



UNITED STATES ARMY SCIENCE BOARD



Biographical Sketch Book

2014



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The Army Science Board (ASB) is a federal advisory committee organized under the Federal Advisory Committee Act. It provides the Army with independent advice and recommendations on matters relating to the Army's scientific, technical, manufacturing, acquisition, logistics and business management functions, and other Department of the Army matters as determined by the Secretary of the Army. Army Science Board members and consultants are eminent authorities in science, technology, manufacturing, acquisitions, logistics, business management functions, or other matters of special interest to the Army.

The Army Science Board began in November 1951 when Army Secretary Frank Pace, Jr. appointed twelve outstanding scientists and industrialists as members of a scientific advisory panel to assist him and the Army leadership in creating and effective, economical and progressive fighting force using existing scientific technology and industrial resources. Three years later, this panel was expanded and officially designated the ASAP, with its first formal meeting held on November 16, 1954. The Army Science Board was created in 1971 to replace the ASAP and continues in that function today.

Both members and consultants are appointed under the authority of 5 U.S.C. § 3109 as Special Government Employees, and are subject to federal ethics rules. They serve voluntarily without compensation.

The Board is supported by a full-time government Directorate in the Office of the Deputy Under Secretary of the Army (DUSA).



THE ARMY SCIENCE BOARD

Dr. Jim Tegnalia
Chair

Vacant
Vice Chair

LTC Stephen K. Barker (USA)
Executive Director, Army Science Board Directorate
ASB Designated Federal Officer
(703) 545-8652

LTC John F. Whitfield, Jr. (USA)
Study Manager
(706) 791-0749
john.whitfield2.mil@mail.mil

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Membership Manager
(703) 545-8654
carolyn.t.german.civ@mail.mil

Ms. Kimberly Sims
Security Manager
(703) 693-0451
kimberly.e.sims.civ@mail.mil

Mr. Brian P. O'Quinn
Program Management Support, Contractor
(703) 545-8651
brian.p.oquinn.ctr@mail.mil

LTC Grant L. Morris (USA)
Study Manager
grant.l.morris.mil@mail.mil

Mr. Paul Woodward
Information Technology Support
(703) 695-8344
paul.j.woodward2.civ@mail.mil

Ms. Neia Herbert
Travel Coordinator, Contractor
(703) 545-8658
neia.m.herbert.ctr@mail.mil
usarmy.pentagon.hqda-dusa.mbx.asb-travel@mail.mil (Travel)



UNITED STATES ARMY SCIENCE BOARD



Parent Board Members

2014





James A. Tegnalia, Ph.D.

Chairman, Army Science Board
Research Professor,
Chemical and Nuclear Engineering Department
University of New Mexico

EDUCATION:

M.S., Engineering Administration, George Washington University	1975
Ph.D., Physics, The Catholic University of America	1968
B.S., Physics, Georgetown University	1964

EXPERTISE:

Physics
Nuclear engineering
Science administration

EXPERIENCE:

University of New Mexico Research Professor, Chemical Nuclear Engineering Department	2009-present
Defense Threat Reduction Agency, Director	2005-2009
Sandia National Laboratories, Vice President	1998-2005
Lockheed Martin Advanced Environmental Systems, Inc., President	1996-1998
Lockheed Martin Corporation, Vice President	1995
Sandia National Laboratories, Executive Vice President and Deputy Director	1993-1995
Martin Marietta Corporation, VP, Business Development, Electronics Group	1987-1993
DARPA, Deputy Director and later Acting Director	1985-1987
Office of the Undersecretary of Defense for Research and Engineering, Assistant Undersecretary of Defense and Acting Deputy Undersecretary of Defense	1982-1985
DARPA, Program Manager and Office Director, Smart Weapons, Radar Sensors, Stealth Technology	1976-1982
United States Army Night Vision Laboratory	1971-1976
United States Army	1968-1971

Department of State International Security Advisory Board
Co-chair, Sandia National Laboratories National Security Advisory Panel
Board of Advisors, George Washington University School of Engineering
Board of Directors, Sandia Science and Technology Park
Board of Directors, Technology Ventures Corporation
Board of Directors, Laguna Industries, Inc.
Chair, Army Science Board
Sigma Xi



Robert G. Atkins, Ph.D.

Assistant Head, Intelligence, Surveillance,
and Reconnaissance and Tactical Systems Division
MIT Lincoln Laboratory

EDUCATION:

Ph.D., Electrical Engineering, Massachusetts Institute of Technology	1993
Electrical Engineer, Massachusetts Institute of Technology	1989
S.M., Electrical Engineering, Massachusetts Institute of Technology	1988
S.B., Electrical Engineering, Massachusetts Institute of Technology	1987

EXPERTISE:

Intelligence, surveillance, and reconnaissance
Air defense
Radar, RF signatures, and electromagnetic modeling
Systems analysis and architecture engineering
Rapid capability development for counterterrorism & counterinsurgency applications

EXPERIENCE:

MIT Lincoln Laboratory	
Assistant Head, Intelligence, Surveillance, and Reconnaissance and Tactical Systems Division	2010-present
Assistant Head, Homeland Protection and Tactical Systems Division	2009-2010
Group Leader, Advanced Capabilities and Systems Group	2006-2009
Associate Group Leader, Systems Analysis Group	2002-2006
Associate Group Leader, Sensor Exploitation Group	2000-2002
Assistant Group Leader, Systems Analysis Group	1999-2000
Technical Staff Member, Air Defense Techniques Group, and Systems and Analysis Group	1993-1999



Joseph J. Beaman, Jr., Sc.D.

Professor, Mechanical Engineering Department
University of Texas at Austin

EDUCATION:

Sc.D., Mechanical Engineering, Massachusetts Institute of Technology	1979
M.S., Mechanical Engineering, The University of Texas at Austin	1975
B.S., Mechanical Engineering, The University of Texas at Austin	1972

EXPERTISE:

Rapid manufacturing
Solid freeform fabrication
Selective laser sintering and 3D printing
Model based control
Manufacturing process control and short run, high value manufacturing

EXPERIENCE:

The University of Texas at Austin	1979-present
Earnest F. Gloyna Chair in Engineering	2002-present
Chair, Department of Mechanical Engineering	2001-2012
Ernest Cockrell, Jr., Memorial Chair in Engineering	2001-2002
Andersen Consulting Endowed Professorship	1991-2001
Temple Foundation Endowed Faculty Fellowship	1990-1991
Associate Professor	1985-1989
Assistant Professor	1979-1985

National Academy of Engineers
Board of Directors, Society of Manufacturing Engineers
Fellow, American Society of Mechanical Engineers
Tau Beta Pi
Phi Kappa Phi



Gisele Bennett, Ph.D.

Director; Regents' Researcher
Electro-Optical Systems Laboratory — GTRI

Professor
School of Electrical and Computer Engineering

EDUCATION:

Ph.D., Electrical Engineering, Georgia Institute of Technology,	1995
Certificate, Management of Technology	1995
M.S.E.E., University of Central Florida	1989
B.S.E., Electrical Engineering, University of Central Florida	1980

EXPERTISE:

Atmospheric Turbulence
Optical Imaging Systems — Super resolution
Secure Supply Chain — Cargo Security
Decision Support Systems

EXPERIENCE:

Georgia Institute of Technology, Atlanta, Georgia	
Georgia Tech Research Institute (GTRI)	1992-present
Regents' Researcher	2011-present
Director, Electro-Optical Systems Laboratory	2005-present
Principal Research Engineer	2005-present
Senior Research Engineer	2000-2005
Founder/Director, Logistics & Maintenance Applied Research Center (LandMARC)	2000-2007
Research Engineer II	1996-2000
Graduate Research Assistant	1992-1995
School of Electrical and Computer Engineering	1990-present
Professor	2005-present
Associate Professor	2004-2005
Adjunct Faculty Member	1996-2003
Graduate Research and Teaching Assistant	1990-1991
University of Central Florida, Orlando, Florida	
Center for Research in Electro-Optics and Lasers (CREOL)	1988-1989



Mary Crannell

President
Idea Sciences, Inc.

