TETHERED AEROSTAT RADAR SYSTEMS (TARS)

STATEMENT OF OBJECTIVES

***\*Note that this sample has been revised from the source document on the Government Point of Entry as necessary to align formatting and applicable FAR procedures.\****

# Mission

The Department of Homeland Security (DHS) is charged with managing, securing, and controlling the Nation's borders with a priority mission focus of preventing terrorists and terrorist weapons from entering the United States. U.S. Customs and Border Protection (CBP) represents the front line in the defense of our Nation's borders. The Tethered Aerostat Radar System (TARS) capability is one method that contributes to CBP’s border security efforts.

The DHS/CBP TARS Systems provide persistent, detection and monitoring (surveillance) capability for interdicting low-level air, maritime and surface smugglers and narcotics traffickers along the United States-Mexico border, the Florida Straits, and a portion of the Caribbean.

The TARS program is an integral part of the Air and Marine Operations mission to detect, sort, intercept, track and apprehend criminals in diverse environments at and beyond U.S. borders. There are currently eight operational TARS sites, six over the US-Mexico border, one over the FL Straits, and one over the northern Caribbean (Puerto Rico). Each site consists of an aerostat, L-band dual-channel air-surface radar, ground control and data networking systems, aerostat mooring systems, and weather detection systems as well as associated facilities, special purpose vehicles, additional equipment, and operational personnel.

TARS provides air, land and maritime domain awareness. This domain awareness enables protection of the United States (U.S.) borders by providing CBP a proactive and persistent strategic detection and deterrence capability via a comprehensive understanding of the air, land and maritime domains, including potential threats. Domain awareness consists of collection, integration and analysis of surveillance, intelligence, and any-source information, and the timely sharing of this information with those who need it to make decisions or operate effectively.

TARS multi-purpose platforms provide day/night persistent surveillance to detect, identify, track, and monitor activity within or immediately outside U.S. borders. This surveillance capability is a cornerstone to enabling CBP’s mission in deterring terrorism and securing our borders, while assisting in the enforcement of immigration policy.

The primary CBP offices supported by this capability are:

* Air and Marine Operations (AMO) and
* U.S. Border Patrol (USBP)

USBP is the primary federal law enforcement organization responsible for preventing the entry of terrorists and their weapons from entering the United States between official Customs and Border Protection ports of entry. The Border Patrol is also responsible for preventing the illicit trafficking of people and contraband between the official ports of entry.

The Border Patrol is specifically responsible for patrolling the 6,000 miles of Mexican and Canadian international land borders and 2,000 miles of coastal waters surrounding the Florida Peninsula and the island of Puerto Rico.

# System Description

The TARS operations are present at eight fixed aerostat sites with all aerostats and support systems, radars, cameras, weather detection equipment, communications systems, mooring systems, facilities, special purpose vehicles, associated equipment, and personnel necessary to accomplish the mission. The TARS systems provide a unique look-down radar capability that allows CBP to detect aircraft that would not be detected through a ground base system due to its low altitude and/or terrain masking limitations. TARS aerostats distribute radar data to the Air and Marine Operations Center (AMOC) and the Caribbean Air and Marine Operations Center (CAMOC).

* The TARS radar capability is primarily optimized to detect low, slow flying aircraft within its area of coverage.
* The TARS are equipped with dual (split) channel receivers with separate processors to detect both air and surface targets.
* The hull of the aerostat contains two parts separated by a gas-tight fabric partition. The upper chamber is filled with helium and provides the aerostat's lifting capability. The lower chamber of the hull is a pressurized air compartment. Seven sites use a 420K aerostat which equates to a hull volume of 420,000 cubic feet. Cudjoe Key is the only site that currently flies a 275K. (See table below)
* TARS uses two types of airborne radars system connected to the underside of the aerostat that is enclosed by a fabric windscreen. Both radar systems provide 360-degree coverage at ranges up to 200 nautical miles to detect, sort and track targets of interest in diverse environments at and beyond U.S. borders. Six aerostats carry the L-88A radar. Two sites use the L88(V)3 (See table below)
* All TARS sites (except Yuma) have an electro-optical/infrared camera on the aerostat to address USBP visual surveillance requirements. The camera video feed is transmitted directly to a designated Border Patrol Station and all camera operations are conducted by Border Patrol personnel from this facility.

TARS Locations, Aerostat Types, Radar Types, and Operational Reporting.

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| --- | --- | --- | --- |
| **Location** | **Aerostat Type** | **Radar Type** | **Operational Reporting** |
| B40 - Yuma, AZ | 420K | L-88A | AMOC |
| B41 - Ft Huachuca, AZ | 420K | L-88A | AMOC |
| B42 - Deming, NM | 420K | L-88A | AMOC |
| B43 - Marfa, TX | 420K | L-88V3 | AMOC |
| B44 - Eagle Pass, TX | 420K | L-88A | AMOC |
| B45 - Rio Grande City, TX | 420K | L-88A | AMOC |
| B94 - Cudjoe Key, FL | 275K | L-88V3 | AMOC |
| B98 - Lajas, PR | 420K | L-88A | CAMOC |

The primary beneficiaries of TARS are AMO, Department of Defense (DoD), Federal Aviation Administration (FAA), and United States Coast Guard (USCG). AMO uses TARS to monitor the border and enforce regulations concerning low-flying aircraft and small vessels approaching the border. Key stakeholders outside of CBP include Eastern / Western Air Defense Sector (EADS/WADS), Department of Homeland Security, Joint Interagency Task Force South (JIATF South), FAA, USCG, and the Government of Mexico.

