to the DoD and their families.

ASSIGNMENTS
(Joint Base Andrews, 2018-Present) Travel Administrative Assistant - SAFTAS Programs; (Joint Base
Anacostia Bolling, 2016-2017) Human Resources Specialist-Transient Department; (Washington Navy

Ms. Erika Castedo
Event Planner

EDUCATION
George Mason University
   B.A. Global Affairs; Concentration in International Development, 2011
   Minor Public Health

AREAS OF EXPERTISE
Event/Conference Planning & Managing at the IC level; Client & Vendor
Relations; Client Database Administration; Project Management.

ASSIGNMENTS
Events/Social Media Manager – (Defense Intelligence Agency- IRT, 2015-2016) Event Manager Lead –
(Sierra Nevada Corporation, 2014) Executive Assistant/Event Manager – (International Volunteer HQ
Event Planner.
Ms. Sanaa A. Lasher
Information Manager

EDUCATION
University of Maryland Global Campus
M.S., Data Analytics (Graduate)
Saint Leo University
B.S., Computer Information Systems, 2014

AREAS OF EXPERTISE
Data Science and Big Data Analytics, Office 365: SharePoint Online Administrator, Mining Massive
DataBase, Oracle, Python, SAS, Java, HTML, CSS, JavaScript, SQL, R Language, Statistics, IBM Congo,
Adobe Creative Suite InDesign, Photoshop, Photoshop Light room, Illustrator, and Dreamweaver.

ASSIGNMENTS
(USAF Scientific Advisory Board, 2019-Present) Information Manager – (UMC-Naval Health Clinic
Quantico, 2019-2020) DBC Administrative Assistant for OCS, TBS, WNY – (Chemonics International
Paso County Legal Assistant – (USAF Eaglewood Gulf Course, 2011-2014) Administrative Assistant
– (Middle East Broadcasting Center-MBC, 2005-2010) Television Post Production Coordinator.

Mr. Phillip W. Burnham
ISSM

EDUCATION
CCAF, Jun 2012
AA Information Technology
Stephen F. Austin State University, May 1999
BS Interdisciplinary Studies

AREAS OF EXPERTISE
Info Assurance, COMSEC, Certified Information Security Manager (ISACA),
Security Plus CE (COMPTIA)

ASSIGNMENTS
(Herndon, VA, 2019-Present), US Air Force 1999-2019); ISSM, Air Force Special Security Office,
Pentagon, VA (2018-2019); COMSEC Responsible Officer, 644 Combat Communication Squadron,
Andersen AFB, Guam (2011-2018); ISSM/CRO, 707 Communications Squadron, Ft Meade, MD (2008-
2011); CRO, NATO IT Wing, Geilenkirchen NATO Air Base, Germany (2004-2008); COMSEC
accountant/ADPE Specialist, 355 Communications Squadron, D-M AFB, AZ (2000-2004); Student, 336
Training Squadron, Keesler AFB, MS (2000-2000); Trainee, 320 Training Squadron, Lackland, AFB, TX
Col Brian K. Beachkofski
Senior Executive Staff Officer

EDUCATION
Massachusetts Institute of Technology
   M.B.A., Data & Entrepreneurship, 2012
Wright State University
   Ph.D., Engineering, 2004
Georgia Institute of Technology
   M.S., Aerospace Engineering, 1999
United States Air Force Academy
   B.S., Engineering Mechanics, 1998

AREAS OF EXPERTISE
Fracture mechanics; Probabilistic analysis; Quantitative financial analysis; Operations research; Risk assessment; Data analysis; Optimization; Stratified sampling techniques.

MILITARY ASSIGNMENTS
Lt Col Jennifer L. Dahms  
Executive Staff Officer

EDUCATION
Harvard University  
M.A., Extension Studies/Government  
United States Air Force Academy  
B.S., Legal Studies

AREAS OF EXPERTISE
Program Management, Intelligence Policy & Strategy,  
Data Exploitation & Dissemination Systems.

MILITARY ASSIGNMENTS
(Pentagon, VA, Mar 14-present) Office of the Assistant Secretary of the Air Force (Acquisition); (National Air and Space Intelligence Center) Program Manager for Business Analytics; (166 Network Warfare Squadron, Delaware Air National Guard) National Security Agency Threat Operations Center Analyst; (102 Network Warfare Squadron, Rhode Island Air National Guard) Flight Commander, Intelligence Support to Air Force Network Operation Center; (Hanscom Air Force Base) Program Manager, Distributed Common Ground System Block 10.2 and Air Operations Center Integration; (Hanscom AFB) Project Manager, Joint Mission Planning System.

Lt Col Jonathon I. Henry  
Executive Staff Officer

EDUCATION
University of Dayton  
M.S., Aerospace Engineering  
West Virginia University  
B.S., Aerospace Engineering

AREAS OF EXPERTISE
Aerodynamics; Aircraft Configuration; Flight Test; Wind Tunnel Testing; Hypersonics; Powered Lift Systems; Missile Testing; Education and Training.