EDUCATION:

M.A.T., Education, Colgate University	1981
B.A., International Relations/History, Eisenhower College, Rochester Institute of Technology	1980

EXPERTISE:

Decision-making
Institutional change
Conflict analysis
Social sciences
Education and organizational culture

EXPERIENCE:

Idea Sciences, Inc., Founder and President	2002-present
Science Applications International Corporation Division Manager, Business Development Consultant	1998-2002
Leadership 2000, Senior Vice President	1995-1998
Drake Beam Morin, Inc., Consultant and Senior Vice President	1988-1995
Crannell and Associates, Career Consultant	1987-1988
Drake Beam Morin, Inc., Career Consultant	1986-1987
University of Houston, Senior Advisor	1982-1986

Board Member, The Kogod School of Business, American University



Siddhartha Dalal, Ph.D.

Adjunct Professor & Executive in Residence
Columbia University

Professor
RAND Corporation

EDUCATION:

Ph.D., Statistics, University of Rochester
MBA, Marketing, University of Rochester

EXPERTISE:

Information Analytics
Information Technology
Machine Learning
Research Management
Network Engineering
Software Engineering
Risk Analysis

EXPERIENCE:

RAND Corporation	2007-present
Adjunct Staff	2012-present
Chief Technology Officer	2007-2012
Professor, Pardee RAND Graduate School of Public Policy	2007-present
Columbia University, Adjunct Professor & Executive in Residence	2012-present
Praedicat, Inc., Board of Directors	2012-present
UCLA School of Engineering, Advisory Board	2011-present
Xerox, Vice President of Research	2003-2007
Bellcore/BellLabs/Telcordia/SAIC, Executive Director & Chief Scientist	1995-2002



Jill Harp, Ph.D.

Professor of Biochemistry, Chair, Department of Life Sciences
Winston Salem State University

EDUCATION:

Ph.D., Organic Chemistry, University of Maryland, College Park 1991
B.S., Chemistry, York College, City University of New York 1985

EXPERTISE:

Bioorganic chemistry
Neuroscience
Accreditation/Assessment of academic programs and policies
High Education Administration

EXPERIENCE:

Winston Salem State University	1997-present
Professor and Chair, Department of Life Sciences	2011-present
Member, SACS Executive Leadership Team	2007-present
Associate Professor, Department of Life Sciences	2003-2011
Assistant Professor, Physical Science Department	1997-2003
Wake Forest University School of Medicine	2003-present
Adjunct Assistant Professor	
North Carolina A&T State University, Assistant Professor	1995
Wake Forest School of Medicine Instructor, HCOP Program	1995
Bennett College, Assistant Professor	1993-1995

National Computational Science Institute (NCSI) Steering Committee Member
Southern Accreditation of Colleges and Schools Consultant 2010-present



Margaret Harrell, Ph.D.

Director, Military, Veterans and Society Program
Center for a New American Security

Senior Social Scientist; Director
Army Health Program, RAND Corporation

EDUCATION:

Ph.D., Cultural Anthropology, University of Virginia	2000
M.S., Systems Analysis, The George Washington University	1991
B.A., Cultural Anthropology, University of Virginia	1986

EXPERTISE:

Military manpower and personnel
Military Health
System dynamics simulation modeling
Veteran services
Qualitative research methods
Military families, quality of life, and effects of deployment on military families

EXPERIENCE:

RAND Corporation, Director, Army Health Program	2011-2012
Center for a New American Security	2011-2012
Senior Fellow; Director, Military, Veterans, and Society Program	
RAND Corporation	1990-2011
Associate Director	2004-2011
Senior Social Scientist, Center for Forces, Resources and Policy	
Senior Social Scientist	2002-2004
Social Scientist	2000-2002
Associate Operations Research Analyst	1990-2000
CACI, Associate	1989-1990
Booz Allen & Hamilton, Management Consultant	1987-1989



Susan Houde-Walter, Ph.D.

CEO
LaserMax Inc.

EDUCATION:

Ph.D., Optics, University of Rochester	1987
M.S., Optics, University of Rochester	1983
B.A., Liberal Arts, Sarah Lawrence College	1976

EXPERTISE:

Laser physics
Optical engineering
Optical materials
Weapons systems (small arms)
Engineering education

EXPERIENCE:

University of Arizona, Adjunct Professor, College of Optical Sciences	2005-present
Minnesota State University, Force Science Research Center, Technical Advisor	2005-present
LaserMax, Inc., CEO	2002-present
LaserMax, Inc., President	2000-2002
University of Rochester, The Institute of Optics, Full Professor	1998-2005
Associate Professor	1993-1998
LaserMax, Inc, Co-Founder and Co-Owner	1989-present

President, Optical Society of America
Board of Directors, Optical Society of America
Fellow, American Ceramic Society
Fellow, Optical Society of America



Jeffrey A. Isaacson, Ph.D.

President and CEO
Universities Space Research Association

EDUCATION:

Ph.D., Theoretical Physics, Massachusetts Institute of Technology	1991
M.S., Chemical Engineering, Princeton University	1984
B.S., Nuclear Engineering, Columbia University	1982

EXPERTISE:

Military space
Ballistic missile defense
Systems engineering

EXPERIENCE:

Sandia National Laboratories	
Vice President, Defense Systems and Assessments	2011-present
Combined Security Transition Command-Afghanistan,	
Chief, Afghan National Army Construction (mobilized reservist)	2009-2010
RAND Corporation	
Vice President and Director, Army Research Division	2007-2011
Lockheed Martin Space Systems Company, Program Management Director	2004-2007
RAND Corporation	
Vice President, National Security Research Division	2000-2004
Director, International Security and Defense Policy Center	1998-2000
Research Staff	1991-1998



Sung M. Lee, Ph.D.

Senior Operational Staff
Carnegie Mellon University, Software Engineering Institute

EDUCATION:

Ph.D., Physics, The Ohio State University	1965
M.S., Physics, The Ohio State University	1959
B.S., Physics, Yonsei University, Korea	1955

EXPERTISE:

Ground vehicle mobility, vulnerability, survivability
Infrared optics (target signature analysis and countermeasures)
Biometrics
Graduate education
Research program portfolio development and administration

EXPERIENCE:

Carnegie Mellon University, Software Engineering Institute, Senior Operational Staff	2000-present
Michigan Technological University, Vice Provost for Research and Dean of the Graduate School	1991-2000
Dean of the Graduate School	1988-1991
Keweenaw Research Center, Director	1976-1991
Assistant Professor, Associate Professor, Professor of Physics	1965-2000
Denison University, Assistant Professor of Physics	1961-1965

Advisory Committee, Michigan Transportation Research Program
Board of Directors, Korea-US Science Cooperation Center
Board of Directors, Council of Graduate Schools
Chair, Midwestern Association of Graduate Schools
Executive Committee, Council of Research Policy and Graduate Education,
National Association of State Universities and Land Grant Colleges
Antarctica Service Medal of the United States, National Science Foundation (1987), The United States Navy (1987)



**MG Lester Martinez-Lopez,
M.D. (USA, Ret)**

Senior Independent Medical Consultant

EDUCATION:

M.P.H., Johns Hopkins University, School of Hygiene and Public Health	1984
M.D., University of Puerto Rico, School of Medicine	1978
B.S., Pre-Med, University of Puerto Rico	1976

EXPERTISE:

Medical research management
Medical quality and patient safety
Medical research translation
Deployment medical operations and logistics
Disaster management and humanitarian response

EXPERIENCE:

Senior Independent Medical Consultant	Present
Brandon Regional Hospital, Chief Medical Officer	2007-2010
Lyndon B. Johnson General Hospital, Senior Vice-President and Administrator	2006-2007
BIOMED Solutions International, Inc., President & CEO	2006
United States Army	
Commanding General, U.S. Army Medical Research and Material Command & Fort Detrick, MD.	2002-2005
Commanding General, U.S. Army Center for Health Promotion and Preventive Medicine	2000-2002
Command Surgeon, U.S. Army Forces Command	1999-2000
Joint Task Force Aguila Surgeon	1998
Commander, Martin Community Hospital	1998-1999
Commander, Blanchfield Community Hospital	1996-1998
Chief Medical Officer, United Nations Mission to Hati	1995
Commander, 86 th Combat Support Hospital	1994-1996
Army War College	1993-1994
Chief, Department of Family Practice and Community Medicine	1990-1993
Division Surgeon, 4 th ID	1988-1990

Fellow, American Academy of Family Physicians
The United States Surgeon General's Medallion



The Honorable Malcolm R. O'Neill, Ph.D.
LTG (USA, Ret.)
Consultant

EDUCATION:

Ph.D., Physics, Rice University	1974
M.A., Physics, Rice University	1970
B.S., Physics, DePaul University	1962

EXPERTISE:

Missile Defense
Acquisitions
Research and Development Organizations

EXPERIENCE:

Assistant Secretary of the Army for Acquisition, Logistics, and Technology	2010-2011
National Academies and the National Research Council	2006-2010
Chairman of the Board on Army Science and Technology	2006-2010
Lockheed Martin Corporation	1996-2006
Vice President and CTO	2000-2006
Vice President for Operations and Best Practices, Space and Strategic Missiles	1996-2000
U.S. Army Officer	
Director, Ballistic Missile Defense Organization	1993-1996
Deputy Director, Strategic Defense Initiative Organization	1990-1993
Assistant Military Deputy for International Cooperation, ASA (RDA)	1989-1990
Commanding General, U.S. Army Laboratory Command	1987-1989
Director, Kinetic Energy Weapons, Strategic Defense Initiative	1985-1987

Member, Defense Science Board
Member, Air Force Scientific Advisory Board



Thomas Ramos

Physicist

Lawrence Livermore National Laboratory

EDUCATION:

S.M., Physics, Massachusetts Institute of Technology	1977
B.S., General Engineering, United States Military Academy	1969

EXPERTISE:

Systems engineering of weapons systems
Intelligence analysis
High energy explosives
Lasers and other forms of directed energy
Nuclear weapons design

EXPERIENCE:

Lawrence Livermore National Laboratory, Special Assignment to Principal Associate Director for Weapons and Complex Integration	2012-present
Program Director for Department of Defense Programs	2008-2012
Lawrence Livermore National Laboratory, Program Leader	1994-2008
Department of Defense, Member of the Deutsch Commission	1994
Office of the Assistant to the Secretary of Defense for Atomic Energy, Special Advisor to the Secretary of Defense	1991-1993
Lawrence Livermore National Laboratory, Military Affairs Liaison	1989-1991
Department of Energy, Arms Control Analyst	1989
Lawrence Livermore National Laboratory, Nuclear Weapons Designer	1981-1989
United States Military Academy, Assistant Professor of Physics	1977-1981

Licensed Professional Engineer, State of Virginia



MG Ronald M. Segal (USAF, Ret), Ph.D.

Vice President and Enterprise Executive for
Energy and the Environment
Colorado State University/The Ohio State University

EDUCATION:

Ph.D., Electrical Engineering, University of Colorado	1982
M.S., Physics, Ohio State University	1975
B.S., Math and Physics, U.S. Air Force Academy	1974

EXPERTISE:

Aerospace technology
Energy technology
Systems engineering
Research and development management

EXPERIENCE:

Colorado State University/The Ohio State University, Vice President and Enterprise Executive for Energy and the Environment	2010-present
Colorado State University, Director, Graduate Studies in Systems Engineering, Woodward Professor of Systems Engineering	2007-present
Under Secretary of the Air Force, The Department of Defense Executive Agent for Space	2005-2007
Office of the Secretary of Defense, Director of Defense Research and Engineering	2001-2005
Major General (U.S. Air Force Reserves), Reserve Assistant to the Chairman of the Joint Chiefs of Staff	2001-2005
University of Colorado, Dean, College of Engineering and Applied Science	1996-2001
Astronaut	1990-1996
University of Colorado at Colorado Springs, Professor	1982-present
Air Force Space Command, Air Force Reserve Officer, Mobilization Assistant to Commander	1987-2001
Air Force Academy, Technical Director, Lasers and AeroSpace Mechanics Dir.	1987-1988
Air Force Reserve, Pilot/Chief, Command Post/Operations Plans Officer	1982-1987
United States Air Force Academy, Assistant Professor/Instructor, Physics	1979-1982
Air Force Instructor Pilot	1976-1979



James D. Shields

President & CEO
The Charles Stark Draper Laboratory Inc.

EDUCATION:

M.S., Electrical Engineering, Massachusetts Institute of Technology	1972
B.S., Electrical Engineering, Massachusetts Institute of Technology	1972

EXPERTISE:

Guidance Navigation and Control
Systems Engineering and Analysis
Autonomous Systems
Logistics
Data Fusion

EXPERIENCE:

Charles Stark Draper Laboratory, President and CEO	2006-present
Vice President for Program	2001-2006
TASC	1994-2001
Vice President, Transportation and Strategic Operations	1996-2001
Vice President, Systems Integration Group	1995-1996
Vice President, Information System Sector	1994-1994
Line Management, Vice President	1988-1994



George T. Singley, III

President, Singley & Associates, LLC

EDUCATION:

M.E., Mechanical Engineering, Old Dominion University	1977
M.B.A., College of William and Mary	1971
B.E.A., Mechanical Engineering, University of Delaware	1968

EXPERTISE:

- RDA management
- Strategic planning
- Systems design and development
- Helicopter systems
- Weapons systems

EXPERIENCE:

President, Singley & Associates, LLC	2008-present
Vice Chairman, Association of the U.S. Army for Civilian Affairs	2007-present
Group President & Sector VP, Science Applications International Corporation	2001-2007
CEO & President, Hicks and Associates, Inc.	1998-2004
Office of the Secretary of Defense:	
Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological Defense Program (Acting)	1997-1998
Director, Defense Research & Engineering (Acting)	1997-1998
Principal Deputy Director, Defense Research & Engineering	1995-1997
Principal U.S. Representative to the NATO Research and Technology Board and The Technical Cooperation Program (TTCP)	1995-1998
Deputy Assistant Secretary of the Army for Research and Technology	1988-1995
Program Executive Officer for Combat Support Aviation	1987-1988
Assistant Director of Army Research and Technology, Office of the Assistant Secretary of the Army for RDA	1985-1987
Army Aviation Systems Command: Chief, Advanced Concepts Division & Deputy PM, Light Helicopter Experimental	1980-1985
Aerospace Engineer, Aviation Applied Technology Directorate	1970-1980
Army Officer	1968-1970



Grant M. Warner, Ph.D.

United Technologies Corporation Assistant Professor
Howard University

EDUCATION:

Ph.D., Mechanical Engineering, Columbia University	2003
M.S., Mechanical Engineering, Pennsylvania State University	1996
B.S., Mechanical Engineering, Cornell University	1993

EXPERTISE:

Structural dynamics
Bio-mechanics
Energy harvesting

EXPERIENCE:

Howard University, Department of Mechanical Engineering United Technologies Corporation Assistant Professor	2006-present
Northeastern University, Department of Mechanical, Industrial, and Manufacturing Engineering, Assistant Professor	2003-2006

Member, New England Board of Higher Education



UNITED STATES ARMY SCIENCE BOARD



Subcommittee Members

2014





Vanu G. Bose, Ph.D.