# Purpose

The purpose of this solicitation is to sustain TARS operations while increasing efficiency and effectiveness and reduce cost by emplacing, consolidating and streamlining contractor provided Field Operations, Logistics, and Maintenance activities for DHS/CBP TARS sites and systems. Efficiency, effectiveness and cost savings can be achieved by the following means:

1. Consolidating and streamlining:
   * Operations – (processes and procedures)
   * Logistics and supply operations and facilities
   * Maintenance Operations and opportunity to perform maintenance
   * Cross training, proficiency training, certification processes, and cross competencies of personnel
   * Enhanced safety resulting from uniform processes, procedures and shared lessons learned
   * Emergency and Incident Management process efficiencies
2. Identifying, and implementing as directed, means and mechanisms to:
   * Increase operational availability and quality surveillance flight hours
   * Increase longevity of systems
   * Enhance new and future capabilities
3. Creating TARS automated data and information management system (here after referred to as the Management Information System or MIS) to streamline collection and distribution of:
   * Operational and Radar Mission Data
   * Logistics Data
   * Maintenance Data
   * Personnel and Site Administration data

The goals and objectives of this DHS/CBP TARS solicitation and resulting contract are defined below:

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| --- | --- | --- | --- |
| **Goal** | **Mission Objectives** | **Mission Support Objectives** | **Business Objectives** |
| Goal 1: Highest Quality Surveillance Flight Hours with Lowest Threat to Personnel and Equipment while achieving Cost Savings | Surveillance Operations  Mission Data Operations  Logistics Operations  Maintenance Operations | * Safety * Quality * Security (Physical & Cyber) * Facilities (Real Property) * Continuous Improvement | * Program Management * Risk Management * Financial Management * Systems Engineering * Environmental Engineering |
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| Goal 2: Lifecycle Sustainment and  Other Improvement Projects | System Lifetime Extensions | * Design alternatives * Modernization; * Technology Refresh * Diminishing Manufacturing Sources and Material Shortages (DMSMS). |
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| Goal 3: Transition | Accomplish transition of contract activities without impact to operations and  mission capability |  |

# Goal 1: Highest Quality Surveillance Flight Hours with Lowest Threat to Personnel and Equipment while achieving Cost Savings/Cost Avoidance Efficiencies

# Surveillance Operations

* 1. Scope
     1. Surveillance operations entails positioning the network of eight TARS aerostat systems and its complement of electronic sensors at a minimum flight altitude, or greater, to collect and forward surveillance information consisting of “items of interest” (e.g., aircraft, vessels, vehicles and/or foot traffic) approaching, arriving at, or passing through the U.S. border with Mexico, the Florida Straits and the southwest approaches into Puerto Rico and US Virgin Islands.
     2. Customs and Border Protection, Air and Marine Operations, uses TARS for multiple, interrelated border security missions. The primary mission of the TARS is to detect and report aircraft activity using its onboard primary radar system and signal processor for resolving detected aircraft. The TARS primary radar detections and processing are enhanced when using the TARS aircraft beacon interrogator (secondary radar) to reinforce the primary radar detection. Ancillary missions include using the TARS radar system for surface (e.g., maritime) target detection and reporting, providing video data to nearby U.S. Border Patrol stations, and performing surrogate ground-based radar surveillance while radiating from the ground mooring configuration.
     3. Surveillance operations requires a combination of successful contractor operator activities and system performance in order to detect aircraft entering and traversing the TARS radar field of regard, and the combined result is measured in terms of Quality Surveillance Flight Hours (QSFH). In general terms, a QSFH represents an hour of time where the system radar and signal processing perform as expected, and the processed radar data product is distributed to approved radar data users without loss of integrity. Significant success conditions for achieving a QSFH include, at a minimum of the following:
        1. Minimum Operating Altitude (MOA) – the TARS radar needs to be positioned at or above a site specific, designated minimum altitude, based on topology and border geography, in order to detect aircraft at low altitudes and long ranges to the border region and beyond.
        2. Quality – the primary radar and air channel signal processor (“air” STRAP) must be maintained to deliver baseline or better performance as indicated by Search Blip Scan Ratio measures, and radar data is distributed accurately and with integrity through the distribution network to destination nodes.
        3. Flight Hour – an hour, or decimal fraction thereof (e.g., six minute increments), of quality primary radar data produced from MOA or higher.
     4. No credit for QSFH will be provided for performing “ancillary” missions. QSFH is defined as providing aircraft activity detections through the primary radar, enhanced by the secondary radar, through the associated signal processors.

v. When the primary or secondary radars or the air STRAP are not functional, then

their Contractor’s priority is to enter corrective maintenance to restore full operations to the primary mission. However, the government may direct that an ancillary mission take priority over maintenance and request the contractor to fly surveillance (with the camera, for example) given situations at the border. In the case of flying ancillary surveillance missions in lieu of corrective maintenance the government will credit the contractor with quality surveillance flight hours for the period directed.

* 1. Key Objectives

1. Provide maximum quality surveillance hours over extended periods while minimizing threats to equipment and personnel. This entails balancing maximum quality surveillance hours with threats to system/personnel safety.
2. Maintain constant situational awareness of system status and physical/environmental threats to the system via the Telemetry and Communications Center and other resources.
3. Provide qualified, experienced management and supervisory personnel, qualified operations and maintenance personnel, and a level of support at the contractor’s facilities and sites which are deemed necessary to accomplish the mission.
4. Maintain the TARS Radar Data Network that processes analog radar signals into digital radar signals, converts the digital radar signals into Internet Protocol format for transport, and provides that radar data to the AMOC and CAMOC. Data processing is performed for all sites 24 hours per day, 365 day per year (24/365). Radar data is recorded and stored for possible future use or historical analysis.
5. Maintain proficiency and implement procedures to respond to emergencies and or related accidents/incidents to accomplish Surveillance Flight Operations.
6. Coordinate with AMOC for airspace, operations, and maintenance scheduling and flight profile adjustments.
7. Manage user feedback to support user mission profiles (modes) and make operational adjustment to optimize aerostat flight profiles and radar performance.
8. Accomplish Surveillance Operations 24/365except for downtime caused by Weather, Maintenance and other Government Directed downtime.
9. Qualified flight crews are required on site 24/365to ensure direct aerostat operations.
10. Effectiveness is measured by the Contractor’s ability to meet or exceed the proposed Target for quality surveillance flight hours annually/monthly.
11. Efficiency is measured by how well the Contractor meets the proposed Target for maximizing quality surveillance flight hours across all TARS sites
    1. Constraints
       1. Weather and Environmental conditions may adversely affect the ability of the Aerostats to safely perform their mission. It is necessary to continually monitor weather conditions during all aerostat operations. Real-time weather monitoring functionality is necessary for situational awareness for safe flight operations and are used in decision making process to minimize risk to equipment and personnel.
       2. All applicable FAA Regulations governing flights of unmanned lighter than air aircraft are in effect.
       3. Operating at or above the minimum operating altitudes (MOA) (specified by site) is necessary for a site to be considered fully mission capable and is essential to provide quality surveillance flight hours.Minimum Operating Altitudes

