

## Enhanced Mutual Collaborators

condensed list...

### ■ International: PAs, TTCP, NATO, EOARD, AOARD ...



### ■ Other DoD Agencies: DARPA, MDA, DTRA ...



### ■ Others: FFRDCs, NASA, DHS, NIST, DOE LABS, MITRE, Cyber COI, C4I COI ...



### ■ Joint Community: STRATCOM, TRANSCOM, NORTHCOM, ARMY, NAVY, MARINES ...



### ■ USAF/USSF: AFMC, AFSOC, ANG, AF, AMC, ACC, AFLCMC, SMC, AFGSC ...



### ■ Intel Community: DIA, CIA, IARPA, NSA, NRO, NSA, NASIC ...



### ■ Industry: 250 Contractual Partners, IR&D, 77 CRADAs, SBIR ...

### ■ Academia: Information Institute, Partnerships, 132 EPAs, Visiting Faculty Research Program, STEM, Center of Excellence (COEs) Machine Learning (ML) ...



## AFRL Information Directorate

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## AFRL Information Directorate Customer Contact Information

### ■ Contract Opportunities

<https://beta.sam.gov/>

- ① Select "Contract Opportunities" from drop down menu.
- ② Enter RIK.
- ③ Click Search.

# AFRL

Air Force Research  
Laboratory



## Information Directorate

The Information Directorate is the Air Force's and nation's premier research organization for Command, Control, Communications, Computers and Intelligence (C4I) and Cyber technologies. The directorate explores, prototypes and demonstrates high-impact, affordable and game-changing technologies. These technologies transform data into information and subsequently knowledge for decision makers to command and control forces. This knowledge gives our air, space and cyberspace forces the competitive advantage needed to protect and defend the nation.

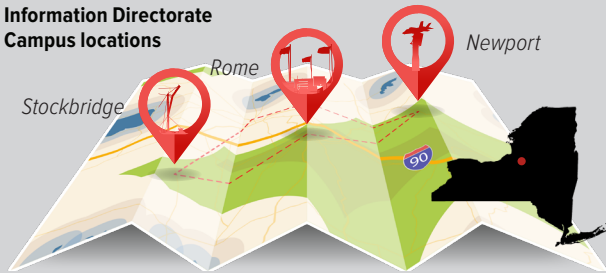
- AFRL/RI Organization Directory
- Engagements: Enhanced Mutual Collaborations
- AFRL/RI Core Technical Competencies Focused in Four Major Technical Areas of Research

## Air Force Research Laboratory Information Directorate

### ■ Mission of the AFRL Information Directorate

To explore, prototype and demonstrate high-impact, game changing technologies that enable the Air Force and Nation to maintain its superior technical advantage.

#### Information Directorate Campus locations



### ■ AFRL Information Directorate

Director/Commander Det 4..... Col Fred Garcia II  
Deputy Director..... Dr. Michael Hayduk  
Deputy Commander/Chief of Staff..... Lt Col Thomas Kramer  
Associate Director..... Dr. Bryant Wysocki  
Chief Scientist..... Dr. Sarah Muccio (acting)  
Principal Advisor..... Dr. Nathaniel Gemelli  
AF Technical Advisor, C4I & Cyber Systems..... Dr. Bryant Wysocki  
Chief Engineer..... Ms. Karen Roth  
Deputy Chief Engineer..... Lt Col Matthew Moyer  
Senior Scientist, Information Assurance..... Dr. Kamal Jabbour  
Senior Scientist, Command & Control..... Dr. Mark Linderman  
Senior Scientist, Processing & Exploitation..... Dr. Qing Wu  
Director of Staff..... Lt Col Thomas Kramer  
Commander's Support Staff..... Dr. John MacGaffick  
Chief of Protocol..... Mr. Jim Ray  
DAG/RI Visits..... Lt Seth Bacon  
First Sergeant..... MSgt Christopher Budhu

### ■ Mission Divisions

Intelligence Systems (RIE)..... Col Richard Kieffer  
Information Warfare (RIG)..... Mr. Scott Shyne  
Information Systems (RIS)..... Ms. Julie Brichacek  
Computing & Communications (RIT)..... Mr. Gregory Zagar  
Special Programs (RIZ)..... Mr. Brent Holmes

