Our People = Our Strength

RAS personnel form a close-knit team with each customer to define operational requirements, establish achievable programs, and then execute them on-time and on-budget. RAS combines a top-down systems approach with bottoms-up integration and test.

Skilled Personnel – RAS technical and project personnel hold advanced degrees; RAS has access to many Subject Matter Experts and contract with senior, world-class consultants in sensors and signal / information processing techniques.

Rigor and Flexibility – RAS provides unbiased appraisals of systems and concepts for the DoD as well as a Quick Reaction Capability for our customers, able to respond rapidly to their needs with thorough analysis and assessments.

Broad Involvement – The RAS team has a broad background in systems engineering, software and firmware development, modern signal analysis, feature extraction, cyber security, and data analytics. Our Staff has experience with several DoD platforms like F/A-22, B1-B, F-18 E/F, AN/BLQ-10, AN/SLQ-32(V and VI), and RC-135C.

Who We Are

About RAS

Research Associates of Syracuse (RAS) is a small business located within the Griffiss Technology Park adjacent to the Air Force Research Laboratory - Rome Research Site in Central New York. RAS has developed / assessed new concepts for Electronic Intelligence (ELINT), Electronic Support (ES), and Specific Emitter Identification & Tracking (SEI/SET) systems and processing techniques for over 25 years. Founded in 1986, RAS has contracted with multiple organizations including all DoD branches, various agencies, and several primes, and is aligned strategically with several companies to provide quality engineering analyses and products for ELINT, SIGINT, and Cyber initiatives. RAS is experienced in algorithm, software, & firmware development for signal detection, pulse feature measurement, automatic modulation recognition, and real-time EW signal processing, clustering, emitter identification, and SET/SEI. RAS also has expertise in cyber signals, cyber sensing, and data analytics.

Contact Us

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John Stacy	VP, SW Programs / Cyber SME
Stan Hall	VP, Contracts / Bus. Dev.

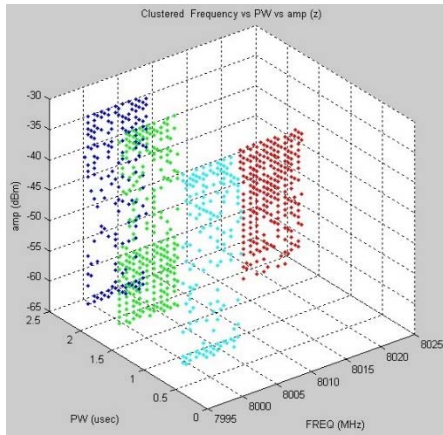**RESEARCH ASSOCIATES OF SYRACUSE, INC.**

111 Dart Circle
Rome, NY 13441

RAS
Bringing EW, ELINT, and Cyber Security together for the Warfighter

RESEARCH ASSOCIATES OF SYRACUSE, INC.

- *Electronic Warfare and Electronic / Signals Intelligence Analysis, Development, and Products*
- *Cyber Security Analysis, Development, and Products*

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Mission Statement

To solve technically challenging problems on behalf of our current and future customers while providing an exciting, challenging, and rewarding work environment for our employees.

Core Strengths

RAS has extensive experience in:

- Electronic Warfare (EW) performance analysis for airborne, naval, and ground-based systems
- Advanced signal detection, characterization, and processing algorithms
- System design and development to accurately measure pulse parameters
- Automatic modulation recognition
- Interference detection and mitigation
- Low Probability-of-Intercept (LPI) signal detection and measurement
- Specific Emitter Feature (SEF) extraction techniques for use in Specific Emitter Identification (SEI) and Specific Emitter Tracking (SET) functions
- Conducting research into cyber security and addressing complex cyber problems

Other Services

RAS is able to provide a number of unique services to our customers based upon the enabling talents and experiences of our personnel, including:

- providing clients with impartial system evaluations and concept assessments
- collecting data on emitters of interest to our customers, some of which form the foundation for National ELINT databases
- training courses in radar, EW, ELINT, and digital signal processing to a wide range of customers
- studies of National ELINT databases and recommendations for their improvement
- cyber security services, including signals, sensors, and data analytics

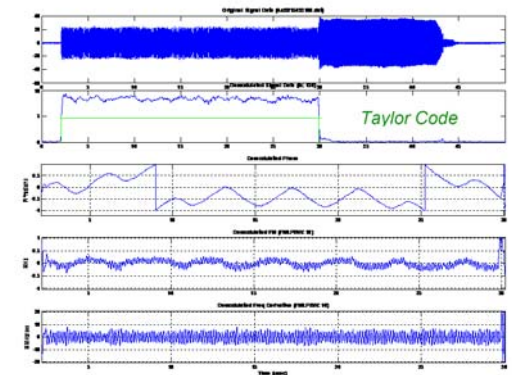*Changing the way we listen, gather, and react to signals*

Government Contract Awards

RAS has a proven track record developing and implementing innovative solutions to stressing problems and technical concerns of customers. A listing of recent Small Business and Innovation Research (SBIR), Broad Agency Announcement (BAA), and Production contracts follows:

Phase II / Phase II Plus

- **Navy** (NAVSEA) – Precision Feature Extraction Preprocessor (ES-PFEP)
- **Navy** (NAVSEA) – Multi-Algorithm Unique Emitter Identification (MAUEI)

- **AFRL** (Dayton) – Hardware-Based Broadband Ultra-High Speed Digital Signal Processor
- **AFRL** (Robins) – Development of Common Operational SEI Functionality for Sustained EW Systems (COMOPS)
- **Navy** (NAVSEA) – Automated RF Spectrum Management for Wideband EW Systems (ARFSM)
- **Navy** (NAVSEA) – Processing Signals in High Density Electromagnetic Environments (interference mitigation)
- **Army** (AMRDEC) – Advanced Detection Techniques for Altimeters (ALPIP), Army – Radar Altimeter Collections (Blue and Red)

Taylor Code

Phase III / BAA / Production

- **Navy** (NAVAIR) – F-18 Studies (ES-PFEP)
- **Army** (AMRDEC / LMCO) – Common ESM Sensor for Air Defense (CESAD) / SET
- **Navy** (NAVSEA / GD / LMCO) – High-Gain, High-Sense (HGHS)
- **AFRL** (Rome) – Signal Intelligence for Real-Time Applications (SIRTA)
- **AFRL** (Rome) – ELINT Signal Information Exploitation (ELSIE)
- **Navy** (NAVSEA) –MAUEI Rapid Innovation Funds