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| --- | --- | --- |
| **Site** | **Location** | **Minimum Operating**  **Altitude (MOA) above Mean Sea Level (MSL)** |
| B-40 | Yuma, AZ | 4,500ft |
| B-41 | Ft Huachuca, AZ | 6,500ft |
| B-42 | Deming, NM | 6,200ft |
| B-43 | Marfa, TX | 6,700ft |
| B-44 | Eagle Pass, TX | 4,500ft |
| B-45 | Rio Grande City, TX | 3,300ft |
| B-94 | Cudjoe Key, FL | 1,000ft |
| B-98 | Lajas, PR | 2,055ft |

* 1. Reference
     1. TARS Flight Operations Red Book, Revision 13, 30 January 2015
     2. TARS Ground Operations Red Book, Revision 9, 30 January 2015
     3. OI Aerostat Incident Emergency Response Guides for the 275k Site, Revision 10, 30 January 2015, and 420k site, Revision 12, 30 January 2015
     4. System Configuration Dictionary
     5. CBP Office of Air and Marine (AMO) “Mishap Classification System” dated August 27, 2013

# Mission Data Operations

* 1. Scope
     1. Operate the TARS Radar Data Network (TRDN) in order to provide quality sensor data to the Air and Marine Operations Center (AMOC) and U.S. Border Patrol and other end-users as applicable. This requires radar signal processing, and plot reports with assurance of end-to-end data quality and data integrity across both wired and wireless networks.
     2. The contractor shall maintain, manage, secure, monitor, and upgrade the TARS TRDN. The Contractor shall comply with all CBP cyber and internet security protocol to administer and deliver TARS radar data over the internet from each TARS site to the user and ensure confidentiality, integrity, and availability of the data to the user.

iii The Contractor shall have the capability to install, replace and configure all TRDN components to maintain a high operational availability for the system. Radar data travels from the TARS via the network and is displayed to operators at the Air and Marine Operations Center in Riverside, CA.

1. Radar data is transmitted to the AMOC to provide an accurate and comprehensive Air and Maritime surveillance for the designated Area of responsibility (AoR)
2. EO/IR (day/night) camera video feeds and data are transmitted wirelessly using MPU 5 radios to the local Border Patrol station. Camera video and data are not part of the TARS data network. The camera system provides ground surveillance capabilities to BP for the designated AOR.
3. Monitor and maintain both data and network quality (e.g. performance) across the network for all sites.
4. Support network operational and reliability status to the MIS.
5. Provide help desk support to the System End-Users.
6. Manage operator (user) feedback, optimize radar performance to support user mission profiles (Modes)
   1. Key Objectives
      1. Quality and Integrity: Operate and maintain the TRDN to ensure sensor data provided to the users are of the highest data quality and data integrity.
      2. Provide support to the end users by operating a Help desk that tracks and responds to trouble calls. The Contractor will propose performance measures such as trouble call tracking, response time and problem resolution.
      3. Provide the skills, knowledge, and qualified personnel to optimize radar performance to meet changing operational needs.
      4. Maintain operability (keep the hardware and software current and supportable, in compliance).
      5. Recording and Archiving: Perform routine monitoring and archival recording of sensor data for each site. Analyze data recording to ensure data integrity and data loss measurements meet the baseline standards established and documented during equipment installation.
      6. Security: Develop and implement a Security Plan IAW DHS/CBP Security and Information Assurance Policies and Directives and TARS Security Plan to ensure TARS maintain the CBP “Authority to Operate (ATO)” the TARS. Develop and maintain procedures to manage user nodes, equipment, and identify/defeat unauthorized access or threats to the system.
      7. Radar and Camera data transfer: Ensure transfer of data with assurance of end-to- end data quality and data integrity across both wired and wireless networks. Radar data travels from the Aerostats via the network and is displayed to operators at the Air and Marine Operations Center in Riverside, CA. Camera data is displayed locally to the U.S. Border Patrol Operators and does not travel over the TRDN.
      8. Effectiveness is measured by how well the Contractor’s system is able to receive, process, and securely transport the data in a timely and consistent manner.
      9. Efficiency is measured by the Contractor’s performance, operation, and maintenance of the TRDN to obtain an overall network reliability of equal or greater than 99% during 24/365hours of operation. (NR is currently calculated using the formula: NR = (MT – O)/MT X 100. MT = Monthly Time, the number of hours in the calendar month. O = Outage, the number of hours the network was down and not available to send data.)
   2. Constraints
      1. Due to the age of the TARS system, the specialized nature of the current configuration of Surveillance and Tracking Radar Processor (STRAP) equipment and network, the contractor data operations support personnel must have sufficient education, background and specific practical experience in designing, integrating and maintaining specific TARS Computers, Communications and Radar Surveillance Systems such as TDX-2000 Digitizer/Processors and TARS L-88 radars.
      2. DHS/CBP Security and Information Assurance Policies and Directives - See security clauses in Section H and the TARS Security Plan.
   3. Reference
      1. TRDN system architecture or other documentation of the TRDN
      2. Technical manuals and documentation on the STRAP equipment
      3. DHS Geospatial Information Infrastructure (GII)

