STATEMENT OF WORK

1.0 Introduction

The Contractor shall furnish all labor, materials, tools, equipment, transportation, supervision, and management necessary to provide comprehensive sustainment, lifecycle support, and subject matter expertise for the Electronic Security System (ESS), Closed Circuit Television (CCTV)/Qognify systems, NICE Vision Pro digital recorders, the HUGS Infant/Pediatric Protection System, and all associated network infrastructure at Brooke Army Medical Center (BAMC) and designated outlying facilities.

The Contractor is fully responsible for the performance, reliability, and operational readiness of all systems covered under this contract. All work shall comply with Department of War (DoW) requirements, applicable security directives, clinical safety standards, and manufacturer specifications. The Contractor shall ensure that all personnel assigned to this effort possess the required **OEM certifications**, **active U.S. Government Secret clearances**, and **documented experience in hospital or Military Treatment Facility (MTF) environments** prior to performing work under this contract.

The systems supported under this contract directly enable **life-safety**, **patient protection**, **clinical operations**, and **force protection** functions within a Level I Trauma Center. As such, the Contractor shall maintain continuous operational availability, provide rapid emergency response, and ensure all systems remain fully functional, integrated, and compliant with Government requirements.

2.0 Objective

The objective of this contract is to ensure uninterrupted sustainment, maintenance, and modernization of the following systems:

- **CEM Access 2000** and **Lenel** access control systems
- **CCTV/Qognify** video surveillance systems
- **NICE Vision Pro** digital video recorders
- **HUGS Infant/Pediatric Protection System**
- All associated servers, workstations, network components, cabling, and supporting hardware/software

This requirement is **mission-critical**. The Contractor shall provide:

- Continuous technical support
- Preventive and corrective maintenance
- System administration
- Network support
- Hardware and software lifecycle management

- OEM-aligned upgrades and patches
- Integration support between ESS, CCTV, and HUGS systems

Contractor personnel shall be fully trained, OEM-certified, and experienced in the systems they service. All response and resolution times specified in this Statement of Work are mandatory and enforceable.

The Contractor shall ensure all systems remain operational at or above the required availability thresholds, including:

- **99.9% uptime** for HUGS
- **99.9% uptime** for ESS and CCTV critical components
- **2-hour emergency response** for all mission-critical failures

The Contractor shall maintain all system documentation, drawings, inventories, and configuration baselines in accordance with Government requirements and shall coordinate all changes with the Contracting Officer's Representative (COR).

C.2 — SCOPE OF WORK

3.0 Electronic Security System (ESS) Support

3.1 Coverage and Responsibilities

The Contractor shall provide comprehensive sustainment, maintenance, troubleshooting, and lifecycle support for all components of the Electronic Security System (ESS) deployed across Brooke Army Medical Center (BAMC) and designated outlying facilities. Support shall include, but is not limited to:

- Proximity card readers
- Electronic locks, strikes, and magnetic locking devices
- Request-to-Exit (REX) devices
- Door position switches
- Field controllers, reader modules, and interface boards
- Structured cabling, terminations, and low-voltage wiring
- ESS servers, workstations, and associated network elements
- Graphical monitoring stations and alarm management consoles

The Contractor shall ensure all ESS components remain fully operational, integrated, and compliant with manufacturer specifications and Government security requirements. All work shall be performed by **OEM-certified technicians** with documented experience supporting CEM Access 2000 and Lenel systems in hospital or MTF environments.

3.2 Supported Facilities

The Contractor shall provide ESS sustainment support for all BAMC facilities, including but not limited to:

- Brooke Army Medical Center Hospital
- CoTo
- Consolidated Parking Structure
- Institute of Surgical Research / Burn and Trauma (ISR/BHT)
- Central Energy Plants 1 and 2
- Fort Sam Houston Clinic
- Troop billets
- Fisher Houses 1–4
- Center for the Intrepid
- Any additional facilities designated by the Government during the period of performance

The Contractor shall maintain awareness of facility-specific access control requirements, clinical workflows, and operational constraints to ensure safe and compliant system support.

3.3 System Description and Operational Requirements

The Contractor shall maintain BAMC's independent ESS network consisting of:

- Approximately **3,500** proximity readers and control devices
- Approximately **800** monitored secure points
- Approximately **500** duress buttons
- CEM Access 2000 running on **Fedora Core Linux servers**
- Windows-based workstations accessing CEM Access 2000
- Crystal Reports-based reporting and audit tools

The Contractor shall ensure all ESS components remain synchronized, properly configured, and fully integrated with CCTV/Qognify and HUGS systems. All configuration changes, firmware updates, and system modifications shall be coordinated with the COR.

3.4 Upgrades, Patches, and Manufacturer Support

The Contractor shall provide all manufacturer-recommended upgrades, patches, and lifecycle support for:

- CEM Access 2000
- Windows Server and Windows Professional workstations
- Crystal Reports
- Fedora Core Linux systems
- ESS controllers, modules, and field devices

The Contractor shall maintain active OEM support relationships and ensure all technicians performing work are **OEM-certified**. The Contractor shall coordinate directly with the manufacturer for advanced diagnostics, software escalations, and system-level troubleshooting.

3.5 Logistics and Mobility Requirements

The Contractor shall provide or lease vehicles for locksmiths, technicians, and system administrators to transport tools, equipment, and spare parts to all supported facilities. Vehicles shall be properly equipped to support:

- On-site repairs
- Emergency response
- Transport of sensitive equipment
- Movement between geographically dispersed facilities

The Contractor shall maintain sufficient tools, diagnostic equipment, and test devices to support all ESS maintenance and troubleshooting activities.

