



# Project Management

TriVector provides proven *experience* and exceptional *performance* in managing complex, technical projects. We use our streamlined, disciplined Project Management processes to ensure project success and provide *value* to our customers. We deliver high quality technical results, while complying with project cost and schedule constraints.

## Initiation & Planning

- ▶ *Management & Communication Plans*
- ▶ *Statement of Work (SOW) Preparation*
- ▶ *Organizational, Work, Product Breakdown Structures*
- ▶ *Cost Modeling & Baseline Preparation*
- ▶ *Budget Allocation & Phasing*
- ▶ *Schedule & Resource Planning*
- ▶ *Acquisition Strategy & Procurement*
- ▶ *Technical Trade Studies Balancing Cost, Schedule, & Risk*

## Execution & Control

- ▶ *Project Leadership*
- ▶ *Earned Value Management (EVM)*
- ▶ *Cost Analysis & Schedule Management*
- ▶ *Program Risk Assessments & Mitigation*
- ▶ *Subcontractor & Vendor Management*
- ▶ *Information Management*
- ▶ *Customer & Program Reviews*
- ▶ *Independent Review Team Support*

## Our People

- ▶ *65% 25+ Years Experience*
- ▶ *49% Engineers*
- ▶ *42% Advanced Degrees*
- ▶ *25% Subject Matter Experts*

## Our Customers

- ▶ *MDA: Ground Based Mid-Course Defense*
- ▶ *NASA: MSFC (SLS, ISS ECLSS, PMPO)*
- ▶ *NOAA: Unmanned Aircraft Systems, Weather, OWAQ*
- ▶ *U.S. Army: AMRDEC (AED, ED, S3I, WDI)*
- ▶ *Commercial Energy and Space Programs*
- ▶ *International Education Programs*

# Delivering Technical Solutions...Controlling Cost, Schedule, Risk



## National Oceanic and Atmospheric Administration (NOAA) High Altitude, Long-Endurance (HALE) Unmanned Aircraft Systems (UAS) Project Leadership

The NOAA Sensing Hazards with Operational Unmanned Technology (SHOUT) Project's scientific goal was to determine the potential utility of observations from HALE UAS, such as the Global Hawk (GH) aircraft, to improve weather forecasts. TriVector's SHOUT Project Manager led the overall project planning and interagency coordination for SHOUT's 3 successive field campaigns over a six-year planning period. Our Project Manager developed and executed the budgetary, operational, integration, and staffing plans for the highly successful project. As part of this project, HALE UAS were flown into major weather events, to include hurricanes, and gathered real-time weather information resulting in advanced forecasting methods for destructive high-impact weather events.

## Ground-Based Midcourse Defense (GMD) Systems Engineering & Integration Verification (GMEV) Project Leadership

Serving as Deputy Division Chief (Acting) for the GMD GMEV team, TriVector is responsible for achieving technical results within cost, schedule, and acceptable risk. As Deputy Chief (Acting), our SME leads the GMEV team in defining and allocating verifiable GMD requirements to specific test events (ground, hardware-in-the-loop, flight), inspection, or analysis, and performing GMD requirements verification upon event completion. To accomplish this complex program, our SME coordinates events and communicates results with numerous Missile Defense Agency organization and Industry staff. To date, TriVector's SME has successfully led the GMEV personnel in event execution, analysis of data, and development of requirement closure notice packages.



## NASA Planetary Missions Program Office (PMPO) Independent Cost Assessments (ICA)

For \$250M+ projects, the PMPO performs a Joint Confidence Level (JCL) analysis per NPR 7120.5E to demonstrate a project's ability to achieve cost and schedule. TriVector led the development of an independent JCL analysis capability to meet this requirement. We evaluated JCL analysis tools, selected the best tool, and benchmarked against a specific PMPO project. We developed the project's cost estimate, worked with the schedule team to develop the JCL schedule; and assessed its risks. We integrated the data into the JCL tool and successfully performed the analysis. Now, the PMPO uses this model to demonstrate its projects' likelihood of completing all work within planned budget and schedule. TriVector experts provide ICA leadership for all PMPO project reviews.

## Team Redstone Additive Manufacturing (AM) Support

The Army is exploring the use of AM to enhance product availability and elevate mission readiness. TriVector's AM subject matter expert (SME) serves as the Team Redstone AM Integrated Product Team Facilitator. The AM IPT's vision is to advance AM across the community through collaboration, knowledge, and shared resources. Our SME has fostered the IPT's growth from 20 members and 2 organizations to a membership of 140 members from 9 government organizations, 9 academic institutions, and 13 companies. Through the IPT, TriVector's SME provided key input to the NASA and AMRDEC Additive Manufacturing Strategic Plans, the NASA Additive Manufacturing Standards and Specifications, and the AMRDEC Additive Manufacturing Facility Plan.



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