HAYSTAC CAPABILITIES OVERVIEW

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Areté

Overview

EXCELLENCE

- An integrated innovation engine that provides exceptional value

- A multi-disciplinary, world-class workforce that solves problems in original ways

- Ethical, professional, client and problem focused

CORE COMPETENCIES

- Detecting weak signals in heavy clutter with low false alarms.

- Low-SWaP sensors with real-time fusion for multiple domains

- Merging AI with Physics-based domain understanding

- Extracting maximum performance from systems

Discover.

Develop.
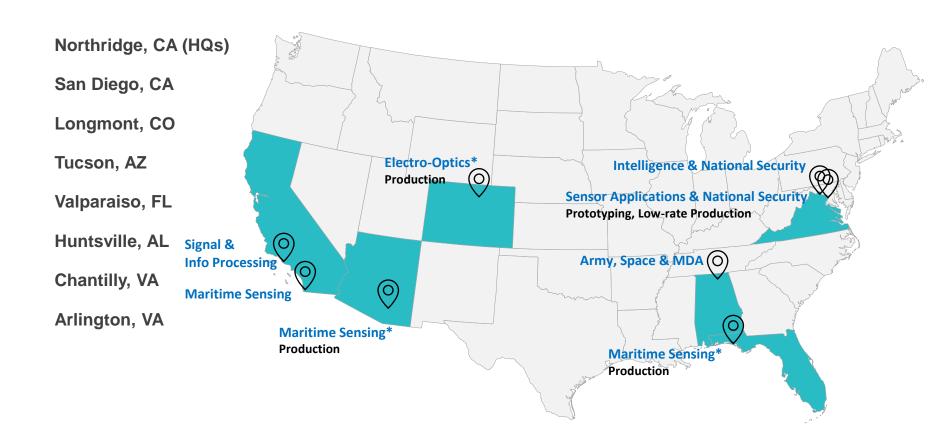
Deliver.

DESCRIPTION

- Employee-Owned w/ Small Business status

- 350 employees, 70% w/ advanced degrees

- Eight Locations: AL, AZ, CA, CO, FL, VA: six SCI or TS capable

- 250K sq.ft. lab/office/production capacity; QMS is AS9100/ISO-9001 Certified.

- > 40 years of government experience

APPROACH

- Rapid, creative, end-to-end development

- Discover: A science and technology engine advancing state-of-the-art sensing: over 40 patents in force; 30+ Active SBIRs

- Develop: A responsive collaborator rapidly maturing prototype system solutions for new and existing sensors

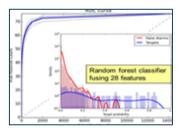- Deliver: Reliable producer of high-performance systems; typically low-SWaP

Locations

Areté

Northridge, CA (HQs)

San Diego, CA

Longmont, CO

Tucson, AZ

Valparaiso, FL

Huntsville, AL

Chantilly, VA

Arlington, VA

Electro-Optics*
Production

Intelligence & National Security

Sensor Applications & National Security
Prototyping, Low-rate Production

Signal & Info Processing

Maritime Sensing

Army, Space & MDA

Maritime Sensing*
Production

Maritime Sensing*
Production

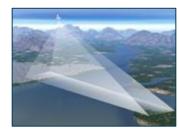* AZ, FL, CO Locations: Quality Management System (QMS) is AS9100D & ISO-9001 Certified
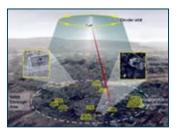
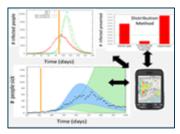**Artificial Intelligence**

Low Size, Weight, Power Sensors

Real-Time Processing

Remote Sensing

Deep Analytics

Networked Surveillance

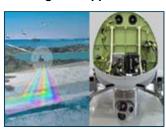**Weak Signals Intelligence Applications**

Models and Simulation

Field Tests & Measurements

Rapid Prototyping

System Integration

Production

HAYSTAC Teaming

- Currently have capabilities in
  - Deep Learning predictive analytics
    - Future pose in hypothetical sensor
    - Likelihood of future location
  - Track kinematic trajectory analysis for subtle behavior identification
    - Pairwise behavior extractions give indication between object interactions and intent
  - Maintaining object custody between locations, sensors, and modalities
  - Software for real-time target tracking and kinematic extractions
- Seeking teaming with complementary capabilities in
  - Human behavioral science
  - Transportation Science
  - Agent-based Modeling
  - Microsimulations