President and CEO
Vanu Inc.

EDUCATION:

Ph.D., Electrical Eng & Computer Science, Massachusetts Institute of Technology	1999
M.S., Electrical Eng & Computer Science, Massachusetts Institute of Technology	1994
B.S., Electrical Eng & Computer Science, Massachusetts Institute of Technology	1987
B.S., Mathematics, Massachusetts Institute of Technology	1987

EXPERTISE:

Software radio
Wireless communication
Network architecture
Audio signal processing

EXPERIENCE:

Vanu, Inc., CEO & President	1998-present
Bose Corp, Director of Online Sales and Marketing	
Kalba International, Associate	
Project Orbis, Systems Engineer	



John-Paul Clarke, Sc.D.

Associate Professor
School of Aerospace Engineering

EDUCATION:

Sc.D., Massachusetts Institute of Technology	1997
S.M., Massachusetts Institute of Technology	1992
S.B., Massachusetts Institute of Technology	1991

EXPERTISE:

Optimization
Control Theory and Applications
Systems Analysis, Architecture and Design
Air Transportation Systems

EXPERIENCE:

Georgia Institute of Technology, Associate Professor	2005-present
Massachusetts Institute of Technology, Associate Professor	2002-2005
Massachusetts Institute of Technology, Assistant Professor	1997-2002
The Boeing Company, Visiting Scholar	1997-1997
Massachusetts Institute of Technology, Graduate Research Assistant	1992-1996
NASA Jet Propulsion Laboratory, Member of Technical Staff	1989-1992



Endy M. Daehner, Ph.D.

Policy Analyst/Physical Scientist
RAND Corporation

EDUCATION:

Ph.D., Chemistry, California Institute of Technology	2005
B.A., Human Biology, Stanford University	1997

FIELDS OF EXPERTISE:

Energy
Intelligence, surveillance, reconnaissance
Processing, exploitation, and dissemination
Unmanned air vehicles

EXPERIENCE:

RAND Corporation	2006-present
Full Physical Scientist	2010-present
Associate Physical Scientist	2006-2010
California Institute of Technology, Graduate Researcher	2000-2005
Catalytica, Inc., Research Assistant	1999
San Jose State University	
Chemistry Lecturer	1998
Research Assistant	1997



Mark N. Glauser, Ph.D.

Associate Dean for Research and Doctoral Programs
Syracuse University, LC Smith College of Engineering and Computer
Science

EDUCATION:

Ph.D., Fluid Dynamics, University of Buffalo, SUNY	1987
B.S., Mechanical Engineering, University of Buffalo, SUNY	1982

EXPERTISE:

Turbulent Flows; Jet Noise; Aero-optics;
Flow Separation; Unsteady Aerodynamics; Open and Closed-Loop Flow Control;
Signal Processing; Principle Component Analysis; Compressive Sensing;
Low Dimensional Modeling; Intelligence Wind Turbines; Research Management

EXPERIENCE:

Syracuse University	2001-present
Associate Dean for Research and Doctoral Programs, LC Smith College of Engineering and Computer Science	2008-present
Professor, Mechanical and Aerospace Engineering	2001-present
Professor, Department of Physics	2008-present
Associate Director for Research, "New York State Environmental Quality Systems Center"	2001-present
Clarkson University	1987-2001
Professor, Mechanical and Aeronautical Engineering and Institute for Nonlinear Studies	1998-2001
Associate Professor, Mechanical and Aeronautical Engineering and Institute for Nonlinear Studies	1993-1998
Assistant Professor, Mechanical and Aeronautical Engineering and Institute for Nonlinear Studies	1987-1993
Air Force Office of Scientific Research, Program Manager, "Turbulence and Internal Flows"	1996-1999
Universite de Poitiers, Fulbright Fellow and Visiting Senior Research Scientist	1995
NASA Langley Research Center, Visiting Senior Research Scientist	1994-1995
NASA Graduate Student Researchers Fellowship, NASA/Ames Research Center	1984-1987
University of Buffalo, Research Assistant, Turbulence Research Laboratory	1983-1984



Richard A. Guida
Managing Director
Guida Technology Associates, Inc.

EDUCATION:

M.B.A., The George Washington University	1981
M.S., Nuclear Engineering, Massachusetts Institute of Technology	1973
B.S., Electrical Eng. & Computer Science, Massachusetts Institute of Technology	1973

EXPERTISE:

Information technology
Information security
Nuclear engineering
Spent nuclear fuel management and transportation

EXPERIENCE:

Guida Technology Associates, Inc., Managing Director	2011-present
Johnson & Johnson	
Vice President, Worldwide Information Security	2008-2011
Director, Information Security	2001-2008
Department of the Treasury, Senior Technical Advisor to the Treasury CIO	1998-2001
Department of the Navy	
Associate Director for Regulatory Affairs	1988-1998
Naval Nuclear Propulsion Program	
Senior Engineer and Program Manager	1977-1988
Naval Officer and Reactor Engineer	1973-1977

Certified Information Systems Security Professional (current)
Professional Engineer, Commonwealth of Virginia (1978-2001)



William Guyton Jr.

Retired Leader of Science and Engineering Organizations

EDUCATION:

M.S., Electrical Engineering, Rutgers University	1970
B.S., Electrical Engineering, Fairleigh Dickenson University	1966

EXPERTISE:

Missile Defense
Conventional Weapons Systems
Directed Energy Systems
Defense Management
Systems Engineering

EXPERIENCE:

Sandia National Laboratories	1999–2010
Director, Integrated Military Systems	1999-2010
Lockheed Martin Corporation	1966-1999
Vice President and General Manager	1994-1999
Manager, Systems Analysis and Simulation	1990-1994
Director, Advanced Programs	1988-1990
Manager, Systems Engineering	1981-1987
Program/Project Manager	1975-1981
Principal, Sr. and Jr. Engineer	1966-1975



MG Charles R. Henry (USA, Ret)

President
CRH Inc.

Consultant
Federal Acquisition Process, Logistics, and the Defense Industry

EDUCATION:

U.S. Army War College	1982
L.L.M., J.D., Woodrow Wilson Law School	1976
B.S., Economics, Middle Tennessee State University	1959

EXPERTISE:

DOD acquisition system
Supply chain logistics
Business operations, including planning, operations, execution, and P&L (profit/loss)

EXPERIENCE:

CRH Inc., President	
Consultant, Federal Acquisition Process, Logistics, and the Defense Industry	2007-present
C.E. Gillman Company, Chief Operating Officer	2006-2007
National Veterans Business Development Corporation, President and CEO	2001-2004
LFR Group, Chairman and CEO	2000-2001
LFR Group, President	1997-2000
Science Applications International Corporation, Senior Consultant	1996-1998
Allied Research Corporation Services, President	1993-1996
United States Army	1959-1993
DCMC, Chief Executive Officer, Commander (First Commander)	1990-1993
Defense Logistics Agency, Deputy Director	1988-1992
U.S. Army Competition Advocate General	1985-1988
Defense Logistics Agency, Chief of Staff,	1984-1985
Cleveland Defense Contract Administration, Chief Operating Officer	1981-1984

Member, The National Research Council, Committee on Manufacturing Trends 2004-2005
Director, Molycorp (NYSE); Audit Committee; Safety
Director, Gaming Partners (NASDAQ) Vice-Chairman, Audit
Director, Imperatis Corp, Chairman of Board
Director, Procurement Round Table



Maria Mouratidis, Psy.D.