# Logistics

The TARS radar and some of the support systems are over 30 years old. Replacement of these major system components is not an option at this time. Contractors will develop and implement an Integrated Logistics Support (ILS) program that includes, but is not limited to, strategies and practices to maintain and, where possible, improve systems reliability, availability, maintainability, etc. At a minimum, the ILS should address strategies in the following areas:

* Maintenance including Support and Test Equipment
* Supply Operations
* Property Management and Accountability
* Real Property and Facility Management
* Technical Data and Documentation

The Contractor’s ILS will include their methodologies to manage technical maintenance and Commercial and Non-Developmental Items (CaNDI) documentation, prime contractor (and/or Qualified 3rd Party) provided sparing, inventory documentation, configuration documentation, training documentation, and other support elements needed to maintain and operate the TARS systems. Additionally, the Contractor shall provide/maintain technical documentation consisting of:

* Provisioning Parts List (PPL)
* Long Lead Time Items List (LLTIL)
* Tools and Test Equipment Lists (TTEL)
* Common and Bulk Item List (CBIL)
* Other lists as required

# Logistics - Maintenance Operations

a. Scope

The TARS consists of multiple systems and sub systems to support the aerostat operations which include the aerostat, aerostat sub elements (e.g. blowers, generator, power distribution, wind screen, etc.), support systems, mooring systems, radars, cameras, weather detection equipment, communications systems, data network equipment, computers, facilities, real property, rolling stock, special purpose vehicles and other associated equipment necessary to accomplish the mission. Contractors will develop and implement a maintenance program that includes, but is not limited to:

1. A consolidated field (organizational, intermediate, depot) level maintenance management function for all TARS sites. This is also essential to maintain proficiency and procedures, maximize system availability and readiness across the entire system. Implement preventative (scheduled) and corrective (episodic) maintenance on all GFE equipment in accordance with applicable Operating Instructions (OI), commercial manuals, and other approved O&M manuals or national standards. Appropriate Test, Measurement, and Diagnostic Equipment

(TMDE) is required to accomplish successful maintenance operations.

* + Preventative (Scheduled) Maintenance: is defined as regular and routine actions carried out on equipment to avoid its breakdown or malfunction. Preventive maintenance tends to follow planned timeline to prevent equipment breakdown.
  + Corrective (Episodic) Maintenance: is defined as actions carried out to identify, isolate, and rectify a fault so that the failed equipment can be restored to an operational condition within the tolerances or limits established for in service operations.

1. EO/IR Camera maintenance support: Currently, the TARS Program is in the process of installing the Stedi-View Maritime 50HDL Camera system to the TARS sites. It is expected that installation will be completed by end of FY19. The EO/IR Sensor and its peripheral equipment will be added to the TARS System Configuration. The warranty of the cameras is the responsibility of the Camera OEM and covers approximately 14 months after the date of delivery at each site.
2. It is expected that the TARS O&M contractor provide storage facilities to store 2-3 spare cameras and critical spare parts at a centralized location to replace nonfunctioning cameras at TARS sites as required. It is also expected that the TARS O&M personnel perform organizational level maintenance and support at each site where a camera is installed (i.e. cleaning the camera lens, checking equipment to insure it’s in working order, including replacement of broken or defective equipment. The TARS O&M personnel will also have contact with the local BP Station personnel to perform basic troubleshooting, notification of aerostat launches and recoveries.
3. Key Objectives
   1. Create, Implement and Manage a Consolidated Maintenance Enterprise along with the Activities, Processes, Personnel and Industry Partnerships, etc. to achieve cost savings.
   2. Develop, implement, operate and manage a TARS preventative (scheduled) maintenance program.
   3. Perform preventative (scheduled) maintenance as defined in commercial OEM manuals or other approved O&M manuals on all major systems, sub-systems and components to achieve maximum safe Quality Surveillance Hours.
   4. Perform corrective (episodic) maintenance in a manner defined in commercial OEM manuals or other approved O&M manuals with the objective of minimizing mean time to repair and returning system to full operational capability as expeditiously as possible. Corrective maintenance is required on an ad Hoc basis when system/subsystem and/or component failures occur.
   5. Identify high risk components, trends and potential mechanisms to mitigate major risks.
   6. Standardize maintenance management procedures and implement continuous improvement processes.
   7. Maintain proficiency and procedures for safe ground operations to achieve maximum safe Quality Surveillance Flight Hours.
   8. Maintain proficiency and procedures for recurring preventative (scheduled) maintenance and inspections across all system assets to achieve maximum safe Quality Surveillance Hours.
   9. Effectiveness is measured by how well the Contractor’s proposed logistics management system maximizes the system availability to contribute to quality surveillance flight hours.
   10. Efficiency is measured by the Contractor’s proposed methods to maximize system availability by minimizing system downtime when accomplishing scheduled (preventative) and corrective maintenance, to include (but not limited to) Reliability, Availability and Maintainability (RAM), Critical Failure Rate, Preventative Maintenance Rate, Average Time to Conduct Preventive Maintenance and Mean Time to Repair (MTTR).
4. Constraints
   1. Weather and Environmental conditions may adversely affect the ability to safely perform scheduled and corrective maintenance operations.
   2. TARS Ground Operations Red Book, Revision 9, 30 January 2015
   3. Preventative Maintenance Inspections (PMIs)
5. Reference
   1. TARS Flight Operations Red Book, Revision 13, 30 January 2015
   2. TARS Ground Operations Red Book, Revision 9, 30 January 2015Aerostat Incident Emergency Response Guides for the 275k Site, Revision 10, 30 January 2015, and 420k site, Revision 12, 30 January 2015
   3. Minimum Essential Subsystem List (MESL)
   4. Commercial manuals and other approved O&M manuals contained in the Bidders Master Library.
   5. MPU5 Basic Operators Manual version 2.2/03EN073 Rev. D
   6. DSP-HD Electro-Optic Observation System, I-Level Manual, DSB3-0001-00-4010,
   7. September 4, 2017
   8. DSP-HD Electro-Optic Observation System, Operation and O-Level Manual, DSB30001- 00-4009, September 28, 2017