4.0 CCTV / Qognify Support

4.1 Coverage and Responsibilities

The Contractor shall provide full sustainment, maintenance, and lifecycle support for all CCTV/Qognify components, including:

- Fixed and PTZ cameras
- Encoders and decoders
- Video switches and CPUs
- NICE Vision Pro digital recorders
- Video management servers
- Monitoring stations and client workstations

All work shall be performed by **OEM-certified NICE/Qognify technicians** with documented experience supporting video surveillance systems in hospital or MTF environments.

4.2 Transmission Links and Remote Connectivity

The Contractor shall maintain all wired and wireless video transmission links supporting:

- BAMC main gate
- Binz-Engleman gate
- Fort Sam Houston Clinic
- Additional remote or outlying locations designated by the Government

The Contractor shall ensure all video links remain stable, secure, and capable of supporting real-time video transmission, alarm-triggered presets, and forensic video retrieval.

4.3 System Integration Requirements

The Contractor shall maintain and program the interface between ESS and CCTV systems to support:

- Automated salvos
- Camera tours
- Alarm-triggered video presets
- Real-time video verification of ESS alarms
- Integrated event logging and reporting

All integration work shall be performed in accordance with OEM specifications and Government security requirements.

5.0 Infant/Pediatric Protection System (HUGS)

5.1 Coverage and Responsibilities

The Contractor shall provide full sustainment, maintenance, and lifecycle support for the HUGS Infant/Pediatric Protection System deployed in pediatric, NICU, and other designated clinical areas. Support shall include:

- HUGS tags and tamper-detecting bands
- Band sensors and exciters
- Monitoring stations
- HUGS servers and network components
- Integration with ESS and CCTV systems

5.2 System Description and Clinical Requirements

The HUGS system provides:

- Infant/pediatric abduction prevention
- Correct infant-to-parent matching
- Movement monitoring within designated areas
- Alarm generation for tamper, removal, mismatch, and exit approach events

The Contractor shall ensure all HUGS components remain fully functional, properly calibrated, and integrated with ESS and CCTV systems to support coordinated alarm responses.

5.3 Maintenance, Upgrades, and OEM Support

The Contractor shall provide all manufacturer-recommended:

- Software updates
- Firmware upgrades
- Hardware replacements

- Tag and band lifecycle management
- Monitoring station support

All HUGS technicians shall be **OEM-certified**, and certification documentation shall be provided to the COR.

5.4 Testing, Reporting, and MEVA Integration

The Contractor shall incorporate HUGS devices into the quarterly Mission Essential Vulnerability Area (MEVA) testing program. Reports shall include:

- Test procedures
- Alarm logs
- Video verification references
- Corrective actions
- Root cause analysis for repeated alarms

5.5 Performance Requirement

The Contractor shall maintain **99.9% uptime** for all HUGS components, excluding scheduled maintenance and Government-directed outages.

Roger that, James — here is **C.3 Program Management and Personnel**, rewritten in **full detail**, matching the **depth, structure, and specificity** of your uploaded SOW, while integrating your enhanced requirements (Secret clearances, OEM certifications, MTF experience, on-site staffing, etc.).

This is **not** an outline.
This is **full contract language**, ready for KO submission.

C.3 — PROGRAM MANAGEMENT AND PERSONNEL

6.0 Project Management

6.1 Project Manager Assignment

The Contractor shall designate a **full-time Project Manager (PM)** for the duration of the contract. The PM shall serve as the primary point of contact for all contractual, technical, administrative, and operational matters. The PM may serve as a working supervisor but shall retain responsibility for overall contract execution, personnel oversight, and coordination with Government stakeholders.

The PM shall be available during normal Government duty hours and shall be capable of meeting with Government personnel **within eight (8) hours** of request. The PM shall maintain continuous communication availability via Government-approved means.

6.2 Minimum Qualifications

The Project Manager shall meet or exceed the following minimum qualifications:

- **Five (5) years of specialized Department of War (DoW) or DoD project management experience** supporting security, access control, CCTV, or clinical technology systems
- Demonstrated supervisory experience managing multi-disciplinary technical teams
- Strong written and oral communication skills suitable for interaction with clinical leadership, security personnel, and contracting officials
- Documented experience managing sustainment operations in a **hospital or Military Treatment Facility (MTF)** environment
- **Active U.S. Government Secret security clearance required prior to assignment**
- Familiarity with OEM support processes for CEM, Lenel, NICE/Qognify, and HUGS systems

The Government reserves the right to reject any PM candidate who does not meet these requirements.

6.3 Responsibilities

The Project Manager shall:

- Provide day-to-day oversight of all Contractor personnel
- Allocate resources to meet scheduled and unscheduled maintenance requirements
- Establish and monitor milestones, schedules, and performance metrics
- Ensure compliance with all OEM, DoW, and BAMC requirements
- Coordinate all system changes, outages, and upgrades with the COR
- Maintain staffing continuity and ensure all personnel remain fully certified
- Ensure all deliverables are accurate, complete, and submitted on time
- Maintain a complete inventory of Contractor-provided tools, equipment, and spares
- Serve as the escalation point for all technical and operational issues

The PM shall ensure that all personnel assigned to the contract comply with security, safety, and clinical access requirements.

