Problem Statement

- Confined space monitoring is an important practice **mandated by OSHA** to protect worker health & safety
  - Adds workload & manpower demands
  - Thousands of hours spent each year to monitor confined space work at an Air Logistics Complex (ALC)
  - While effective overall, **improvement opportunities exist** to better protect workers in confined spaces
- **Unobtrusive sensors** to monitor worker health and safety while operating in confined spaces

- **Integrated data display** for alerting & intervention
  - Monitor health/safety indicators for all confined spaces
  - Enact preventative measures
  - Accelerate emergency response
SBIR R&D Products

- **Sensor design** specifications well-suited to constraints of confined spaces

- **Data network infrastructure** design that meets government IT requirements and scalability needs

- **Algorithms** for assessing sensor data and facilitating appropriate health/safety interventions

- **User monitoring station design** & prototype system test/evaluation results
Summary of Benefits

- **Greater Reliability to Ensure Worker Safety**
  - Detect deteriorating health/safety conditions
  - Prevent and respond to issues faster & more reliably

- **Improved Performance & Work Efficiency**
  - Reduce worker downtime
  - Reduce radio exchanges when entering/exiting spaces
  - Easier access health/safety data across depot

- **Cost Savings**
  - Reduce manpower needed to manually perform confined space monitoring
  - Reduce overall maintenance time due to better work efficiency and reallocation of manpower
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