Associate Professor and Department Chair
Department of Psychology
Notre Dame of Maryland University

EDUCATION:

Psy.D., Psychology, Argosy University	2002
M.A., Clinical Psychology, Loyola University Maryland	1992
B.A., Psychology, Loyola University Maryland	1991

EXPERTISE:

Psychology
Military Mental Health
Psychotherapy
Neuropsychology and Neuroscience
Strategic planning
Post-traumatic stress disorder, traumatic brain injury
Suicide

EXPERIENCE:

Notre Dame of Maryland University, Department of Psychology, Chair and Associate Professor	2009-present
Psychologist, Independent Practice	2009-present
Loyola University Maryland, Affiliate Faculty	2006-present
National Naval Medical Center, Psychologist and Command Consultant	2005-2009
Yale University School of Medicine, Assistant Professor of Psychiatry	2003-2006
The National Institutes of Health, Guest Scientist Appointment	2000-2003
Johns Hopkins University School of Medicine, Research Program Coordinator	1998-2001
Private Practice	1994-2001

The American Psychological Association
International Neuropsychological Society



Evelyn M. Mullen

Science Campaigns Program Director (Acting)
Weapons Physics Directorate
Los Alamos National Laboratory

EDUCATION:

M.S., Nuclear Engineering, Texas A&M University 1988
B.S., Nuclear Engineering, Texas A&M University 1986

EXPERTISE:

Nuclear Weapons
Program Management
Research and Development

EXPERIENCE:

Los Alamos National Laboratory	1992-present
Science Campaigns Program Director (Acting), Weapons Physics Directorate	2010-present
Executive Advisor, Weapons Physics Directorate	2010-2013
Deputy Principal Associate Director (Acting), Global Security	2010
Division Leader, International and Applied Technology Division	2006-2010
Office Director, Threat Response Operations Office	2003-2006
Deputy Division Leader, Nonproliferation and International Security Division	1998-2003
NIS-18 Group Leader	1994-1998
ESH-12 TSM	1992-1994
SAIC, Staff Engineer	1990-1992
TU Electric, Engineer	1988-1990
Texas A&M University, Reactor Supervisor	1986-1988

Registered Professional Engineer, New Mexico, since 1994
Advisory Board member, Texas A&M Nuclear Engineering Department
Chair, American Nuclear Society—Trinity Section



Olugbemiga A. Olatidoye, Ph.D.

Professor/Director
Clark Atlanta University

EDUCATION:

Ph.D., Expert Systems-Intelligent Graphics, Georgia Institute of Technology	1992
M.S.C.E., Engineering Computer Graphics, Georgia Institute of Technology	1990
M. Arch., Architecture-Solar Energy, Virginia Polytechnic Institute and State University	1985
B.S.A.E., Structures, North Carolina A&T State University	1982

EXPERTISE:

Fluid-structure interaction problems using high performance computing
Alternative and renewable energy
Visualization, simulation models
CAD/CAM/GIS/geospatial
Sustainable environment

EXPERIENCE:

Clark Atlanta University Coordinator, Dual Degree Engineering Program	2004-present
Professor of Engineering	1999-present
Director, Center for Alternative, Renewable Energy Technology and Training (CARET ²)	1992-present
Director, AUC Sustainable Campus Community Initiative (ASCCI)	2010-present
Director, Visualization, Simulation and Design Laboratory	1992-present
CEO, Tido Tech International, LLC	1995-present

Board of Directors, Georgia Institute of Technology
Regional Sustainability Advisory Board, DOE-ORNL
Gamma Beta Phi Honor Society
Tau Beta Pi National Engineering Honor Society



Isaac Porche, Ph.D.

Associate Director, Force Development and Technology Program
RAND Corporation

EDUCATION:

Ph.D., Department of Electrical Engineering and Computer Science, Systems Division, University of Michigan	1998
M.S., Electrical Engineering, University of California, Berkeley	1992
B.S., Electrical Engineering, Southern University	1989

EXPERTISE:

- Cyber space operations
- Big Data
- Rapid acquisition
- Science of networks
- Intelligence Surveillance and Reconnaissance
- Electronic warfare

EXPERIENCE:

RAND Corporation, Senior Engineer	1998-present
Environmental Research Institute of Michigan, Transportation Research Engineer	1995-1997
General Motors Electric Vehicles, Project Engineer	1990-1994



James Providakes, Ph.D.

Executive Director, Army Programs Directorate
The MITRE Corporation

EDUCATION:

Ph.D., Electrical Engineering, Cornell University	1990
M.S., Electrical Engineering, Worcester Polytechnic University	1981
B.S., Electrical Engineering, Worcester Polytechnic University	1979

EXPERTISE:

C4ISR architecture analysis
Communication systems analysis
Advanced command and control activities
Intelligence reconnaissance sensor systems analysis/modeling
System engineering of distributed information systems

EXPERIENCE:

The MITRE Corporation	1988-present
Director, Army Programs Division	2006-present
Director, Washington C3 Center	2003-2006
Director, Chief Engineer, Army Systems and Technology Division	1997-2003
Executive Director, Air Force Center for Robust Global Operations	1995-1997
Executive Director, Air Force ESC/EN	1992-1995
Deputy Chief Engineer, Washington C3 Center, Army Battlefield Systems Division	1990-1992
Technical Director, Over the Horizon Radar	1988-1990
Lead Scientist	1988
Army SATCOM Agency, SATCOM Engineer	1985-1988
United States Army, Captain	1981-1985
Army Future Combat Systems Senior Advisory Board	
National Academies / National Research Council Naval Studies Board	2007-2010



Marcus W. Shute, Ph.D.

Vice President, Research and Sponsored Programs
Clark Atlanta University

EDUCATION:

Ph.D., Mechanical Engineering, Georgia Institute of Technology	1994
M.S., Mechanical Engineering, Georgia Institute of Technology	1991
P.E., Professional Engineer (Mechanical), State of Georgia	1987
M.S., Materials Science, Massachusetts Institute of Technology	1986
B.S., Mechanical Engineering, Tennessee State University	1984

EXPERTISE:

Materials Science
Optical Fiber Technology
Optical Networking
Wireless Networks
Technology Transfer/Commercialization
Technology Innovation and Strategic Planning
Digital Media as a Pedagogical Tool (serious games)

EXPERIENCE:

Clark Atlanta University, Vice President, Research and Sponsored Programs	2008-present
Shute Enterprises, Inc., Consultant	1987-present
Tennessee State University,	2003-2008
Vice President, Research and Sponsored Programs	
Professor, Electrical and Computer Engineering	
Luxcore Networks, Inc.,	2000-2002
Vice President, Advanced Technologies	
Vice President, Engineering	
Bell Laboratories/Lucent Technologies	1998-2000
Distinguished Member of Technical Staff, Wireless Networks Group	
AT&T Bell Laboratories/Lucent Technologies	1986-1998
Member of Technical Staff, Transmission Media Laboratory	
AT&T Bell Laboratories, Senior Technical Associate	1983-1985



William E. Snowden, Ph.D.

Technical Consultant
System Planning Corporation

EDUCATION:

Ph.D., Materials Science and Engineering, University of California, Berkeley	1976
M.S., Materials Science and Engineering, University of California, Berkeley	1971
B.S., Ceramic Engineering, Alfred University	1969

EXPERTISE:

Materials science
Microtechnology and applications
Armor/anti-armor technology
Active protecting systems
Defense technology

EXPERIENCE:

System Planning Corporation, Technical Consultant	1993-present
Science and Technology Associates, Inc. Vice President, Member of the Technical Staff	1992-1993
Failure Analysis Associates, Inc., Director	1989-1992
Office of the Secretary of Defense (OSD) Special Assistant to DUSD (Research and Advanced Technology)	1986-1989
Lawrence Livermore National Laboratory, Program Manager, Advanced Strategic Defense Systems	1985-1986
Defense Advanced Research Projects Agency, Project Manager, Defense Sciences Office	1983-1985
Lawrence Livermore National Laboratory, Materials Scientist, Chemistry and Materials Science Department	1979-1983
Corning Glass Works and General Electric Company, Research Scientist	1975-1979

Member, Keramos national professional honor fraternity



Bruce A. Swett, Ph.D.