7.0 Technicians and Training Requirements

7.1 Personnel Qualifications

The Contractor shall provide trained, experienced, and fully qualified technicians to perform all work under this contract. All personnel performing work on ESS, CCTV/Qognify, NICE Vision Pro, or HUGS systems shall possess:

- **Current OEM certifications** for the systems they support
- Documented training records and proof of certification
- Experience supporting access control, CCTV, and infant protection systems
- Familiarity with clinical workflows and patient-safety protocols
- Ability to work in sensitive clinical areas, including NICU, Pediatrics, and restricted zones

The Contractor shall maintain complete and current certification records for all personnel and shall submit these records to the COR as part of **Appendix D — Personnel Qualifications and Resumes**.

7.2 Security Clearance Requirements

All personnel assigned to this contract shall:

- Possess, at a minimum, an **active U.S. Government Secret security clearance** prior to performing work
- Maintain clearance eligibility throughout the period of performance
- Comply with all requirements of the DD Form 254, Contract Security Classification Specification

Personnel without the required clearance **shall not** access ESS servers, HUGS servers, CCTV servers, restricted clinical areas, or any controlled spaces.

7.3 Staffing Continuity

The Contractor shall maintain sufficient staffing levels to meet all scheduled maintenance, preventive maintenance, and unscheduled emergency response requirements. Staffing shall be structured to ensure:

- 24/7/365 coverage
- Ability to meet the **2-hour emergency response** requirement
- No degradation of service during leave, training, or personnel turnover
- Immediate replacement of personnel who depart or lose certification

The Contractor shall notify the COR of any personnel changes within **five (5) business days** and shall update Appendix D accordingly.

8.0 Position Descriptions

The Contractor shall provide personnel who meet or exceed the minimum qualifications listed below. Any proposed substitution must be approved by the COR prior to assignment. All

resumes, certifications, and clearance verification documents shall be submitted to **Appendix D** before personnel begin work.

8.1 HUGS Infant Security Technician / Access Control / Camera Installer

Role Summary:
The HUGS Technician shall install, maintain, test, and troubleshoot all HUGS Infant/Pediatric Protection System components, including tags, band sensors, monitoring stations, exciters, and associated ESS/CCTV integrations. The technician shall coordinate with nursing, clinical, and security staff to ensure continuous protection of pediatric patients.

Key Duties:

- Install and integrate HUGS alarms with ESS and CCTV/Qognify systems
- Install and service AiPhones, electronic strikes, maglocks, card readers, duress buttons, door contacts, REX devices, and motion alarms
- Pull, terminate, and test low-voltage and structured cabling
- Mount cameras in metal, fiberglass, and gypsum ceiling tiles
- Terminate and test fiber connections using OEM-approved tools
- Perform preventive maintenance and quarterly MEVA testing
- Assist clinical staff with tag application, verification, and troubleshooting
- Maintain tag inventory, spare parts, and replacement bands
- Document all work performed and update system records

Minimum Qualifications:

- High school diploma or equivalent (technical diploma preferred)
- Two (2) to four (4) years of experience with infant protection systems, RFID/tag systems, or access control/CCTV installation
- **OEM certification for HUGS required** (or obtained within 30 days of award)
- Experience working in clinical or MTF environments

On-Call Requirements:

- Participate in rotating on-call schedule
- Respond to HUGS alarms (band removal, exit approach, tamper) within **2 hours**

8.2 Systems Administrator (Senior)

Role Summary:
The Senior Systems Administrator shall manage all ESS, CCTV, and HUGS servers, including CEM Access 2000, NICE/Qognify servers, Linux/Windows environments, and associated databases.

Minimum Qualifications:

- Associate degree in IT or equivalent
- Five (5) years of systems administration experience
- Experience with Linux (Fedora Core) and Windows Server
- **RHCE or equivalent Linux certification required**
- **Active Secret clearance required**
- OEM training for CEM and NICE/Qognify preferred

Responsibilities:

- Maintain server uptime and data integrity
- Perform backups, patching, and system hardening
- Maintain configuration baselines
- Respond to critical server incidents within **2 hours**
- Provide 24/7 availability for emergency events

8.3 Network Architect / Engineer

Role Summary:
The Network Engineer shall maintain LAN/WAN connectivity and network performance for ESS, CCTV/Qognify, and HUGS systems.

Minimum Qualifications:

- Associate degree or equivalent
- Four (4) years of network engineering experience
- **CCNA or equivalent certification required**
- Familiarity with TIA/ISO cabling standards and fiber connector types
- **Active Secret clearance required**

Responsibilities:

- Maintain network control nodes (NCNs)
- Troubleshoot link failures
- Maintain network diagrams and documentation
- Respond to NCN failures within **2 hours**

8.4 Maintenance Technician

Role Summary:
The Maintenance Technician shall perform hands-on maintenance, repair, and preventive service for ESS hardware and door hardware components.

Minimum Qualifications:

- High school diploma or equivalent
- Three (3) years of experience with access control or physical security systems

- Manufacturer training for CEM/Lenel or equivalent
- Ability to obtain DoW clearance

Responsibilities:

- Perform repairs, replacements, and preventive maintenance
- Maintain parts logs and repair tickets
- Respond to emergencies within **2 hours**

8.5 CCTV / Qognify Technician

Role Summary:
The CCTV Technician shall install, maintain, and troubleshoot CCTV cameras, encoders/decoders, video switches, and NICE Vision Pro recorders.

Minimum Qualifications:

- Technical diploma or equivalent
- Three (3) years of CCTV experience
- **NICE/Qognify OEM certification required**

Responsibilities:

- Maintain camera inventory
- Verify video retention
- Provide incident video references
- Respond to video outages within **2 hours**

8.6 Locksmith

Role Summary:
The Locksmith shall provide mechanical lock services, key control, and emergency door hardware repairs.

