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**Presented to:**

**ISR Task Force Requirements IPT (or IEB, IRB as appropriate)**

**Date: TBD**

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**Please provide POCs  
NIPR, SIPR and JWICS  
contact information**

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- Requirement
- Initiative Description
- Quad
- Operational View
- Collection, Processing, Exploitation & Dissemination (CPED)
- Planning Issues

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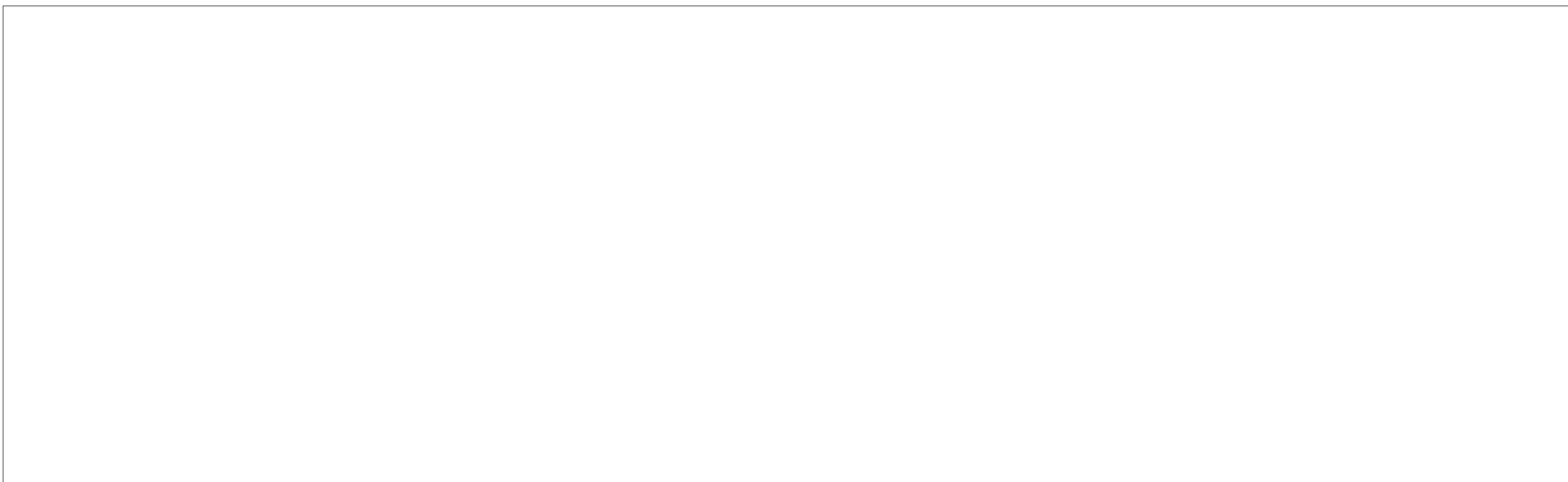
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**PROBLEM:** Provide operations and maintenance for High Altitude LIDAR Operational Experiment (HALOE) CPED

**NRO REQUIREMENT(S):** Response to numerous IPLs and Requirements:



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**BACKGROUND:** Plan for HALOE Phase 3 CPED operations to begin 1 May 2012

**SATISFACTION:** Acquire 12 months of HALOE CPED O&M:

- Airborne segment – sensor and aircraft collection
- [redacted] PED – tent, generator, processing van, staffing
- [redacted] PED – staffing and program management

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**DESCRIPTION:** HALOE CPED O&M is a restart of capabilities interrupted due to re-tasking of initial capability aircraft

**CAPABILITY:** HALOE CPED O&M provides :

- High resolution, wide area, 3D imaging
- High resolution, Point Target collection
- High resolution Digital Elevation Models
- Cross border side-looking imagery

**DELIVERABLES:** One (1) year HALOE CPED O&M

**DELIVERY:** Four (4) months from receipt of funds to delivery in theater

**IOC and FOC:** Full Operational Capability commences 1 May 2012

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**(U) IPLs, JUONSSs, STUNRs & Requirements**

[Redacted]

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**(U) Capabilities, Near Term and Long Term Plans**

(U//FOUO) High Altitude LIDAR Operational Experiment (HALOE)

(U//FOUO) Capability: IOC Nov 2011  
 High resolution, wide area, 3D imaging; High res Point Target collection  
 High resolution Digital Elevation Models  
 Cross border side-looking imagery  
 Unclassified PED footprint (tent, generator, processing van)