Principal Scientist & Director of the Advanced Research Group
EOIR Technologies, Inc.

EDUCATION:

Ph.D., Neurosciences and Cognitive Studies, University of Maryland, College Park	2007
M.S.W., Clinical Social Work, University of Maryland at Baltimore	1993
M.Div., Religious Studies, Texas Christian University	1986
B.A., Psychology and Philosophy/Religion, McDaniel College	1981

EXPERTISE:

Scalable (Massive, "Big" Data) Analysis and Machine Learning
Cloud Video Analytics for Army Intelligence
Scalable Data Models for Data Fusion across Intelligence Sources
Biologically-Inspired Algorithms
Computational and Experimental neuroscience (fMRI, PET, MEG, EEG)

EXPERIENCE:

EOIR Technologies, Inc., Principal Scientist & Director of the Advanced Research Group	2010-present
Decisive Analytics Corporation (DAC), Senior Scientist	2008-2010
National Institute of Deafness and Other Communication Disorders, National Institute of Health, Research Scientist	2008-present
National Institute of Deafness and Other Communication Disorders, National Institute of Health, Post-Doctoral Fellow	2007-2008
Counseling Associates, Inc., CEO	1993-2002



Joe L. Theobald, Ph.D.

Principal Fellow
Raytheon Missile Systems Company

EDUCATION:

Ph.D., Physics, UCLA	1984
M.S., Physics, UCLA	1975
B.S., Physics, Harvey Mudd College	1974

EXPERTISE:

Ballistic Missile Defense
Space Based Surveillance Systems
Active Defense Systems at Sea
Integrated Air Defense Systems

EXPERIENCE:

Raytheon Missile Systems Company	2005–present
Principal Fellow	2005-present
Chief Engineer, High Speed Anti-radiation Missile	2002-2005
Raytheon Systems Company	1992-2002
Chief Engineer, STA NDARD and STANDARD II Missiles	1992-2002
General Dynamics, Engineering Staff Specialist	1987-1992
Rockwell International, Department Manager	1981-1987



Alan E. Willner, Ph.D.

Steven and Kathryn Sample Chair in Engineering
University of Southern California

EDUCATION:

Honorary Doctorate, Yeshiva University	2012
Ph.D., Electrical Engineering, Columbia University	1988
M.S., Electrical Engineering, Columbia University	1984
B.A., Physics, Yeshiva University	1982

EXPERTISE:

Optical Communications
Optical and Photonic Technologies

EXPERIENCE:

University of Southern California, Steven and Kathryn Sample Chaired Professor of Engineering, Ming Hsieh Dept. of Electrical Engineering, Viterbi School of Eng.	2010-present
University of Southern California, Professor, Ming Hsieh Dept. of Electrical Engineering	1998-2010
Defense Sciences Research Council, Member	2009-present
University of Southern California, Co-Director, Communications Sciences Institute	2007-2012
University College London, Visiting Professor, Department of Electronic & Electrical Engineering	2007-present
Phaethon Communications, Inc., Founder and CTO	1999-2002
University of Southern California, Associate Professor, Department of Electrical Engineering	1994-1998
Weizmann Institute of Science, Visiting Fulbright Professor, Physics Department	Spring 1998
University of Southern California, Director, Optical Communications Laboratory	1992-present



Marc A. Zissman, Ph.D.

Associate Head of the Cyber Security and
Information Sciences Division
MIT Lincoln Laboratory

EDUCATION:

Ph.D., Electrical Engineering, Massachusetts Institute of Technology	1990
S.M., Electrical Engineering, Massachusetts Institute of Technology	1986
S.B., Electrical Engineering, Massachusetts Institute of Technology	1986
S.B., Computer Science, Massachusetts Institute of Technology	1985

EXPERTISE:

Human language technology and speech, speaker and language recognition
Networking and communications
Tactical networking on the move
Cyber security
Quantitative test and evaluation of systems and technology

EXPERIENCE:

MIT Lincoln Laboratory, Assistant Division Head and Cyber Mission Lead, Communication Systems and Cyber Security Division	2007-2012
Group Leader, Wideband Tactical Networking Group	2004-2007
Assistant and Associate Group Leader Information Systems Technology Group	1997-2004
National Security Agency, Intergovernmental Personnel Act (IPA) Integree, Speech Research Branch, Office of Research and SIGINT Technology	1996-1997
MIT Lincoln Laboratory, Technical Staff, Speech Systems Technology Group	1986-1996
MIT Research Laboratory of Electronics, Research Affiliate	1992-1997



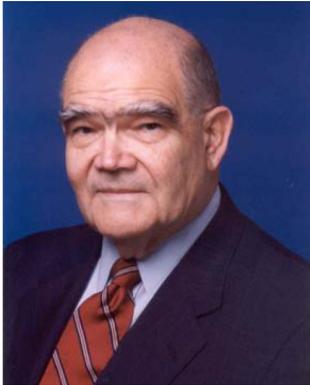
UNITED STATES ARMY SCIENCE BOARD



Consultants

2014





Joseph V. Braddock, Ph.D.

Trustee
The Potomac Foundation

EDUCATION:

Ph.D., Physics, Fordham University	1958
M.S., Physics, Fordham University	1952
B.S., Physics, St. Peters College	1951

EXPERTISE:

- Threat assessment
- Concept development and system concept definition
- System prototyping
- Test and evaluation
- Weapon system vulnerability and hardening

EXPERIENCE:

The Potomac Foundation, Trustee	1988-present
BDM	1959-1998
Founder and Member, Board of Directors	
Various corporate and management positions	
Iona College, Assistant Professor of Physics	1958-1960
Fordham University, Instructor in Physics	1952-1958



Nancy J. Chesser, Ph.D.

Independent Consultant

EDUCATION:

Ph.D., Physics, State University of New York at Stony Brook	1972
B.A., Physics, Cornell University	1967

EXPERTISE:

Defense systems analysis
Physics
Directed energy
Biometrics
Technology transition

EXPERIENCE:

Independent Consultant	2011-present
Directed Technologies, Inc.	1983-2011
Executive Vice President	2008-2011
Vice President for Technology Analysis	1983-2007
B-K Dynamics, Project Scientist	1977-1983

New York Academy of Sciences
Sigma Xi



William S. Crowder

Director for Logistics Services and Future Concepts
Logistics Management Institute

EDUCATION:

Industrial College of the Armed Forces	1990
M.B.A., Business/System Design, University of Georgia	1972
B.S., Accounting, University of Alabama	1964
A.A., Business, Marion Military Institute	1964

EXPERTISE:

Strategic concepts on logistics, supply chain, and deployment
Operational logistics
Change management
Systems design and engineering
Program Management of large programs
Contingency contracting
Financial management

EXPERIENCE:

Logistics Management Institute	1993-present
Director, Logistics Services and Future Concepts	2011-present
Director, Future Logistics Concepts	2003-2010
Technology Assessment Program Manager	1997-2002
Research Fellow	1993-1996
United States Army	1967-1993
Chief of Strategic Mobility, HQDA	1990-1993
Commander, Military Traffic Management Command, Port of Yokohama, Japan	1986-1988



LTG Paul E. (Butch) Funk (USA, Ret), Ed.D.