Minimum Qualifications:

- Journeyman locksmith certification or equivalent
- Three (3) years of experience
- Familiarity with fire-rated door hardware and code requirements

Responsibilities:

- Maintain key control logs
- Repair and replace mechanical locking systems
- Respond to fire-rated or perimeter door failures within **2 hours**

C.4 — SERVICE, MATERIALS, AND SPARES

8.0 Service Requirements

8.1 General Service Obligations

The Contractor shall provide all labor, tools, materials, diagnostic equipment, transportation, and technical expertise necessary to maintain the Electronic Security System (ESS), CCTV/Qognify systems, NICE Vision Pro recorders, HUGS Infant/Pediatric Protection System, and all associated hardware and software at full operational capability. All services shall be performed in accordance with:

- OEM specifications
- Department of War (DoW) requirements
- BAMC clinical safety and infection-control standards
- Applicable security and accreditation requirements

The Contractor shall ensure that all systems remain fully functional, properly configured, and continuously available to support life-safety, patient-protection, and force-protection missions.

8.2 Labor and Technical Support

The Contractor shall provide all labor necessary to:

- Diagnose and repair system faults
- Replace failed components
- Perform preventive maintenance
- Conduct system upgrades and lifecycle refreshes
- Maintain system documentation and configuration baselines
- Provide on-site and remote technical support
- Coordinate with OEM support teams for escalated issues

All labor shall be performed by **OEM-certified technicians** with documented experience supporting CEM, Lenel, NICE/Qognify, and HUGS systems in hospital or MTF environments.

The Contractor shall ensure that all personnel performing work on servers, network components, or restricted clinical systems possess an **active Secret clearance**.

8.3 Software Support and Upgrades

The Contractor shall provide all software technical support, including:

- Installation of OEM-recommended patches and updates
- Firmware upgrades for controllers, cameras, and field devices
- Security hardening in accordance with DoW cybersecurity requirements
- Configuration management and version control
- Testing and validation of updates prior to deployment

All software upgrades shall be coordinated with the COR to avoid disruption to clinical operations.

8.4 System Availability Requirements

The Contractor shall maintain operational availability at or above the following thresholds:

- **99.9% uptime** for ESS
- **99.9% uptime** for CCTV/Qognify systems
- **99.9% uptime** for HUGS Infant/Pediatric Protection System

Uptime calculations exclude:

- Scheduled maintenance approved by the COR
- Government-directed outages
- OEM-mandated downtime for critical patches

Failure to meet uptime requirements may result in performance deductions or other contractual remedies.

8.5 Emergency and Non-Emergency Service

The Contractor shall provide **unlimited on-site service and telephone consultation 24 hours per day, 7 days per week, 365 days per year**.

Emergency Response Requirements:
The Contractor shall respond on-site within **two (2) hours** for emergency events, including but not limited to:

- MEVA failures
- Server failures
- Badging system outages
- Real-Time Computer (RTC) failures
- Network Control Node (NCN) failures
- Perimeter or fire-rated door failures
- CCTV system outages
- HUGS band removal, tamper, or exit-approach alarms

The Contractor shall restore systems to manufacturer specifications within **24 hours**, where applicable.

Non-Emergency Response Requirements:
The Contractor shall respond within **24 hours** for non-emergency issues, including:

- Individual door problems
- Low battery notifications
- Isolated camera issues
- Non-critical HUGS alerts

Non-emergency issues shall be resolved within **72 hours**, where applicable.

9.0 Materials and Billing

9.1 Materials and Replacement Parts

The Contractor shall provide all materials required for:

- Repairs
- Replacements
- Upgrades
- Shipping and transportation
- Installation of new components

All replacement parts shall be **OEM components only**.
Third-party or non-OEM parts are strictly prohibited unless explicitly approved in writing by the COR and OEM.

Materials include, but are not limited to:

- Security hardware
- CCTV equipment
- HUGS tags and bands
- Lock supplies
- Failed computer hardware
- Software licenses (if applicable)

9.2 Billing Requirements

Materials shall be billed under the appropriate repair and replacement Contract Line Item Numbers (CLINs). The Contractor shall:

- Provide itemized invoices
- Include serial numbers, part numbers, and quantities
- Identify labor hours associated with each repair
- Provide OEM documentation for replaced components

The Government reserves the right to audit material costs at any time.

10.0 Spare Media and Documentation

10.1 Backup Media Requirements

The Contractor shall provide and maintain a **spare hard disk** loaded with:

- Current system software
- Current configuration files
- Current database backups
- Any custom scripts or OEM utilities required for system restoration

The spare hard disk shall be stored in the **Provost Marshal's safe** and updated after any system upgrade or configuration change.

10.2 System Drawings and Documentation

The Contractor shall maintain complete and accurate system drawings, including:

- ESS topology diagrams
- CCTV network diagrams
- HUGS system architecture
- Fiber and copper cabling maps
- Device inventories and locations
- Controller and NCN layouts

The Contractor shall update drawings **within five (5) business days** of any system addition, deletion, or modification and shall provide updated documentation to the COR.

Roger that, James — here is **C.5**, rewritten in **full detail**, matching the **exact depth, structure, and operational specificity** of your uploaded SOW.
This is **contract-grade language**, not an outline, not a summary — it is written to withstand KO, legal, and technical review.

C.5 — INSPECTIONS, TESTING, AND REPORTING

11.0 Scheduled Inspections

The Contractor shall perform all manufacturer-recommended periodic services, inspections, and functional tests required to ensure full operational capability of the Electronic Security System (ESS), CCTV/Qognify systems, NICE Vision Pro recorders, HUGS Infant/Pediatric Protection System, and all associated hardware and software.

