Our Mission
Our centers of technical excellence move science from the laboratory to the field for the benefit of our nation. We build teams of recognized experts to deliver effective, efficient, high-value solutions and services to our sponsors.

Our Vision
We strive to be one of America’s premier not-for-profit providers of independent, trusted technical and scientific expertise. From public service to national security, we aspire to be a valued partner to our sponsors and to earn their trust through our unwavering commitment to achieve timely, innovative, cost-effective, and mission-focused solutions.
Letter from the President

Dear Colleagues and Friends of Riverside Research,

As we enter our 48th year of service, we take this opportunity to reflect on the most recent chapter in our storied history and consider how Riverside Research got to this point. Our reputation for technical excellence and trusted solutions has been established—or rather, earned—by three enduring qualities: (1) the technical strength of our people, (2) our unwillingness as an organization to deviate from our founding principles, and (3) our longstanding partnerships that continue to push the boundaries of innovation.

Our People

Our people are passionate about their work. They are recognized experts in their fields, working daily to deliver trusted, mission-focused solutions in Biomedical Engineering, Cyber, Electromagnetic Sciences, and Intelligence, Surveillance, and Reconnaissance. These are not just technology focus areas for Riverside Research, nor are they mere business units. Thanks to our employees and the history of mission successes they’ve helped our customers realize in these key scientific disciplines, they are deservingly called Centers of Excellence.

Our Principles

The professionalism and customer-first mentality of our people is rooted in our founding principles. Since 1967, Riverside Research has been dedicated to advancing scientific research in the public interest and in support of the United States government. This is our not-for-profit charter, our culture, and our criteria for virtually every business decision and research opportunity we pursue. Regardless of external market factors such as sequestration, budget cuts, or what national analysts call “turbulent times” for federal contractors, our top-down commitment to technical excellence—quality over quantity—remains at the core of our mission. This is the foundation upon which our partnerships are built.

Our Partnerships

We believe in the value of collaboration—it’s inherent within our principles, embodied by our people, and proven in our partnerships. Many of our partnerships span multiple decades and all are built on trust. We are proud to be a trusted mission partner to the Intelligence Community, the Department of Defense, and the Department of Health and Human Services. Working hand-in-hand with the organizations that comprise these distinguished communities ensures the most comprehensive solution for protecting the health and security of the American public. We all share the same mission.

Your Not-for-Profit Mission Partner

The following pages of this company report highlight some of the partnerships that were established or expanded in 2014. Contextualized within our Centers of Excellence and community outreach program, these partnerships are advancing science through education, research, and workforce development. For example, Wilberforce University recognized Riverside Research as the 2014 Employer of the Year. The Air Force Research Laboratory awarded Riverside Research two prime contracts for new work in emerging technology areas. The National Air and Space Intelligence Center awarded Riverside Research a prime contract for continued support to its Geospatial and Signatures Intelligence Group, extending a partnership first established in 2001.

These and other notable achievements detailed in the following pages prove that “Technical Excellence. Trusted Solutions.” is more than just a tagline. It’s a reflection of who we are, a reminder of where we started, and a guide for where we’re going.

Sincerely,

Richard Annas

President

Riverside Research
President, Richard Annas (left) and Chairman of the Board, Thomas Pitts (right) celebrate the opening of the new Washington Business Office in July 2014.
Centers of Excellence

Riverside Research is a not-for-profit organization chartered to advance scientific research in the public interest and in support of the United States government. Comprised of leading engineering, technology, and operations experts, we deliver trusted solutions through our four Centers of Excellence:

- Biomedical Engineering Lab
- Cyber Research Lab
- Electromagnetics Lab
- Modeling & Application Development Lab
- Radar Assessment & Development Lab


Our Centers of Excellence are supported by five integrated research laboratories that conduct independent and mission-focused research in critical technology areas.

- Biomedical Engineering Lab
- Cyber Research Lab
- Electromagnetics Lab
- Modeling & Application Development Lab
- Radar Assessment & Development Lab

Our Services

- Analysis of Alternatives
- Education & Training
- Modeling & Simulation
- Program Management
- Research & Development
- Security & Facility Engineering
- Systems Engineering
As a subcontractor to Columbia University Medical Center, Riverside Research will contribute to the development of a novel, diagnostically significant plane-wave ultrasound system for the assessment of glaucoma. This system will implement leading-edge plane-wave imaging methods, which produce thousands of images per second as opposed to hundreds of images per second produced with traditional methods. Funded by a grant from the National Eye Institute (NEI) of the National Institutes of Health to Dr. Ronald Silverman (left), Riverside Research and Columbia University Medical Center will make strides toward more precise imaging of the eye over the next four years.