# Logistics - Supply Operations

1. Scope

An efficient and cost-effective system that includes all supply functions essential to support current and future TARS Sites &/or locations. This includes but is not limited to:

* 1. Supply chain and key supplier management
  2. Third party management
  3. Strategic sources management
  4. Support the integration of all-important business processes, i.e., information flow, material handling, production, packaging, inventory, transportation, warehousing, and security.
  5. Increase logistics efficiency through economies of scale and learning-curve effects
  6. Manage and reduce costs
  7. Maintain transparency and accountability in the entire supply chain

1. Key Objectives
   1. Maintain and manage all classes of supply.
   2. Maintain and manage key suppliers, alternate suppliers, and other third-party strategic resources (e.g. aerostat spares, payloads, fuel and helium) as needed to eliminate material risks and reduce cost.
   3. Maintain proficiency and procedures for material acceptance (e.g. spare aerostats, hulls, critical electronics, etc.).
   4. Identify all critical spares, establish a minimum serviceable balance threshold for critical spares, and increase fill action priority when the overall inventory falls below this threshold level to mitigate risk to operations. Critical spares are identified as single point failure (SPF) items that will cause a Non-Mission Capable (NMC) condition for the TARS Sites.
   5. Create and maintain a sound inventory management system (in accordance with FAR Part 45) that can meet all requirements and support objectives of TARS Systems to support mission capability.
   6. Create and maintain a reliable and comprehensive MIS for the ordering, receipt, inspection, issue, storage, and shipment of all direct and indirect support equipment and supplies.
   7. Supply chain visibility entails:
      * Accurately control and account for all assets.
      * Maintaining accuracy of quantities, location, valuation of on-hand material, consumables etc.
   8. Create and maintain a supply chain management system that includes a material management accounting, asset management, inventory control, and purchase orders, and support ad-hoc queries executed by the Government, providing details or summaries of maintenance and logistics activities.
   9. Recommend and implement an appropriate (organizational, intermediate, depot) level of maintenance.
   10. Maximize parts standardization, interchangeability, and commonality; and minimize the number and types of spares.
   11. Effectiveness is measured by the Contractor’s proposed Targets for maintaining minimum levels of inventory, accuracy for consumables, non-expendable equipment and repairable spares to meeting sparing demand and reduce cost.
2. Constraints
   1. Age of systems
   2. Diminishing sources of supply
   3. Dependence on the OEMname
3. Reference
   1. FAR Part 45 (property control system)
   2. DHS/CBP Integrated Logistics Support System (ILSS) Training Document

# Logistics - Property Management and Accountability

1. Scope:

It is mandatory that all Government Furnished Property/Equipment (GFP/E) is controlled and maintained in accordance with FAR Part 45:

* 1. Maintain, repair, construct, and operate GFE, to assure efficient system operation and reliable mission support. Prevent deterioration beyond normal wear and tear and prevent degradation of the mission.
  2. Implement and maintain accountability, inventory control automation, and transparency for all GFE, equipment spares, etc.

1. Key Objectives
   1. Provide and manage all labor, tools, materials, parts, equipment, transportation, licenses, permits, certifications and management necessary to provide for equipment and system maintenance and repairs.
   2. Perform and document a complete annual inventory of all Government-furnished property.
   3. Track and document the assets and configuration of all equipment for each TARS Site, including but not limited to:
      * Barcode number,
      * Serial number,
      * Manufacturer name,
      * Model and part number,
      * Category (asset type), and
      * Location.
   4. Automated records keeping: Establish and maintain a configuration accounting system to reflect current configuration status of all equipment and revise and update documentation, to be current.
   5. Establish inventory and accountability record for all CBP fleet vehicles and follow a preventive (scheduled) and corrective (episodic) maintenance program augmented by safety inspections and documentation procedures in accordance with OEM specifications, industry standard practices and CBP fleet management policies and procedures.
   6. Perform receipt, accounting, chain of custody, inventory, shipment preparation, transportation and distribution of aerostat assets.
   7. Stock and maintain sufficient quantities of consumables, repair parts and direct exchange modules to support daily operations.
   8. Create and maintain, as historical data, required reports and documentation such as asset status, material status, planned shipments, dates shipped, and quantity shipped.
   9. Effectiveness is measured by the Contractor’s proposed internal controls to support property management and accountability goals.
2. Constraints
   1. Comply with all federal, state, and local ES&H laws and directives, statutes and directives, to include Emergency Planning and Community Right to Know Act (EPCRA), CFR, NFPA, Environmental Protection Agency (EPA) and OSHA requirements.
   2. CBP Property and Asset Identification and Tagging Standard (PAITS)
   3. CBP Personal Property and Asset Management Handbook (HB 5200-13C)
3. Reference
   1. CFR, Title 49, Parts 100-177 (Hazardous Materials/Waste)
   2. FAR Subpart 7.4 - Equipment Lease or Purchase
   3. CBP Directive 5260-010 Motor Vehicle Allocation Methodology
   4. DHS Directive 118-01 Motor Vehicle Fleet Management Policy

# Real Property and Facility Management

1. Scope:

Maintain, repair, and operate Government real property and real property installed equipment (e.g. Heating, Air Conditioning, plumbing, etc.).as well as other infrastructure and facilities, in a manner that provides for quality space and services consistent with their operational needs and accomplishes overall mission objectives. Prevent deterioration beyond normal wear and tear and prevent degradation of the site mission.