All inspections shall be conducted in accordance with:

- OEM technical manuals
- Department of War (DoW) requirements
- BAMC clinical safety and infection-control protocols
- Applicable security and accreditation standards

The Contractor shall document all inspection procedures, findings, deficiencies, and corrective actions. Documentation shall be submitted to the COR in the format and frequency specified in this section.

Inspections shall include, but are not limited to:

- Functional testing of access control points
- Verification of door hardware operation
- Validation of CCTV camera functionality, focus, and field of view
- Verification of video retention and recording integrity
- Testing of HUGS tags, bands, exciters, and monitoring stations
- Verification of server health, storage capacity, and system logs
- Testing of duress buttons, panic alarms, and MEVA-designated devices

The Contractor shall ensure that all inspection activities are coordinated with clinical and security personnel to avoid disruption to patient care or mission operations.

12.0 Testing and Reporting

12.1 Annual Work Plan

The Contractor shall develop and submit an **Annual Work Plan** to the COR for approval within thirty (30) calendar days of contract award and annually thereafter. The plan shall detail:

- Scheduled testing of all ESS alarm points
- Controlled access points
- Communication devices
- CCTV cameras and recording systems
- HUGS devices and monitoring stations
- Test frequency and methodology
- Responsible personnel
- Reporting timelines
- Required coordination with clinical and security staff

The Annual Work Plan shall serve as the baseline for all scheduled inspections and testing activities.

12.2 Quarterly MEVA Testing

The Contractor shall conduct and document **quarterly Mission Essential Vulnerability Area (MEVA) testing** for all designated MEVA locations. MEVA testing shall include, but is not limited to:

- Electronic sensors
- Panic/duress buttons
- Batteries and power supplies
- Uninterruptible power supplies (UPS)
- Card readers
- Magnetic locks
- Electric door strikes
- Reader modules
- Network communication nodes (NCNs)
- HUGS-specific devices and alarms

MEVA testing shall be performed in accordance with DoW and BAMC security requirements and shall be coordinated with clinical leadership to minimize operational impact.

12.3 MEVA Locations

The Contractor shall test MEVA devices in all designated MEVA locations, including but not limited to:

- Pharmacies
- Cash-handling facilities
- Morgue
- Radioactive material storage
- Sensitive materials storage
- High-value equipment storage
- All pediatric and neonatal care areas where HUGS is deployed

The Government may designate additional MEVA locations at any time. If additional locations significantly increase workload, the Contractor may request a contract modification.

12.4 HUGS Alarm Scenario Testing

The Contractor shall incorporate explicit HUGS alarm scenarios into all quarterly MEVA tests and reports. Required scenarios include:

Band Removal Alarm:
Triggered when a tag is removed or tampered with. The system shall:

- Generate an immediate local alarm
- Notify the monitoring station
- Trigger associated CCTV presets for video verification
- Log the event with timestamps

Exit Approach Alarm:
Triggered when a protected patient approaches a restricted exit. The system shall:

- Generate a pre-alarm notification
- Escalate to full alarm if movement continues
- Initiate door lockdown (where configured)
- Trigger CCTV recording and presets

Tag Mismatch Alarm:
Triggered when an infant is paired with the incorrect parent or guardian. The system shall:

- Generate an alert at the monitoring station
- Lock affected egress points until verified
- Log the event and corrective actions

Tag Low Battery Alarm:
Triggered when a tag battery reaches a low threshold. The system shall:

- Generate a maintenance alert
- Log the event in the corrective action log
- Require tag replacement

Monitoring Station Failure:
Triggered when a monitoring station loses connectivity. The system shall:

- Initiate failover procedures
- Notify Contractor and Government personnel
- Log the failure and restoration actions

12.5 Reporting Requirements

The Contractor shall deliver comprehensive quarterly and annual test reports that include:

- Detailed test procedures
- Test results and pass/fail status
- Identified anomalies or deficiencies
- Corrective actions taken
- Parts replaced and serial numbers
- HUGS alarm logs with timestamps
- Video verification references
- Root cause analysis for repeated alarms
- Recommendations for system improvements

Reports shall be submitted in a format approved by the COR and shall be delivered within the timelines specified in the Annual Work Plan.

Understood, James — here is **C.6**, rewritten in **full detail**, matching the **exact depth, structure, and operational specificity** of your uploaded SOW.
This is **contract-grade language**, not an outline, not a summary — it is written to withstand KO, legal, and technical review.

C.6 — RESPONSE TIMES AND UNSCHEDULED SERVICE

13.0 Unscheduled On-Site Service

The Contractor shall provide **unlimited on-site service and telephone consultation 24 hours per day, 7 days per week, 365 days per year**, to ensure continuous operational readiness of all Electronic Security System (ESS), CCTV/Qognify, NICE Vision Pro, and HUGS Infant/Pediatric Protection System components.

Unscheduled service includes all corrective maintenance, emergency repairs, troubleshooting, diagnostics, and system restoration activities required to return systems to full manufacturer-specified operational capability.

The Contractor shall maintain sufficient staffing, tools, vehicles, and OEM-certified personnel to meet all response and restoration requirements without exception. Remote support **does not** satisfy on-site response requirements unless explicitly authorized by the COR.

13.1 Priority Levels and Required Response Times

The Contractor shall respond to all service requests according to the priority levels defined below. Failure to meet these response times may result in performance deductions or other contractual remedies.

⭐ 13.1.1 Emergency Service

Emergency events require:

- **On-site response within two (2) hours**, and
- **Restoration to manufacturer specifications within twenty-four (24) hours**, where applicable.