Pinpointing Glaucoma with New Plane-wave Imaging System

Therapeutic Glaucoma Medicine

Dr. Ronald Silverman
Member of the Research Staff, Riverside Research, and Professor of Ophthalmic Science, Columbia University Medical Center

Investigating the Eye’s Structure to Uncover Common Irregularities

Riverside Research received a two-year grant from the NEI to perform research on the eye’s vitreous humor and its common vitreous alterations—known as “floaters.” This grant, awarded to Dr. Jeffrey Ketterling, enables our Biomedical Engineering Lab, again in partnership with Columbia University Medical Center, to continue to develop quantitative-ultrasound imaging protocols and quantitative analyses with the intent of improving the clinical assessment of floater severity and the state of the vitreous in disease-related conditions.

Picturing Prostate Cancer in Real-time Using Patented Ultrasound Methods

Riverside Research established a partnership with Exact Imaging to investigate the means of incorporating our patented ultrasound methods for depicting cancer into its medical technology. Formerly known as Imagistx Inc., the Canadian company is the world’s leading developer of high-resolution micro-ultrasound systems that enable real-time imaging and biopsy guidance to detect and grade prostate cancer.

Pinpointing Glaucoma with New Plane-wave Imaging System

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Building the National Cyber Workforce

Riverside Research is proud to be a Cyber Gold Sponsor to CyberPatriot, the Air Force Association’s (AFA) National Youth Cyber Education Program. More than 1,500 teams of middle and high school students representing all 50 states, the District of Columbia, Canada, and DOD-Dependent Schools in Europe and the Pacific registered to compete in CyberPatriot VI held in Washington DC, March 2014. Riverside Research cyber experts served as competition judges for the annual cyber defense competition. Riverside Research is also the Presenting Sponsor to the AFA’s new elementary school cyber education initiative, advocating for STEM at every level.

Building the Local Cyber Workforce

In partnership with Clark State Community College, Riverside Research developed a 10-week cyber education program that supplements classroom instruction with immersive, real-world experiences in cybersecurity and information assurance. Students who completed this STEM initiative immediately put their cyber skills to work through internships with companies in the Dayton, Ohio area, including Riverside Research, AT&T, and LexisNexis.
Building on 12 Years of Trusted Solutions

The Air Force Research Laboratory (AFRL) awarded Riverside Research a $40M single-award contract to advance antenna, electromagnetic, and plasma physics technologies that enhance defense capabilities and safeguard national security. Advancing scientific research in these critical technology areas will significantly strengthen the Air Force in Global Integrated ISR Operations, Air and Space Superiority, Global Precision Attack, Hypersonic, and Special Operations. Riverside Research received a second award from AFRL to support their $47M Advanced Novel Spectrum Warfare Environment Research program, which encompasses several emerging technology areas critical to America’s Air and Space Forces. Through basic and applied research in radio frequency spectrum warfare, trusted cyber-resilient avionics, position navigation and timing in contested or denied environments, and electro-optics countermeasures, Riverside Research supports AFRL in achieving US warfighting dominance across the electromagnetic spectrum.

Riverside Research has been a trusted mission partner to AFRL since 2002.

Advancing Scientific Research in Metamaterials

Riverside Research became a member of the National Science Foundation’s (NSF) Center for Metamaterials in 2014, contributing to collaborative and innovative research efforts with other industry and academic members. Specifically, our membership supports a joint research project between our Electromagnetics and Biomedical Engineering Labs that enables our former intern and current New York University student to complete her PhD research and dissertation on acoustic and optical metamaterials in breast cancer imaging systems.
INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

PARTNERSHIPS IN PERSISTENT INTELLIGENCE

Moving Geospatial and Signatures Intelligence Forward

The National Air and Space Intelligence Center (NASIC) awarded Riverside Research a $49M single-award contract to advance technologies that meet the intelligence needs of warfighters and national policy makers. Riverside Research has been an active mission partner to NASIC for over a decade and has provided similar advisory and assistance services to the Center’s GEOINT and MASINT missions.