* 1. Be cost effective and energy efficient;
  2. Be adequate to meet the mission;
  3. Meet national, state and local recognized standards; and
  4. Maintain and preserve physical plant assets at each TARS site

1. Key Objectives
   1. Provide and manage all labor, tools, materials, parts, equipment, transportation, licenses, permits, certifications and management necessary to provide for facility maintenance and repairs.
   2. Conduct regular inspections of TARS site facilities and infrastructure (e.g. facility structures, paved surfaces, Air Conditioning/Heating (HVAC), cabling, etc.) to assess conditions and provide for repair/replace as required.
   3. Provide all services required to maintain the facility in safe and effective operating condition to effectively and efficiently support the TARS mission, including but not limited to:
      * Custodial services
      * Land and grounds maintenance
      * Trash/waste & recycling removal
      * Snow removal
      * Pest control
   4. Comply with all permits, lease terms, land use agreements and site regulations, including fire, traffic, security regulations, etc. at all TARS Sites.
   5. Obtain all necessary local, city, county and state licenses, permits, and conform to all laws, regulations, and ordinances and code requirements applicable.
   6. Perform all facilities related work as is specified at the U.S. Customs and Border Protection (CBP) Building Entity (BE) Website maintained by CBP FM&E.
   7. Provide limited engineering services such as facility evaluation, project work identification, construction management, and record drawings maintenance as required to support facility needs.
2. Establish and maintain records in the automated management information system to report current status of all work (both engineering and construction) at all TARS Sites.
3. Effectiveness is measured by the Contractor’s ability provide quality services consistent with site operational needs and meet mandatory inspections.
4. Efficiency is measured by the Contractor meeting all national, local, and CBPfacility inspections.
5. Constraints
   1. Comply with all federal, state, and local environmental safety and health laws and directives, statutes and directives, to include Emergency Planning and Community Right to Know Act (EPCRA), CFR, NFPA, Environmental Protection Agency (EPA) and OSHA requirements.
   2. CBP Property and Asset Identification and Tagging Standard (PAITS)
   3. CBP Personal Property and Asset Management Handbook (HB 5200-13C)
   4. Hazardous Waste Compliance: Comply with all Federal, State and local environmental laws and regulations for the safe handling and accumulation of Hazardous materials and waste. The contractor is responsible for Hazardous waste disposal unless provided by the government.
   5. Government “tenant” agreements at sites and installations
   6. Site and installation Lease agreements
6. Reference
   1. CFR, Title 49, Parts 100-177 (Hazardous Materials/Waste)
   2. FAR Subpart 7.4 - Equipment Lease or Purchase
   3. DHS Directive 119-02 Motor Real Property Management Policy

# Security

* 1. Scope:

It is imperative to follow and implement all DHS/CBP administrative, physical and technical (cyber) security controls to ensure safety and security of property, personnel and information.

* + 1. Physical Security: TARS Sites are classified as “Protection Level 4 Resources.” Therefore, it is essential to safeguard all U.S. Government-owned facilities, infrastructure, Government-furnished property, and equipment provided for contractor use.
    2. Cyber Security: All Government data and information must be protected to the degree and extent required by DHS/CBP rules, regulations, and procedures. Moreover, it is mandatory to comply with all security policies contained in CBP Handbook 140005C, Information Systems Security Policies and Procedures Handbook.
    3. Personnel Security: Ensure that all onsite personnel adhere to the DHS/CBP Background Investigation (BI) process and obtain suitability clearances required including required secret and above clearances. Personnel will also adhere to CBP standards of Behavior IAW Department of Homeland security DHS Management Directive no 04850.1 and the Customs and Border Protection (CBP) Standard of Conduct Directive 51735-013A, March 2015. Contractors will conduct annual training to insure all personnel are reminded of these requirements.
    4. Operational Security (OPSEC): All operational data must be protected in accordance with DHS/CBP rules and requirements governing data sensitivity, data protection and data disclosure of FOUO, LES and other sensitive but unclassified data. OPSEC also covers specific privacy and sensitivity related to Law Enforcement operational environments by restricting photography of equipment, screens, etc.
    5. Information Security: safeguard program, system and site information from disclosure to unauthorized persons (e.g. media, general public).
  1. Key Objectives
     1. Comply with all applicable Government property security requirements in accordance with FAR 45.5.
     2. Implement and maintain Visitor control, Access Control, fencing and lighting in accordance with all applicable DHS/CBP standards and processes.
     3. Promptly and accurately report any information or circumstances that may pose a threat to the security of Government personnel, contractor personnel, resources, and unclassified homeland defense information.
     4. Develop and maintain an overarching TARS Information Security Plan that the processes to ensure appropriate security of IT resources utilized to support the TARS mission. This should at minimum include instructions regarding handling and protecting sensitive information at the Contractor’s site (including any information stored, processed, or transmitted using the Contractor’s computer systems), and the secure management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems.
     5. Support the TARS Systems in achieving, renewing and maintaining their Authority to Operate ATO. An ATO is issued by the CBP CIO and is renewed every three (3) years. These reviews may include onsite visits that involve physical or electronic inspection of the TARS Systems environment to ensure controls are in place.
     6. Develop and implement physical security plans and procedures for TARS Sites in accordance with DHS and CBP Guidance.
     7. Develop and implement personnel security plans and procedures for TARS Sites in accordance with DHS and CBP Guidance.
     8. Develop and implement OPSEC plans and procedures for TARS Sites in accordance with DHS and CBP Guidance.
     9. Safeguard Project and system information and safeguard all information from unauthorized disclosure and dissemination in accordance with DHS and CBP Guidance.
     10. Provide physical security of work areas and CBP furnished equipment issued under this contract.
     11. Develop and implement a visitor control system.
     12. Safeguard Sensitive but Unclassified (SBU) and For Official Use Only (FOUO) Information in accordance with DHS MD 11042.1.
     13. Safeguard Sensitive Security Information and adhere to policy and procedures for the disclosure of records to the public and for marking, handling, transmitting, dissemination, and safeguarding of FOUO and Sensitive Security material in accordance with DHS MD 11056.1.
     14. Comply with DHS/CBP security policies and procedures to assure that all deliverables meet these requirements.
     15. Effectiveness is measured by the Contractor’s proposed Targets to deter and prevent unauthorized access to government facilities, law enforcement sensitive information, and personnel information.
     16. Efficiency is measured by the Contractor’s proposed Targets to implement effective security measures that do not hinder exchange of information between authorized users or the access, control, and movement of personnel.
  2. Constraints
     1. FAR 45.5
     2. Comply with DHS information security policy identified in DHS Management Directive (MD) 4300.1, Information Technology Systems Security Program and DHS 4300A, Sensitive Systems Handbook.
     3. Comply with Computer Security Act of 1987 (40 U.S.C. 1441); the Government Information Security Reform Act of 2000; and the Federal Information Security Management Act of 2002; and with Federal policies and procedures that include, but are not limited to, OMB Circular A-130.