Emergency events include, but are not limited to:

- Mission Essential Vulnerability Area (MEVA) failures
- ESS server failure
- CCTV/Qognify system failure
- NICE Vision Pro recorder failure

- Badging system outage
- Real-Time Computer (RTC) failure
- Network Control Node (NCN) failure
- Perimeter door failure
- Fire-rated door failure
- Duress/panic alarm failure
- HUGS band removal alarms
- HUGS exit-approach alarms
- HUGS tamper alarms
- Any event indicating immediate risk to patient safety, infant security, or facility security

Emergency response personnel shall be **OEM-certified**, fully cleared, and capable of performing immediate corrective action.

⭐ 13.1.2 Non-Emergency Service

Non-emergency events require:

- **On-site response within twenty-four (24) hours**, and
- **Restoration to manufacturer specifications within seventy-two (72) hours**, where applicable.

Non-emergency events include, but are not limited to:

- Individual door problems
- Low battery notifications
- Isolated camera issues
- Non-critical HUGS alerts
- Minor configuration issues
- Non-urgent preventive maintenance findings

Non-emergency issues shall be escalated to emergency status if they impact MEVA areas, patient safety, or system integrity.

13.2 Response Time Measurement

Response times shall be measured from the moment the Government submits a service request via:

- Telephone
- Email
- Approved ticketing system
- Direct notification to the Project Manager

The Contractor shall maintain a **24/7 monitored contact method** for receiving service requests. Failure to acknowledge or respond to a service request within the required timeframe constitutes non-compliance.

13.3 Restoration Requirements

Restoration to manufacturer specifications includes:

- Replacement of failed components
- Correction of configuration errors
- Restoration of network connectivity
- Verification of system functionality
- Documentation of corrective actions
- Updating system logs and inventories
- Validation of integration with ESS, CCTV, and HUGS systems

If restoration cannot be completed within the required timeframe due to OEM dependency, supply chain delays, or other factors, the Contractor shall:

- Notify the COR immediately
- Provide a written explanation
- Provide a temporary mitigation plan
- Document all actions taken

The Government reserves the right to request additional resources or personnel if restoration timelines are not met.

13.4 Escalation Procedures

The Contractor shall maintain a formal escalation process that includes:

- Tier 1 technician response
- Tier 2 senior technician or systems administrator escalation
- Tier 3 OEM escalation (CEM, Lenel, NICE/Qognify, HUGS)
- Project Manager notification
- COR notification for unresolved or repeated issues

Escalation procedures shall be included in the Contractor's Quality Control Plan and shall be updated annually.

13.5 After-Hours and Holiday Support

The Contractor shall provide full emergency support during:

- Nights

- Weekends
- Federal holidays
- BAMC-designated training holidays
- Any period of reduced Government staffing

Response time requirements remain unchanged regardless of date or time.

13.6 Repeat Failure Mitigation

If the same device, subsystem, or component fails more than **three (3) times within a ninety-day period**, the Contractor shall:

- Conduct a root cause analysis
- Provide a written corrective action plan
- Identify whether the failure is due to hardware, configuration, environmental, or operational factors
- Recommend long-term mitigation or replacement

The COR may require immediate replacement of components identified as high-risk or failure-prone.

C.7 — DELIVERABLES AND ACCEPTANCE

14.0 Deliverables

The Contractor shall provide all deliverables listed in this section in the format, frequency, and level of detail required by the Government. All deliverables shall be complete, accurate, and submitted on time. The Government reserves the right to reject any deliverable that does not meet contractual requirements.

All deliverables shall be submitted electronically in a COR-approved format (PDF, Excel, or Word), unless otherwise specified. The Contractor shall maintain version control for all documents and shall ensure that all submissions reflect the most current system configuration, inventory, and operational status.

14.1 Required Deliverables

The Contractor shall provide the following deliverables at the specified intervals:

⭐ 14.1.1 Annual Work Plan

Due: Within 30 calendar days of contract award and annually thereafter.

The Annual Work Plan shall include:

- A complete schedule of all preventive maintenance activities
- Quarterly MEVA testing schedule
- HUGS alarm scenario testing plan
- CCTV camera testing and verification plan
- ESS alarm point testing plan
- Server maintenance and patching schedule
- Required coordination with clinical and security personnel
- Identification of Contractor personnel assigned to each task
- Risk mitigation strategies for high-impact areas

The Annual Work Plan shall serve as the baseline for all scheduled inspections and testing activities.

⭐ 14.1.2 Quarterly MEVA Test Reports

Due: Within 10 business days after the end of each quarter.

Reports shall include:

- Detailed test procedures
- Pass/fail results for each MEVA device
- Identified deficiencies
- Corrective actions taken
- Replacement parts used (with serial numbers)
- HUGS alarm scenario results
- Video verification references
- Root cause analysis for repeated failures
- Recommendations for system improvements

Each MEVA report shall include a summary table listing:

- Device name
- Location
- Device type
- Test result
- Corrective action
- Completion date

⭐ 14.1.3 Annual Inspection Report

Due: Within 30 calendar days after completion of annual inspections.

The report shall include:

- Comprehensive inspection results for all ESS, CCTV, and HUGS components
- Server performance and storage utilization
- Firmware and software version inventory
- Configuration baseline verification
- Environmental and physical security observations
- Recommendations for lifecycle replacement or modernization
- Summary of all corrective actions completed during the year

⭐ 14.1.4 Updated System Drawings and Documentation

Due: Within 5 business days of any system addition, deletion, or modification.