Maintaining the Globe’s Most Advanced Ballistic Missile Technical Collection Radar System

As a longstanding mission partner to Cobra Judy, Cobra Judy Replacement, and now Cobra King, Riverside Research is honored to have supported this critical defense system for the past 43 years. Riverside Research began mission support to Cobra Judy in 1972 and remained involved as the program transferred throughout several US military branches. Now under the Air Force Technical Applications Center, Cobra King reached a significant milestone in April 2014, transferring from acquisition to operation with engineering support from our Radar Assessment & Development Laboratory.

Advancing Aircraft Mission Planning

Air Force Distributed Common Ground System mission planners will improve aircraft navigation routes and sensor plans thanks to our Enterprise Collection Planning software. Our Modeling & Application Development Laboratory achieved 100 percent success upon completion of the first live commanding of an airborne U-2 aircraft utilizing our software in conjunction with the new Senior Year Electro-optical Reconnaissance System 2B sensor. A triumph after just two years of development, the new software-sensor combination has made previously impossible functions a reality.
“Education With Industry” Brings Community Outreach Full Circle

Our multi-faceted partnership with Wilberforce University earned Riverside Research the “Employer of the Year” award. In 2014, we collaborated with Wilberforce University, the oldest historically black private university in the nation, and the Air Force Institute of Technology to host Wilberforce alumna Carmen Dyer, an intelligence analysis engineer at NASIC, through the Air Force training program, “Education With Industry.” During her year-long externship, Carmen helped develop an Advanced Technical Intelligence degree program at her alma mater, which equips students for future careers with Air Force organizations like NASIC. Carmen also coordinated two Riverside Research-funded STEM scholarships for current Wilberforce students.

Wilberforce students Christopher Adams and Malcolm Haraway also joined our staff for cooperative education experiences, contributing to specialized areas like antennas and electromagnetics and corporate education and training initiatives. Both students were honored with “Cooperative Education Student of the Year” awards from Wilberforce for their exceptional representation of the university.

Community Outreach

Partnerships in STEM Education, Research, and Workforce Development

Our not-for-profit status allows us to re-invest our revenue into academic institutions and organizations that empower past, present, and future industry leaders.

Building Tomorrow’s Technical Workforce

- $60,000 in scholarship funds benefiting 11 students
- 41 internships and academic co-ops provided
- 2 STEM teachers hosted in partnership with the Woodrow Wilson National Fellowship Foundation
- 2 undergraduate and 2 graduate courses taught

Active memberships with industry-leading associations

Provided 766 tickets to area military personnel and families to expose them to regional performing arts free of charge
New Locations, New Partnerships

Washington Business Office

We opened our Washington Business Office in 2014. This new "Class-A" facility offers expanded capabilities in a modern setting located in Crystal City, VA, just five miles south of the nation’s capital. The easily-accessible office provides opportunities to collaborate with industry partners in the National Capital Region and features the high-tech “Discovery Room” for capability demos, a 650-square-foot proposal writing room, multiple conference rooms, and executive-level meeting spaces. Our Washington Business Office is a highly capable work space accredited for work at all security levels.

Centreville Research Office

We also began operations in our Centreville Research Office in December 2014. Formerly located in Chantilly, VA, the new Centreville Research Office is designed to foster innovation through intracompany, industry, and government collaboration at all security levels. The new office features smartly configured floor plans designed to promote productivity in a collaborative environment. The space is flexible with distinctive and progressive design elements, including interconnecting and scalable offices, fully equipped conference rooms, data-rich laboratories, and various business services.

“Congratulations to our longstanding business partner, Riverside Research, on their exciting new facility in Centreville. It’s great to see that Riverside’s hard work and customer success has allowed for such a fantastic work environment. Plus, seeing their prominent displays of cool, customer-related work that applied our products really blew me away. We look forward to working together here for many years to come.”

—Paul Graziani, Co-founder and CEO, Analytical Graphics, Inc.

“"This office is a testament to the internal growth of Riverside Research and the immense talent and dedication of our employees, whose efforts have enabled remarkable successes on behalf of our government customers and partner organizations.”

