

# Fact Sheet:

## Electronics & Sensors Branch

### Who we are

The Electronics and Sensors Branch (RXME) resides in the Air Force Research Laboratory's (AFRL) Materials and Manufacturing Directorate (RX) Manufacturing and Industrial Technologies Division (RXM).

RXME's *mission* is to plan and execute manufacturing technology programs to establish the capability for effective processes, materials, and procedures necessary for the affordable manufacture of sensors, electronic devices, assemblies and subsystems for utilization in Air Force and DoD weapon systems.

The team is responsible for developing an investment strategy for the interdisciplinary technology relationships of electronic design and engineering, materials and materials processing, fabrication, assembly, integration, test, and quality improvement.

RXME also serves as Executive Agent for the Defense Production Act Title III Program.

### What we do

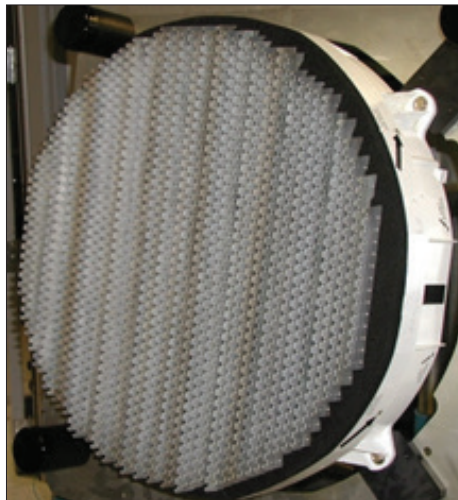
More than 20 civilian *experts* work across AFRL and DoD to carry out programs in Manufacturing Technologies (ManTech), Title III, and Defense Priorities and Allocations System (DPAS).

#### Technology Programs - ManTech

##### ISR Open Systems Manufacturing

- Address manufacturing and affordability issues in the area of Intelligence, Surveillance, and Reconnaissance (ISR).

##### Manufacture of C4ISR - Advanced



**Active Electronically Scanned Array (AESA) Radar**

#### Active Electronically Scanned Array (AESA) Sensor

- Increase the manufacturing readiness levels of AESA radars, AESA communication SATCOMs, and digital receivers/exciter.

#### Manufacture of C4ISR - Communication

- Development and implementation of advanced manufacturing technologies to reduce the touch labor, cycle time, and cost.

#### Manufacture of C4ISR - Mid-wave infrared (MWIR) Optics

- Increase MRL of conformal and planar transparent ceramic windows.

#### Manufacture of C4ISR - Space Solar Cells

- Improve manufacturing capabilities, develop improved manufacturing processes, and space qualify AMO, one-sun inverted metamorphic multi-junction (IMM) solar cells.

#### Manufacture of C4ISR - Space Operations

- Develop affordable satellite

communications antennas and hardware to support worldwide assured communications for multiple airborne platforms.

#### Defense Production Act (DPA) Title III Program

The Title III Program creates, maintains, or expands assured, affordable, and commercially viable production capabilities and capacities for items essential for national defense.

#### Defense Priorities and Allocations System (DPAS)

DPAS assures the timely availability of industrial resources to meet current national defense and emergency preparedness program requirements and to provide an operating system to support rapid industrial response to national emergency.

#### Technical Point of Contact

Mr. Richard "Butch" Porter  
Air Force Research Laboratory  
Materials and Manufacturing Directorate  
Manufacturing & Industrial Technologies  
Division

#### Technical Inquiries

Air Force Research Laboratory  
Materials and Manufacturing Directorate  
Corporate Communications Office  
937-255-0017