Documentation shall include:

- ESS topology diagrams
- CCTV network diagrams
- HUGS system architecture
- Fiber and copper cabling maps
- Device inventories and locations
- Controller and NCN layouts
- Updated configuration baselines

All drawings shall be submitted in COR-approved digital formats.

⭐ 14.1.5 Spare Hard Disk with Current Software

Due: Within 30 days of contract award and updated after any system upgrade.

The Contractor shall maintain a spare hard disk containing:

- Current system software
- Current configuration files
- Current database backups
- OEM utilities required for system restoration

The spare hard disk shall be stored in the **Provost Marshal's safe**.

⭐ 14.1.6 Certification Records and Personnel Documentation (Appendix D)

Due: Within 10 business days of contract award and updated as personnel change.

Documentation shall include:

- OEM certifications for all technicians
- Security clearance verification
- Resumes and experience summaries
- Training records
- Position assignments

No personnel may perform work until documentation is approved by the COR.

⭐ 14.1.7 Monthly Performance Reports

Due: By the 5th business day of each month.

Reports shall include:

- Summary of all service requests
- Emergency and non-emergency response times
- Corrective actions completed
- Outstanding issues and mitigation plans
- System uptime metrics
- Inventory of parts used
- Staffing changes
- OEM support interactions
- Recommendations for system improvements

15.0 Deliverable Acceptance Criteria

All deliverables shall be considered acceptable when they meet the following criteria:

⭐ 15.1 Accuracy and Completeness

Deliverables must:

- Contain all required information
- Reflect current system configurations
- Be free of errors, omissions, or inconsistencies
- Include all supporting documentation, logs, and diagrams

⭐ 15.2 Timeliness

Deliverables must be submitted:

- On or before the required due date
- In the format specified by the COR
- With all required attachments and supporting materials

Late or incomplete deliverables may be rejected.

⭐ 15.3 Technical Quality

Deliverables must:

- Meet OEM specifications
- Align with DoW and BAMC requirements
- Be written in clear, professional language
- Include sufficient detail for technical review

⭐ 15.4 Government Review and Acceptance

The COR will review all deliverables within a reasonable timeframe. Deliverables may be:

- **Accepted**
- **Accepted with comments**
- **Rejected for correction**

Rejected deliverables must be corrected and resubmitted within **five (5) business days**, unless otherwise directed by the COR.

C.8 — ONSITE SPARE PARTS

16.0 Onsite Spare Parts Requirements

The Contractor shall maintain a comprehensive inventory of onsite spare parts to ensure rapid restoration of all Electronic Security System (ESS), CCTV/Qognify, NICE Vision Pro, and HUGS Infant/Pediatric Protection System components. The onsite spare inventory shall be sufficient to support all emergency and non-emergency repairs, meet required response and restoration times, and prevent extended system outages.

The Contractor shall ensure that all spare parts:

- Are **OEM components only**
- Match the exact model, firmware, and revision level required by the system
- Are stored in a secure, environmentally controlled location
- Are immediately available for deployment during emergency events
- Are tracked, logged, and inventoried in accordance with Government requirements

The Contractor shall replenish spare parts immediately after use to maintain minimum stock levels.

16.1 Required Spare Parts Inventory

The Contractor shall maintain, at a minimum, the following onsite spare parts. Quantities shall be sufficient to support the size and complexity of the BAMC ESS, CCTV, and HUGS deployments. The COR may adjust required quantities based on operational needs.

⭐ 16.1.1 ESS Spare Components

The Contractor shall maintain onsite spares for all critical ESS components, including but not limited to:

- Real-Time Computers (RTCs)
- Network Control Nodes (NCNs)
- CEM Field Processors
- Reader interface modules
- Proximity card readers
- Door position switches
- Request-to-Exit (REX) devices
- Electronic strikes and magnetic locks
- Power supplies and backup modules
- Controller boards and interface cards
- Communication interface modules
- ESS workstation components (keyboards, mice, NICs, monitors)
- Spare cabling, connectors, and termination hardware

All ESS spares shall be compatible with the current CEM Access 2000 configuration and firmware.

⭐ 16.1.2 CCTV / Qognify Spare Components

The Contractor shall maintain onsite spares for all critical CCTV components, including:

- Fixed and PTZ cameras
- Camera lenses and housings
- Encoders and decoders
- Video switches
- Network interface cards
- Power injectors and PoE components
- NICE Vision Pro recorder components
- Hard drives for video storage arrays
- Camera mounting hardware
- Fiber and copper patch cables
- Surge protection devices

All CCTV spares shall be OEM-approved and compatible with existing Qognify and NICE Vision Pro systems.

⭐ 16.1.3 HUGS Infant/Pediatric Protection System Spares

The Contractor shall maintain onsite spares for all HUGS components, including:

- HUGS tags
- Tamper-detecting infant/pediatric bands
- Exciters and band sensors
- Monitoring station components
- Power supplies
- Network interface components
- Replacement batteries
- Mounting hardware and accessories

The Contractor shall maintain sufficient quantities to support:

- Immediate replacement of failed tags
- Routine tag lifecycle management
- Clinical surges or increased census in pediatric/NICU areas

16.2 Spare Parts Storage and Security

All spare parts shall be stored in a secure, access-controlled location approved by the COR. Storage requirements include:

- Temperature-controlled environment
- Protection from dust, moisture, and contaminants
- Locked storage cabinets or cages
- Access restricted to cleared, OEM-certified Contractor personnel
- Inventory logs maintained in accordance with Government requirements

The Contractor shall ensure that all spares remain in new or like-new condition and are ready for immediate deployment.