—Richard Annas, President, Riverside Research

10,300 SQ FT Washington Business Office

10,500 SQ FT Centreville Research Office
James Light, Lexington, MA
Ralph J. Mastrandrea Memorial Award
Awarded for his delivery of critical mission performance improvements to the Cobra Judy Replacement/Cobra King, GRAY MOON, and GLOBUS II programs.

Ron Reynolds, Dayton, OH
Ralph J. Mastrandrea Memorial Award
Awarded for his Big Safari program efforts, leadership of the communications engineering team, and delivery of $157M in warfighter aircraft capabilities.

Adrianne Scott, Dayton, OH
Ralph J. Mastrandrea Memorial Award
Awarded for her role as Program Controller to Engineering & Support Solutions, displaying meticulous attention to detail and professionalism.

Paul Frank, Dayton, OH
Ralph J. Mastrandrea Memorial Award
Awarded for his exemplary dedication to the National Air and Space Intelligence Center Overhead Persistent Infrared mission.

Steven Ecker, Greenville, TX
Lawrence H. O’Neill Award for Sustained Excellence
Awarded for his mission-focused leadership to the Project Liberty Program in his role as Flight Test Pilot and Director of Safety.

Bill Walls, Dayton, OH
Lawrence H. O’Neill Award for Sustained Excellence
Awarded for his significant Information Technology contributions that ensure mission performance at the highest level of security and confidentiality.

Taylor Rennee, Dayton, OH
Lawrence H. O’Neill Award for Sustained Excellence
Awarded for her indespensible, multi-faceted role as Program Business Manager and her many years of outstanding support to the Air Force Institute of Technology.

Pranav Patel, Dayton, OH
Ralph J. Mastrandrea Memorial Award
Awarded for his innovative contributions to the Air Force Institute of Technology’s Center for CyberSpace Research contract support team.

Daniel Shue, New York, NY
Lawrence H. O’Neill Award for Sustained Excellence
Awarded for his efforts to develop and implement the Electromagnetics Laboratory’s Theoretical Adaptive Cross Approximation library, a vital homeland security component.

Toni Loveingmer, Dayton, OH
Lawrence H. O’Neill Award for Sustained Excellence
Awarded for her superior database engineering skills, which were instrumental in achieving our first Capability Maturity Model Integration Level-5 certification.

The Ralph J. Mastrandrea Memorial Award and the Lawrence H. O’Neill Award for Sustained Excellence are annual honors given to select employees who exemplify the selfless dedication, professionalism, and integrity of our founding principles. The Riverside Research Board of Trustees congratulates the following recipients for the year 2013.

Jeffrey Harris
Board of Trustees Member
US Geospatial Intelligence Foundation Chairman and former National Reconnaissance Office Director Jeffrey Harris joined Riverside Research in July 2014. An established aerospace, defense, and intelligence expert, Mr. Harris lends nearly 40 years of national security experience to our Board of Trustees.

Joris Hogan
General Counsel & Corporate Secretary
Joris Hogan joined Riverside Research in August 2014 as our General Counsel and Corporate Secretary, bringing with him over 30 years of experience supporting hundreds of US and multinational, public and private businesses in a wide range of strategic matters.

Welcome New Leadership

Jeffrey Harris
Board of Trustees Member

Joris Hogan
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Applied Research Solutions

Your OASIS Small Business Partner

Applied Research Solutions (ARS), a small business subsidiary of Riverside Research, greatly increased business opportunities by earning a spot on the US General Services Administration’s (GSA) One Acquisition Solution for Integrated Services (OASIS) Small Business contract in Pools 5A, 5B, and 6. This 10-year, $60B multiple-award contract vehicle provides ARS an opportunity to provide management and consulting, engineering, logistics, and financial services to government agencies like the Air Force and NASA.

Through the increased visibility provided by the OASIS contract, ARS became a mission partner to Air Force Space Command, delivering technical support that provides for safe, successful space operations and establishing their Space Programs directorate.

In anticipation of continued success and expansion, ARS relocated corporate headquarters to a new 7,000-square-foot facility. ARS has grown rapidly since activation in 2012, building a proven track record of quality expertise and trusted support provided to mission partners.

“The OASIS contract presents ARS with an opportunity to evolve,” said Managing Partner Kevin Sullivan. “The imminent growth that this contract will provide is an absolute game changer.”

Not-for-Profit Mission Partner