Associate Director, Education and Technology Applications Division
University of Texas at Austin, Institute for Advanced Technology

EDUCATION:

Ed.D., Montana State University, Education Administration
M.A., Montana State University, Psychological Counseling
B.S., Montana State University, Agriculture (Animal Industry)

EXPERTISE:

Joint Operations
Combat Leadership

EXPERIENCE:

University of Texas at Austin	
Associate Director, Education and Technology Application Division	2001-present
General Dynamics Land Systems	1996-2001
Vice President, Customer Service and Support	1999-2001
Vice President, Middle Eastern Operations	1996-1999
United States Army	1961-1995
Commanding General, III Corps and Fort Hood	1993-1995
Commanding General, U.S. Army Armor Center and Fort Knox	1992-1993
Vice Director, J-3, The Joint Staff	1991-1992
Commanding General, 3d Armored Division	1989-1991
Commanding General, National Training Center	1988-1989
Assistant Division Commander, 9th Infantry Division (Motorized)	1987-1988
Assistant Commandant, U.S. Army Armor School	1985-1987
Commander 194th Armored Brigade, U.S. Army Armor Center	1984-1985



Michael Heinz
President, MHH Systems Corporation

EDUCATION:

M.B.A., Business Administration, Washington University, St. Louis	1988
M.S., Aeronautical and Aerospace Engineering, Stanford University	1967
B.S., Aeronautical and Aerospace Engineering, University of Notre Dame	1966
B.A., University of Notre Dame	1965

EXPERTISE:

Program Management
Systems Engineering and Integration
Advanced Systems Development
Strategic Planning and Assessment
Weapons Systems

EXPERIENCE:

MHH Systems Corporation, President	2006-present
Boeing Company	1998-2005
Vice President and General Manager, Integrated Defense Adv. Systems	2004-2005
Vice President and Deputy General Manager, Integrated Defense Advanced Systems	2002-2004
Vice President and General Manager, Aircraft and Missiles Division, Unmanned Systems	2001-2002
Vice President and Deputy Program Manager, Aircraft and Missiles Division, Joint Strike Fighter	1998-2001
McDonnell Douglas	1967-1998
Aircraft Company, F/A-18 A/B/C/D Program Vice President	1996-1998
Phantom Works, System Assessment and Planning, Vice President and General Manager	1994-1996
Astronautics Company, Harpoon/SLAAM Programs, Vice President and Program Manager	1993-1994
Astronautics Company, Mission Planning Systems Division, Vice President and Program Manager	1991-1993
Staff Vice President Strategic Business Development	1989-1991
Missiles Company, Propulsion and Systems Engineering, various management and program management assignments	1967-1989



RADM Grant T. Hollett, Jr. (US Navy, Ret)

Senior Advisor, EaglePitcher Technologies

Senior Advisor, The O’Gara Group

EDUCATION:

Harvard University, National Security Course for Senior DOD Executives	1994
M.S. equivalent, Navy Nuclear Power, Naval Postgraduate School	1966
B.S., Mechanical Engineering, Duke University	1964

EXPERTISE:

Joint operations
Nuclear engineering
Manufacturing
Electrochemistry
Robotics

EXPERIENCE:

The O’Gara Group, Senior Advisor	2011-present
EaglePitcher Technologies, CEO/Chairman/Senior Advisor	2001-2011
Siemens Motion Controls Systems, Vice President and General Manager	2000-2001
Vickers Electronic Systems, Group Vice President	1996-1999
Cherry Electrical Products, President and other senior positions	1981-1996
Energy and Pollution Controls, Inc., Vice President	1978-1981
Procter and Gamble, Senior manufacturing management	1969-1978
United States Navy, Rear Admiral	1964-2000
US Navy, Nuclear Power Program	1964-1969

Duke University School of Engineering Board of Visitors
Board positions in US/Japan/Germany/India



GEN Paul J. Kern (USA, Ret)

Senior Counselor, The Cohen Group

EDUCATION:

Harvard University, Senior Service College Fellow	1987
M.S., Civil Engineering, University of Michigan	1973
M.S., Mechanical Engineering, University of Michigan	1973
B.S., U.S. Military Academy	1967

EXPERTISE:

Combat Operations
Program Management
Policy Development
Technology Applications in Military Forces

EXPERIENCE:

The Cohen Group, Senior Counselor	2005-present
AM General Corporation, President and Chief Operating Officer	2008-2010
Battelle Memorial Institute, Vice President	2005-2008
U.S. Army Officer	1967-2005
Commanding General, Army Material Command	2001-2005
Military Deputy to the Army Acquisitions Executive	1997-2001
Commanding General, 4th Infantry Division	1996-1997
Military Assistant to the Secretary of Defense	1993-1996
Program Director, Defense Test and Evaluation	1987-1989
Program Management Chief, Bradley Program Office	1979-1982

Member, Defense Science Board
Director, Exelis
Director, iRobot
Director, A-T Solutions
Member, CoVant Board of Managers
University of Michigan Mechanical Engineering Advisory Board



COL Margaret A. Kulungowski (USAR-Ret)

Director, Government Relations
Navistar Defense

EDUCATION:

M.S., National Resource Strategy, Industrial College of the Armed Forces, National Defense University	2006
B.S., Political Science, U.S. Military Academy	1981

EXPERTISE:

Program Management
Business Intelligence
Networking, Communications, and Outreach
Leadership and Team Building
Contract Development and Negotiation
Operations
Business Development and Marketing
Budget and Cost Control
Strategic Planning
Managing Change

EXPERIENCE:

Navistar Defense, Director of Government Relations	2009-present
JIEDDO, Director of Congressional Affairs	2006-2009
U.S. Army, Deputy, Army Budget Liaison	2003-2005
Dynetics Inc., PEO Soldier Congressional Affairs	2002-2003
Manager, Office of Senator Kay Bailey Hutchinson	2001-2002
National Military Family Association, Government Relations	2000-2001
U.S. Army Officer	1981-1992
Various Command and Staff Positions	



LTG Ricky Lynch (USA, Ret)

Author, Speaker, and Consultant

EDUCATION:

M.S., Robotics Engineering, Massachusetts Institute of Technology
B.S., U.S. Military Academy

EXPERTISE:

Joint Operations
Robotics
Technology Innovation in Military Forces
Combat Leadership

EXPERIENCE:

Executive Director, University of Texas at Arlington Research Institute	2012-2014
U.S. Army Officer	1977-2011
Commanding General, Installation Management Command	2009-2011
Commanding General, III Corps and Fort Hood	2008-2009
Commanding General, 3d Infantry Division	2006-2008
Deputy Chief of Staff, Strategic Effects, MNF-I	2005-2006
Commander, Allied Joint Force Command-Naples	2003-2005
Chief of Staff, KFOR	2002-2003
Assistant Division Commander (Support)	2001-2002
Director, Joint Advanced Warfighting Program, Institute for Defense Analysis	1999-2001
Commander, 1st Brigade, 4th Infantry Division (Mechanized)	1997-1999



Michael R. Macedonia, Ph.D.

Partner
Northern Way LLC

EDUCATION:

Ph.D., Naval Postgraduate School, Computer Science	1995
M.S., Telecommunications	1989
B.S., Electrical Engineering and Political Science, U.S. Military Academy	1979

EXPERTISE:

Simulations
System Architecture
System Engineering

EXPERIENCE:

University of Central Florida, Assistant VP for Research	2013-present
Northern Way LLC	2013-present
SAIC, VP and Chief Scientist, CTO, Technical Fellow, Simulation Training Operation	2010-2013
Forterra Systems Inc., VP and General Manager	2007-2010
Office of the Director of National Intelligence, Director, Disruptive Technology Office	2005-2007
U.S. Army	2002-2005
CTO, U.S. Army PEO STRI	2002-2005
Special Assistant to Deputy Assistant Secretary of the Army for Research	2002
U.S. Army STRICOM, Technical Director	1998-2002
Fraunhofer Center for Research in Computer Graphics, VP of Research	1995-1998
U.S. Army Officer	1979-1995



GEN David M. Maddox (USA, Ret)

Independent Consultant

EDUCATION:

U.S. Army War College
Armed Forces Staff College
U.S. Army Armor School, Basic and Advanced Courses
M.S., Operations Research, Southern Illinois University
B.S., Mathematics, Virginia Military Institute

EXPERTISE:

Operations research
Simulation and modeling
Logistics
Joint operations/warfighting
Organizational design

EXPERIENCE:

Consultant 1995-Present
National Academy of Sciences Board on Army Science and Technology, Vice Chair
George Mason University's Volgenau School of Engineering Dean's Board of Advisors, Member
GMU's School of Applied Information Technology Advisory Board, Chair
Member of the Commission on Army Acquisition & Program Management
in Expeditionary Operations
Member of the Secretary of the Army's Review of Army Acquisition
U.S. Army 1960-1995
Commander, U.S. Army Europe and Seventh Army, Germany
Commanding General, V Corps, U.S. Army Europe and Seventh Army, Germany
Commanding General, 8th Infantry Division (Mechanized)
Deputy Chief of Staff, Combat Developments, TRADOC
Commanding General, Combined Arms Operations Research Activity

Member, National Academy of Engineering
Member, National Academy of Sciences Board on Army Science and Technology
Member, The Washington Institute of Foreign Affairs
Member Emeritus of the Corporation of the Draper Laboratory



William L. Melvin, Ph.D.

