

Low Cost Infrared Hyperspectral Imager for Civil and Military Applications

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Low Cost Infrared Hyperspectral

LANDMINES

GASES

Benzene

CLANDESTINE CONSTRUCTION

AUTOMATIC TARGETING

Operational Capability

- Provides IR hyperspectral capability for micro-UAV's or other power and mass constrained platform
- System will collect IR hyperspectral data from airborne platforms with predictable performance
- US Army Night Vision Laboratory has expressed interest if target performance can be achieved

Problem/Readiness/Champions

- **Problem**
 Infrared hyperspectral is a powerful remote sensing technology, but current systems require power-intensive cryogenic coolers and cooling. This technology does not require cooling but provides high performance
- **Technology Readiness Level: 4**
- **Champions**
 BAE Systems Spectral Solutions is providing technical expertise and business mentoring
 US Environmental Protection Agency has offered to provide test environment for gas detection

Milestones/Deliverable/Date/Status

Milestone	Deliverable	Date	Status
Interface Control Document	Written Report	2/15/06	In progress
Receive camera	Written Report	5/15/06	Future
Complete Data system	Written Report	6/15/06	Future
Complete Interferometer	Written Report	7/15/06	Future
Aircraft study complete	Written Report	8/15/06	Future
Applications Study	Written Report	9/15/06	Future
Flight Test	Written Report	11/15/06	Future
Final Report	Written Report	12/31/06	Future