1. DHS MD 4300.1
2. DHS 4300A CBP Handbook HB1400-05B Information Systems Security Policies and Procedures Handbook
   1. Reference
      1. FAR 45.5
      2. DHS MD 11042.1
      3. DHS MD 11056.1
      4. DHS MD 4300.1
      5. DHS Directive 140-01
      6. DHS 4300A
      7. HB 1400-05D
      8. 40 U.S.C. 1441
      9. CBP OPSEC security training curriculum
      10. Homeland Security Acquisition Regulation (HSAR) Clause 3052.204-71
      11. DHS Management Directive no 04850.1
      12. Customs and Border Protection (CBP) Standard of Conduct Directive 51735-013A, March 2015

# Systems Engineering and Integration

* 1. Scope:
     1. System Engineering and Integration function is defined as efforts toward modifications of a delivered product or changes that incorporate a new product (hardware, software, and/or firmware) for any number of purposes, including avoiding product end of life or obsolescence, responding to an emerging TARS system security vulnerability or threat, or incorporating a new system, sensor, or ancillary equipment. These modifications may or may not impact form, fit and function.
     2. Apply Value Engineering (VE) approach, procedures and processes to improve performance, quality, safety and reduce life cycle cost.
  2. Key Objectives
     1. Modify TARS technology and equipment, including hardware, software and/or firmware. Update associated manuals, drawings, training, product baseline, and other affected documentation under a configuration management system.
     2. Use best engineering practices to design, develop, manage, procure, and implement Government approved sustainment and improvement modifications for existing systems.
     3. Support the implementation of Government approved sustainment and improvement modifications for existing systems by providing the necessary level of in-house and outsourced engineering support. The balance of in-house versus outsourced engineering support shall focus on the best value solution to the Government.
     4. Provide engineering support for the integration of new and additional sensors systems, platforms, processing equipment, and ancillary equipment, including the potential implementation of mobile radars for temporary needs or to fill gaps during periods of system down time.
     5. Analyze, design, and recommend product improvements and system changes brought about by deficiencies, mission changes, technology changes, technology obsolescence, regulatory changes, or user needs.
     6. Establish and maintain a configuration management (CM) system to reflect current configuration status of all Technology; revise and update documentation in accordance with the CM system for approved system modifications, including engineering change proposals (ECPs), technical drawings, system configuration records, manuals, and network infrastructure.
     7. Provide reviews and development of technical proposals, requirements documents, test plans, test results, system change notices, engineering change proposals (ECPs), and other relevant technical documentation.
     8. Provide recommendations on performance improvements and upgrades to keep pace with current technology, avoid obsolescence, and maintain system operability.
     9. Provide recommendations on TRDN performance improvements and upgrades to keep pace with current technology, avoid obsolescence, and maintain compliance with regulatory policies and new radar mission profiles.
     10. Identify potential risk- or cost-increasing policies and performance-impacting policies that would have an overall negative impact on TARS and its ability to support CBP’s mission; notify the Government of significant policy issues.
     11. Effectiveness is measured by Contractor’s successful implementation of system modifications that achieve projected outcomes, i.e., improve system performance, reduce operations costs, or other some other agreed to value.
     12. Efficiency is measured by the Contractor’s ability to implement engineering and technical changes in a timely manner, maintaining compliance with existing policies, and meeting system technical performance parameters that support the proposed project scope.
  3. Constraints
     1. Aging Technology
     2. Affordability
     3. Avoiding system downtime
  4. Reference
     1. FAR - Part 39 Acquisitions of Information Technology
     2. DHS Guidebook 102-01-103-01 Systems Engineering Life Cycle (3/15/16)