MILITARY ASSIGNMENTS
(Pentagon, VA, May 15-present) Office of the Assistant Secretary of the Air Force (Acquisition); (Maxwell AFB) Chief, Commanders Action Group, HQ Air University; Dir of Ops, 23d Training Sq, OTS; Student Sq CC, 23d Training Sq, OTS; (Kirtland AFB) Chief, Airborne Sensors Branch, Airborne Laser Program Office; Deputy Chief, Airborne Sensors Branch, Airborne Laser; (Camp Victory, Iraq) Ops Officer, DCMA Central Iraq; (Edwards AFB) Lead B-2 Ops Engineer, 419th Flt Test Sq, 412th Test Wing; Flight Test Engr, Hypersonic Flight Test Team, 412th Test Wing; (Wright Patt AFB) Deputy Chief, Advanced Mobility Office, Air Vehicles Dir, AFRL; Developmental Engr, Air Vehicles Dir, AFR.
Maj Lloyd “Tom” Hunsaker  
Executive Staff Officer

EDUCATION
Georgetown University  
CMAP, Change Management Advanced Practitioner, 2011
University of Colorado – Colorado Springs  
MBA, Organizational Development and New Venture Management, 2008
Utah State University  
B.S., Business Administration, 2002

AREAS OF EXPERTISE

MILITARY ASSIGNMENTS
(Pentagon, VA, Oct 19-present) Office of the Assistant Secretary of the Air Force (Acquisition); (Peterson AFB) Dean’s Office and Instructor, National Security Space Institute, (Schriever AFB) Satellite Operations, DMSP; (Vandenberg AFB) Assistant Director, Missile Defense Office; (Vandenberg AFB) Program Manager, Evolved Expendable Launch Vehicle (EELV).

Capt Matthew C. Renner  
Executive Staff Officer

EDUCATION
Harvard Business School  
M.B.A., Business Administration, 2016
John Hopkins University  
M.S., Systems Engineering, 2013
University of Michigan  
B.S., Mechanical Engineering, 2010

AREAS OF EXPERTISE
Strategy consulting; general management; due diligence; financial analysis; engineering management; program management; mechanical engineering; systems engineering; design.

MILITARY ASSIGNMENTS
United States Air Force Reserve Staff Officer, Air Force Science Advisory Board, 2016-Present  
Capt Young-Jun (Y.J.) Yoon  
Executive Staff Officer

EDUCATION
Johns Hopkins University  
    M.B.A., Financial Engineering, 2017
Rensselaer Polytechnic Institute  
    M.Eng., Computer & Systems Engineering, 2002
University of Delaware  
    B.S., Computer Science, 1997

AREAS OF EXPERTISE
Big Data Analytics; Server Platform Infrastructure & Engineering; Artificial Intelligence; Machine Learning; SIGINT; Cyber Security; Data Collection & Analysis; Software Engineering.

MILITARY ASSIGNMENTS
(Pentagon, VA, Apr 19-present) Office of the Assistant Secretary of the Air Force (Acquisition); (Fort Meade, MD) Computer & Systems Engineer, DISA; (Fort Meade, MD) Deputy Branch Chief, 29th Intelligence Squadron, NSA; (Fort Meade, MD) Technical Director, 34th Intelligence Squadron, NSA; (Shaw AFB) Crew Commander, AFCENT; (Fort Meade, MD) Flight Commander, 707th Comm Squadron.
Section 4: Membership Departure List

FY2020
Dr. Andrew Alleyne
Dr. Melissa Choi
Dr. Mark Campbell
Dr. James Chow
Lt Gen Terry Gabreski, USAF (Ret)
Dr. Samuel Graham Jr.
Dr. Tadayoshi Kohno
Gen Lester Lyles, USAF (Ret)
Dr. Kenneth Olson
Dr. Alan Pue
Dr. Nils Sandell Jr.
Dr. Lara Schmidt
Dr. Yadunath Zambre

FY2022
Dr. Suzanne Beers
Dr. Rodney Bowersox
Dr. David Coombs
Dr. Natalie Crawford
Dr. Doc Dougherty
Dr. Robert Duncan
Dr. Philip Fawcett
Dr. Peter Hancock
Dr. Ryan Hersey
Dr. Eric Jones
Mr. Glenn Kuller
Dr. Todd Murphey
Dr. David Robbins
Dr. Katherine Simonson

FY2021
Mr. Aaron Blow
Dr. Robert Bontz
Dr. Eric Hall
Gen Donald Hoffman, USAF (Ret)
Dr. Juliana Hsu
Dr. Ann Karagozian
Dr. Leo Kempel
Dr. Patric Patterson
Dr. Kevin Saeger
Dr. Gregory Shannon
Mr. Gregory Simer
Dr. Lindley Specht
Dr. Vyshnavi Suntharalingam
Dr. Steven Warner
Mr. Alan Wiechman