(U//FOUO) Short Term Objectives (New Contract, 8 Month Duration):  
 Re-Deploy on new aircraft (current platform re-directed to [Redacted] Program)  
 Return to theater as rapidly as possible with current HALOE capability  
 Improve integrated system reliability and maintainability  
 Increase performance and flexibility within bounds of acceptable risk  
 Re-Deploy IOC: 30 Apr 2012  
 Funding Available [Redacted]

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(U//FOUO) Long Term Goals (May 2012 – Apr 2013+):  
 Establish and Fund HALOE CPED O&M, Submit UFR to ISR Task Force  
 Transition Ops and Maintenance to a Title 10 org for developing a POR

**(U) Unfunded Requirements**

(U//FOUO) HALOE CPED O&M Task List:  
 Aircraft/Sensor Collection Ops and Maintenance (includes Fuel)  
 LIDAR [Redacted] PED operations and sustainment (includes HW/SW/Shipping)  
 LIDAR [Redacted] PED Ops and sustainment (includes Program Management)

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(U//FOUO) Proposed ISR TF Funding:  
 FY12 UFR proposal [Redacted] to extend HALOE program an additional 12 months, May 2012 - Apr 2013

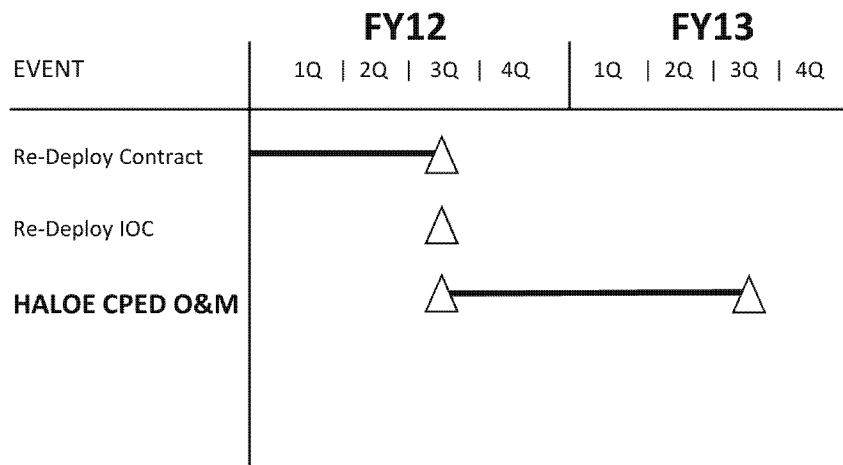
O&M Tasks	\$FY12	Total
Aircraft/Sensor Ops & Maint	[Redacted]	[Redacted]
HALOE LIDAR [Redacted] PED	[Redacted]	[Redacted]
HALOE LIDAR [Redacted] PED (incl PM)	[Redacted]	[Redacted]
TOTAL (thru Apr 2012)	[Redacted]	[Redacted]

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Primary POC: [Redacted]  
 Alternate POC: [Redacted]

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**(U) Key Milestones**



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- HALOE O&M Collection Modes

- Targeting LLA (Lat-Long-Altitude)
- Wide-Area Mapping: Single-Look, 2-Look and Multi-Look Geocoding
- Cross-Border: Target mode and Area mode
- Foliage Penetration (FOPEN)

- HALOE O&M PED

- Processing
  - In-theater [redacted] HALOE operations
  - Raw sensor data, Level 0 (L0), processed to geo-registered point cloud (L3)
- Exploitation
  - In-theater [redacted] HALOE operations
  - L3 data processed to Gridded Digital Elevation Models (L4)
- Dissemination
  - In-theater [redacted]
    - Ship L4 products to in-theater customers
  - NGA NEA courier retrieves L0-L4 products
    - [redacted] Archive and PED

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- Risks:
  - HALOE CPED Re-Deployment capabilities lack O&M funding
  - Without a source of O&M funds, satisfying USCENTCOM requirements for high resolution 3D products is jeopardized
    - Mission planning
    - Rehearsals
    - Broad mission analysis functions
- Sustainment:
  - ISR TF funding is needed to bridge gap between HALOE CPED IOC and Program of Record (POR)
- Transition:
  - Plan to establish HALOE CPED POR in FY13

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# BACK-UPS

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