# Program and Personnel Management

* 1. Scope
     1. This entails an integrated Program and Personnel Management function to support the Government PMO and staff in a proactive, responsive and timely manner. The administration of the contract will require maximum coordination between the Government and the Contractor.
     2. Providing a holistic approach to Integrating system and program functional areas (e.g. maintenance and supply, flight and data operations, etc.)
     3. Provide a qualified, trained workforce across all required operations and functional disciplines.
  2. Key Objectives
     1. Provide integrated and cohesive program management. The functions of personnel management, logistics and sustainment, systems engineering and enhancements, risk management and mitigation, financial management and comprehensive reporting are to be seamlessly integrated into day-to-day operations.
     2. Manage staffing to ensure that the full range of skills sets are available as needed to support the TARS Site activities at each site 24/7/365.
     3. Analyze operational data, metrics, and lessons learned to propose process improvements and mitigate risk.
     4. Create and maintain a comprehensive and automated data repository that enables the Government to view, extract, and disseminate information real-time both in the form of pre-defined report formats and ad hoc queries.
     5. Develop a management plan including job descriptions, skill set, training, and certification requirements for all positions, organizational structure with defined lines of authority, site staffing levels, work scheduling methods, training concepts, a strike contingency strategy that provides for continued TARS Sites support in the event of a labor work stoppage, and any other key management processes that affect contract operations to achieve the Quality Surveillance Hours objective.
     6. Track, mitigate, manage, and resolve problems and issues associated with programmatic and technical risk.
     7. Ensure that staff personnel apply proper business practices in accordance with the specifications, directives, and manuals required for conducting work under this contract.
     8. Ensure that staff personnel who are authorized access to sensitive information, receive training pertaining to protection and disclosure of sensitive information.
     9. Manage risks and any project issues and follow a defined escalation procedure and review current risk status with government.
     10. Support TARS related meetings, conferences, demonstrations, VIP visits, etc., at the direction of the Government.
     11. Quality: Develop a quality management plan that provides the approach to ensure overall quality in all aspects of the TARS operations and management functions for all TARS Sites, Systems and facilities.
     12. Develop and submit a monthly management report organized by functional areas highlighting management planning, risk mitigation and program direction.
     13. Management and Operational Data: Collect, manage and maintain real-time / near real-time operational data. Additionally, collect, manage and maintain logistics and management data of the TARS Sites, Systems and facilities and provide easy access to authorized TARS government personnel to appropriate information systems.
* This data repository will facilitate the TARS program concept of Government insight versus oversight and will enable authorized TARS government personnel to view TARS operational data real-time / near real-time to enable sound management planning, risk mitigation and decision-making.
* Contractor will provide familiarization and training to government PMO, AMOC and other personnel as identified to facilitate/allow government access to the data, ability to develop required reports, etc.
* This data must be available on-demand with relative ease of access.
* This data must provide access to an analytical tool suite that is easy to use and should include dashboards, trend indicators, report template, alerts and ad hoc query capability.
* This data must be protected to the degree and extent required by DHS/CBP rules, regulations, and procedures. (See SOO section 7 for additional details)
* The MIS shall include detailed accessible records for tracking for all performance targets.
  + 1. Effectiveness is measured by the Contractor’s ability to staff the program with qualified personnel and to achieve cost, schedule, and performance targets.
    2. Efficiency is measured by how well the Contractor meets proposed targets for quality data products, MIS updates, responses to user needs and execute program functions to consistently achieve TARS program objectives.
  1. Constraints
     1. Security Background Investigation Requirements in accordance with DHS Management Directive (MD) 11055, Suitability Screening Requirements for Contractors.
     2. General procedures governing physical, environmental, and information security described in the various DHS CBP regulations identified in this clause.
     3. Title 5, Code of Federal Regulations, Part 930.301, Subpart C (annual Information Technology Security Awareness Training).
     4. The DHS Rules of Behavior apply to every DHS employee, Contractor and subcontractor that will have access to DHS systems and sensitive information.
     5. CBP 1400-02B Security Policy and Procedures.
     6. DHS personal identity verification procedures identified in FIPS PUB Number 201, Personal Identity Verification (PIV) of Federal Employees and Contractors. d.

Reference

* + 1. CBP Directive 51715-006, Separation Procedures for Contractor Employees.
    2. DHS MD 11055
    3. CBP 1400-02B
    4. FAR Part 3 Subpart 3.10
    5. FAR Part 9

# Goal 2: Lifecycle Sustainment and Other Improvement Projects

1. **Lifecycle Sustainment Projects**

Lifecycle Sustainment encompasses distinct projects focused on System Expansion, modification and service life extension. This Goal addresses major tasks that are not part of the steady state operations (Goal 1) that will add, enhance, or extend the utilities of this system when directed by the Government.

* 1. Scope

When directed by the Government.

* + 1. Identify, design and implement innovative risk mitigation approaches to increase the useful service life expectancy of the aerostats and payload components
    2. Minimize reactive Diminishing Manufacturing Sources and Material Shortages (DMSMS) actions.
    3. Add additional infrastructure to support other payloads and other end-users such as USBP, etc.
  1. Key Objectives

When directed by the Government.

* + 1. Analyze and design Government Directed product improvements and system changes brought about by deficiencies, mission changes, technology changes, and user needs. Evaluate:
* Design alternatives;
* Modernization;
* Technology Refresh;
  + 1. Effectively identify and manage Diminishing Manufacturing Sources and Material Shortages (DMSMS).
* Promote cost-effective supply chain management integrity through DMSMS problem solution at the lowest (cost, time, functional) level.
* Provide for risk mitigation as it applies to DMSMS.
* Evaluate more than one approach to resolve DMSMS issues.
* Define a proactive DMSMS management process to build an effective DMSMS program.
* Define DMSMS support metrics to measure the effectiveness of a proactive DMSMS program.
* Promote the exercise of best practices throughout the DMSMS management cycle
  + 1. Ensure that all parts and material to repair the system or equipment are available.
    2. Minimize and control total ownership cost (TOC).
    3. Minimize total life-cycle systems management (TLCSM) cost.
    4. Collect metrics to monitor program effectiveness.
  1. Constraints

System Modifications are accomplished in accordance with the terms and conditions of the contract and the Contractor submitted Government approved Life Cycle Sustainment Plan (LCSP), Configuration Management Plan (CMP), and TARS Security Plan.

* 1. Reference
     1. FAR - Part 39 Acquisitions of Information Technology
     2. DHS Guidebook 102-01-103-01 Systems Engineering Life Cycle (3/15/16)

# Goal 3: Transition

1. **Transition**
   1. Scope
      1. Effectively transition Field Operations for the TARSs program within 60 days from contract award and assume control of operations from incumbent (both as the incoming and outgoing contractor).
      2. Transition all other systems, support equipment access privileges, inventory and other system documentation, (e.g. checklists, Red Books, training documents, etc.)
   2. Key Objectives: Incoming Contractor to assume operational, logistics, program management responsibility for all activities and fully staff the project to support 24/365 operations at the end of the 60-day transition period. Additionally, implement and execute management processes that will result in continuity of mission support and contract performance and efficiently transition/phase-in resources and personnel onto the contract.
   3. Constraints

Transition activities shall be performed without interference with the incumbent’s operations. There can be no disruptions or degradation in service or delivery of Quality Surveillance Hours during transition.