### ■ Support Divisions

Strategic Planning & Integration (RIB)..... Mr. John Grieco  
Comptroller (RIF)..... Mr. Gary Tarantino  
Judge Advocate (RIJ)..... Lt Col Dean Korsak  
Contracting (RIK)..... Mr. Robert Stadelmaier  
Integration & Operations (RIO)..... Mr. Gabriel Sbarglia  
Det4/SE (Safety)..... Ms. Wendy Medley

## Core Technical Competencies (CTCs) Focused in Four Major Technical Areas of Research

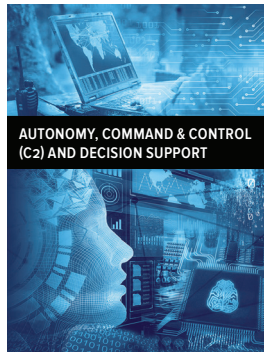
### ■ Autonomy, Command & Control and Decision Support

**Vision:** Mastering & imposing complexity to Command & Control future joint all domain operations in an evolving battlespace with speed and scale.

**Mission:** Deliver revolutionary, trusted, affordable information technologies for agile, resilient, & distributed AF command and control & intelligent systems.

**Sub CTCs:** Complex Adaptive Systems • Complex Effects Analysis • Machine Intelligence

**Goals:** Research, develop, and deliver next generation intelligent C2 systems to enable the command & control of future multi-domain operations in an evolving and contested battlespace at speed and scale. The key to achieving this vision is the ability to master complexity while executing multi-domain operations.



### ■ Connectivity and Dissemination

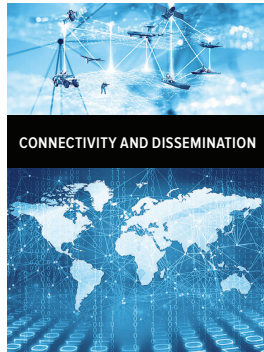
*Putting the right information into the right hands at the right time.*

**Vision:** Seamless, resilient networked communications fabric across the command and control intelligence surveillance reconnaissance (C2ISR) enterprise, assuring delivery of timely, reliable and actionable information to warfighters and systems.

**Mission:** Provide agile and secure mission-responsive communications and information exchange globally.

**Sub CTCs:** Communication Links and Networks • Secure Multi-Domain Architectures • Mission-Responsive Information Exchange

**Goals:** Agile and secure communications and networks. Agnostic connectivity. Autonomous link discovery, creation and utilization. Dissemination of information at need, securely.



### ■ Cyber Science and Technology

*Leveraging and shaping the cyber domain to the nation's advantage.*

**Vision:** An Air Force equipped with technologies that enable our freedom to operate in cyberspace while denying the adversary the same.

**Mission:** Deliver the science and technology necessary to ensure cyberspace superiority and support the conduct of full-spectrum, multi-domain, integrated cyberspace operations.

**Sub CTCs:** Cyber Assurance • Electromagnetic Cyber Convergence • Cyber Warfighting

**Goals:** Secure, composable, risk-based compute options. Cyber operations integrated and on par with air & space. Ability to conduct cyber operations agnostic to medium and geography.



### ■ Processing and Exploitation

*Exploiting computing and algorithms to transform big data into information.*

**Vision:** Innovator of technologies that process and exploit data in near real time, analyze massive collections over time, and employ continuous learning to deliver asymmetric decision speed to the Air Force and Intelligence Community.

**Mission:** Deliver fast sensemaking for situational awareness and adversarial insight for the AF, DoD, and Intelligence Community.

**Sub CTCs:** Machine Analytic Characterization • Machine Analytic Comprehension and Projection • Extreme Computing

**Goals:** Multi-INT correlation and fusion of massive amounts of intelligence, surveillance, and reconnaissance (ISR) and publicly available data. Exploit targets in denied areas. Adversarial and secure machine learning. Dynamic, hybrid computing advancing neuromorphic, nanotech, and quantum systems to efficiently process ISR information.