16.3 Inventory Management and Reporting

The Contractor shall maintain a complete and accurate inventory of all onsite spare parts. Inventory management requirements include:

- Unique identification of each spare part
- Serial number tracking (where applicable)
- OEM part number tracking
- Quantity on hand
- Quantity used
- Date of use
- Work order or service ticket associated with usage

- Reorder date and replenishment status

The Contractor shall conduct a **quarterly physical inventory** of all spare parts and submit a report to the COR that includes:

- Current inventory levels
- Parts used during the quarter
- Replenishment actions taken
- Any shortages or backordered items
- Recommendations for adjusting minimum stock levels

The COR may require adjustments to inventory levels based on system performance, failure trends, or operational needs.

16.4 Replenishment Requirements

The Contractor shall replenish any spare part used during maintenance or repair activities **within five (5) business days**, unless otherwise approved by the COR. Replenishment actions shall ensure:

- No degradation of emergency response capability
- No impact on required restoration times
- Continuous availability of critical components

If OEM supply chain delays occur, the Contractor shall:

- Notify the COR immediately
- Provide documentation from the OEM
- Provide a temporary mitigation plan
- Track and report estimated delivery dates

C.9 — MANUFACTURER SUPPORT

17.0 Manufacturer Technical Support Requirements

The Contractor shall maintain active and continuous support relationships with all Original Equipment Manufacturers (OEMs) associated with the Electronic Security System (ESS), CCTV/Qognify systems, NICE Vision Pro recorders, and the HUGS Infant/Pediatric Protection System.

The Contractor shall ensure that all OEM support channels remain available for:

- Advanced diagnostics
- Firmware and software escalations

- System-level troubleshooting
- Configuration guidance
- Security patching
- Hardware compatibility verification
- Root cause analysis for repeated failures

The Contractor shall coordinate all OEM interactions on behalf of the Government and shall ensure that all OEM recommendations are implemented in accordance with Government approval and clinical operational constraints.

17.1 CEM Manufacturer Support (European Time Zone)

The Contractor shall maintain direct access to **CEM Systems Ltd.** technical support, which operates primarily within European business hours. To ensure uninterrupted support for BAMC operations, the Contractor shall:

- Adjust staffing schedules to ensure availability during CEM support hours
- Maintain at least one OEM-certified technician capable of communicating directly with CEM support
- Provide immediate escalation to CEM for system-level issues, firmware anomalies, or controller failures
- Document all interactions with CEM, including ticket numbers, recommendations, and resolutions
- Implement CEM-recommended patches, firmware updates, and configuration changes upon COR approval

The Contractor shall ensure that all CEM-related issues requiring OEM involvement are escalated **within one (1) business day** of identification.

17.2 NICE Vision Pro / Qognify Manufacturer Support

The Contractor shall maintain active support relationships with NICE/Qognify to ensure:

- Access to OEM technical support engineers
- Availability of software patches and security updates
- Compatibility verification for new cameras, encoders, and firmware
- Troubleshooting of video retention, recording failures, and storage anomalies
- Access to OEM diagnostic tools and logs
- Escalation of complex video system failures

The Contractor shall ensure that all NICE/Qognify technicians assigned to the contract hold **current OEM certifications**, and that certification records are maintained in Appendix D.

17.3 HUGS Infant/Pediatric Protection System Manufacturer Support

The Contractor shall maintain active support with the HUGS OEM to ensure:

- Access to OEM technical support
- Availability of updated firmware, patches, and software releases
- Compatibility verification for new tags, bands, and exciters
- Troubleshooting of alarm logic, tag behavior, and monitoring station issues
- Access to OEM training resources and certification programs

All HUGS technicians shall be **OEM-certified**, and certification documentation shall be submitted to the COR.

17.4 OEM Escalation Procedures

The Contractor shall maintain a formal OEM escalation process that includes:

- Tier 1: Contractor technician troubleshooting
- Tier 2: Senior technician or systems administrator escalation
- Tier 3: OEM technical support escalation
- Tier 4: OEM engineering escalation (if required)

The Contractor shall document:

- All escalation steps
- OEM ticket numbers
- Recommendations provided
- Actions taken
- Final resolution

OEM escalation logs shall be included in monthly performance reports.

17.5 Manufacturer Support Coordination Plan

Within **thirty (30) calendar days** of contract award, the Contractor shall submit a **Manufacturer Support Coordination Plan** to the COR. The plan shall include:

- OEM points of contact
- Support contract numbers and expiration dates
- Escalation procedures
- After-hours support processes
- Required documentation for OEM engagement
- Technician certification requirements

- Procedures for implementing OEM recommendations
- Risk mitigation strategies for OEM delays

The Contractor shall update the plan annually or upon any change in OEM support structure.

17.6 Compliance with OEM Requirements

The Contractor shall ensure that all system modifications, upgrades, and repairs comply with OEM specifications. This includes:

- Firmware version compatibility
- Hardware revision requirements
- Approved configuration settings
- Supported integration methods
- OEM-approved replacement parts

The Contractor shall not implement any configuration changes, third-party components, or non-OEM modifications without written approval from both the COR and the OEM (if required).

17.7 Documentation of OEM Interactions

The Contractor shall maintain complete documentation of all OEM interactions, including:

- Date and time of contact
- OEM representative name and contact information
- Issue description
- Diagnostic steps performed
- Recommendations provided
- Actions taken
- Final resolution
- Any required follow-up

Documentation shall be included in:

- Monthly performance reports
- Quarterly MEVA reports (if applicable)
- Annual inspection reports
- Root cause analysis reports