Director, Sensors & Electromagnetic Applications Lab
Georgia Tech Research Institute

EDUCATION:

Ph.D., Electrical Engineering, Lehigh University	1994
M.S., Electrical Engineering, Lehigh University	1992
B.S., Electrical Engineering with High Honors, Lehigh University	1989

EXPERTISE:

ISR Systems
Statistical Signal Processing
Space-Time Adaptive Processing
Imaging Sensors
Electronic Warfare
Sensor Engineering

EXPERIENCE:

Georgia Tech Research Institute	1998-present
Director Sensors & Electromagnetic Applications Laboratory	2006-present
Regents' Researcher	2013-present
Principal Research Engineer	2005-present
Director, Adaptive Sensor Technology Project Office	2003-2006
Adjunct Professor of ECE	2003-present
Senior Research Engineer	2001-2005
Research Engineer II	1998-2001
U.S. Air Force Individual Mobilization Augmentee Reservist, U.S. Air Force Research Lab	1998-2005
RF Sensor Technology Division	2001-2005
Radar Branch	1998-2001
U.S. Air Force Research Laboratory, Senior Signal Processing Research Engineer	1994-1998
Lehigh University, Research Assistant & Teaching Assistant	1989-1993



Teresa Smith

Deputy to the Chief Technology Officer
Northrop Grumman Corporation

EDUCATION:

General Manager's Program, Harvard Business School	2001
Harvard Business School First Year, MBA Program	1989
B.S., Electrical Engineering, Johns Hopkins University	1979

EXPERTISE:

Research and development management
Strategic planning
System design and development
Electronics
Command and control

EXPERIENCE:

Northrop Grumman	1995-present
Deputy to the Chief Technology Officer	2010-present
Corporate Lead Executive, IED Defeat Integration Group	2007-2010
Director, Electronic Systems, Systems Development and Technology	2005-2007
Director, Electronic Systems, Strategic Planning	2001-2005
Director, Advanced Technology Center, Microelectronic Technology	1995-2001
Westinghouse Advanced Technology Division	1985-1995
Manager, Linear, Optics and Power Technologies	1990-1995
Program Manager, GaAs Microwave Technology	1989-1990
Manager, Analog and Memory Design	1985-1990
White House Fellow, Special Assistant to the Administrator of NASA	1984-1985
Westinghouse Advanced Technology Division, Associate Engineer	1979-1984

Department of Homeland Security Science and Technology Advisory Committee
University of Texas Center for Electromechanics, Advisory Board
IEEE Senior Member
White House Fellow, Class of 1984-1985



LTC Albert B. Tanner (USA, Ret), Ph.D.

Program Manager, BAE Systems
Ground Combat Vehicle

EDUCATION:

Ph.D., Mechanical Engineering, Georgia Institute of Technology	1998
M.S., Mechanical Engineering — Robotics, Massachusetts Institute of Technology	1987
B.S., Civil Engineering & Math, United States Military Academy, West Point	1979

EXPERTISE:

Combat Vehicle Development
Electromagnetic Guns
Survivability (armor, signature management)

EXPERIENCE:

BAE Systems	2004-present
Program Manager, Ground Combat Vehicle	2009-present
Director Program I, Manned Ground Systems (Deputy and Common)	2007-2009
Program Manager, Unmanned Ground Systems	2004-2007
United States Army	1973-2004
Chief, Research & Development and Standardization Division, London	2001-2004
Program Manager, Electro-Magnetic Gun Program	1999-2001
Director of Studies, Future Combat Systems & Senior Material Scientist	1998-1999
Combat Vehicle Survivability (Low Observable Technology and Application)	1993-1995
A/PM Survivability Systems	1990-1992
Associate Professor and Executive Officer	1987-1990
M60 Machine Gunner	1973-1974



BG Robert Wynn (USA, Ret)

Consultant

EDUCATION:

M.S., Electrical Engineering, University of Tennessee 1971
B.S., United States Military Academy at West Point 1964

EXPERTISE:

Battlefield and strategic communications systems
Tactical ISR systems
Electrical engineering, computers and information systems
Combat developments and program management
Army planning, programming and budgeting

EXPERIENCE:

Independent Consultant	2008-present
Harris Corporation, Defense Communications and Electronics, Senior Executive Account Manager and Vice President, Army Customer Segment	1997-2008 2006-2008
Vice President & WIN-T Capture Manager, Government Communications System Division, Army Customer Segment	2002-2006
Vice President, Business Development, Eastern Region Field Office	1997-2002
Electrospace Systems Inc. & Raytheon Company, C4 Systems, Director	1995-1997
United States Army	1964-1995
Commanding General, Information Systems Engineering Command & Program Manager for Army Information Systems	1992-1995
Commanding General, 7th Signal Command	1990-1992
Deputy Chief of Staff, Information Management, TRADOC	1988-1990
Commander, 2nd Signal Brigade, USAEUR	1986-1988
Chief of Staff/Deputy Commander, 5th Signal Command	1984-1986
Division Chief, Force Developments Requirements (FDR), HQDA	1983-1984

Armed Forces Communications Electronics Association
Government Electronics Industry Association



UNITED STATES ARMY SCIENCE BOARD



Past Army Science Board Leadership



Past Leadership

Past Army Science Board Chairs	Past Army Scientific Advisory Panel Chairs
Mr. George T. Singley III 2011-2014	Dr. Bruce A. Reese 1976 - 1977
Dr. Frank H. Akers, Jr. 2005-2011	Mr. Lawrence H. O'Neill 1971 - 1976
Dr. James A. Tegnalia 2004-2005	Dr. Harold M. Agnew 1966 - 1970
Dr. Joseph V. Braddock 2002-2004	Dr. Finn J. Larsen 1965
Mr. Michael J. Bayer 1998-2002	Dean Morrrough P. O'Brien 1961 - 1964
Dr. Michael Frankel 1996 - 1998	Dr. Clifford C. Furnas 1960 - 1961
Dr. Wilson K. Talley 1995 - 1996	Dr. James W. McRae 1960
Dr. Walter B. LaBerge 1992 - 1995	Mr. Richard S. Morse 1958 - 1959
Mr. James Jacobs 1991 - 1992	Dr. Frederick L. Hovde 1956 - 1957
Dr. Duane A. Adams 1990 - 1991	Dr. James R. Killian, Jr. 1951 - 1956
Dr. Dennis R. Horn 1989 - 1990	
Mr. Gilbert F. Decker 1987 - 1989	
Dr. Irene C. Peden 1986 - 1987	
Dr. Wilson K. Talley 1983 - 1986	
Dr. Richard A. Montgomery 1981 - 1983	
Dr. J. Ernest Wilkins, Jr. 1978 - 1981	

Notes

United States Army



Army Science Board