Statement of Objectives (SOO)

Project: Design, Engineering, and Installation of a Secure Video Teleconferencing (VTC) System

1. Purpose

The purpose of this Statement of Objectives (SOO) is to outline the requirements for the design, engineering, installation, and integration of a new Secure Video Teleconferencing (VTC) system. The goal is to acquire a turnkey, state-of-the-art secure (SECRET) communication solution that meets DoD security protocols while providing high-quality, reliable, and user-friendly audio-visual capabilities.

2. Background

To support critical operations and facilitate secure collaboration among internal and external stakeholders, a modernized, highly secure VTC system is required.

3. Scope

The scope of this project includes, but is not limited to:

- **System Design & Engineering:** Development of a secure VTC architecture tailored for room XXX, a 22' x 15' conference room on the second floor of Building ###, Hill AFB UT (see diagram below). System shall include:
  - Wall mounted camera capable of panning/zooming
  - 65" Monitor
  - 4 ceiling mounted speaker
  - 2 Ceiling mounted microphones
  - All necessary control equipment necessary to initiate/terminate secure VTCs from the room
- Room is located on the second floor. The entire second floor is a controlled processing area. Communications room servicing this conference room is located in the same hallway, approximately 50" from this space
- **Procurement:** Sourcing all necessary hardware, software, and licenses required to support the system.

- **Installation & Integration:** Physical installation, cabling, and seamless integration of all components into the existing secure network infrastructure.
- **Testing & Validation:** Security and performance testing to ensure the system operates flawlessly under required classification levels.
- **Training & Documentation:** Delivery of user manuals, administrator documentation, and hands-on training for staff.

4. Key Objectives

The contractor shall design and implement a system that achieves the following operational objectives:

- **Exceptional Audio/Video Quality:** Deliver high-definition (HD) or 4K video resolution and clear, echo-free audio to ensure natural and effective communication.
- **Intuitive User Experience:** Provide a user-friendly control interface (e.g., touch panels) that allows personnel to easily initiate, manage, and terminate secure conferences.
- **Interoperability:** Ensure the system can seamlessly connect with standard secure VTC endpoints and bridges used by partner organizations, adhering to industry-standard protocols (e.g., SIP, H.323).
- **Scalability and Flexibility:** Design the architecture to allow for future expansion, software upgrades, and the addition of new endpoints without requiring a complete system overhaul.
- **Reliability:** Achieve a high-availability architecture, including robust error handling and rapid recovery mechanisms.

5. Security Requirements

Security is the paramount objective of this project and must meet all requirements listed in section 2.1 of the VTC/AV Lifecycle Support PWS. The system must natively support secure operations through:

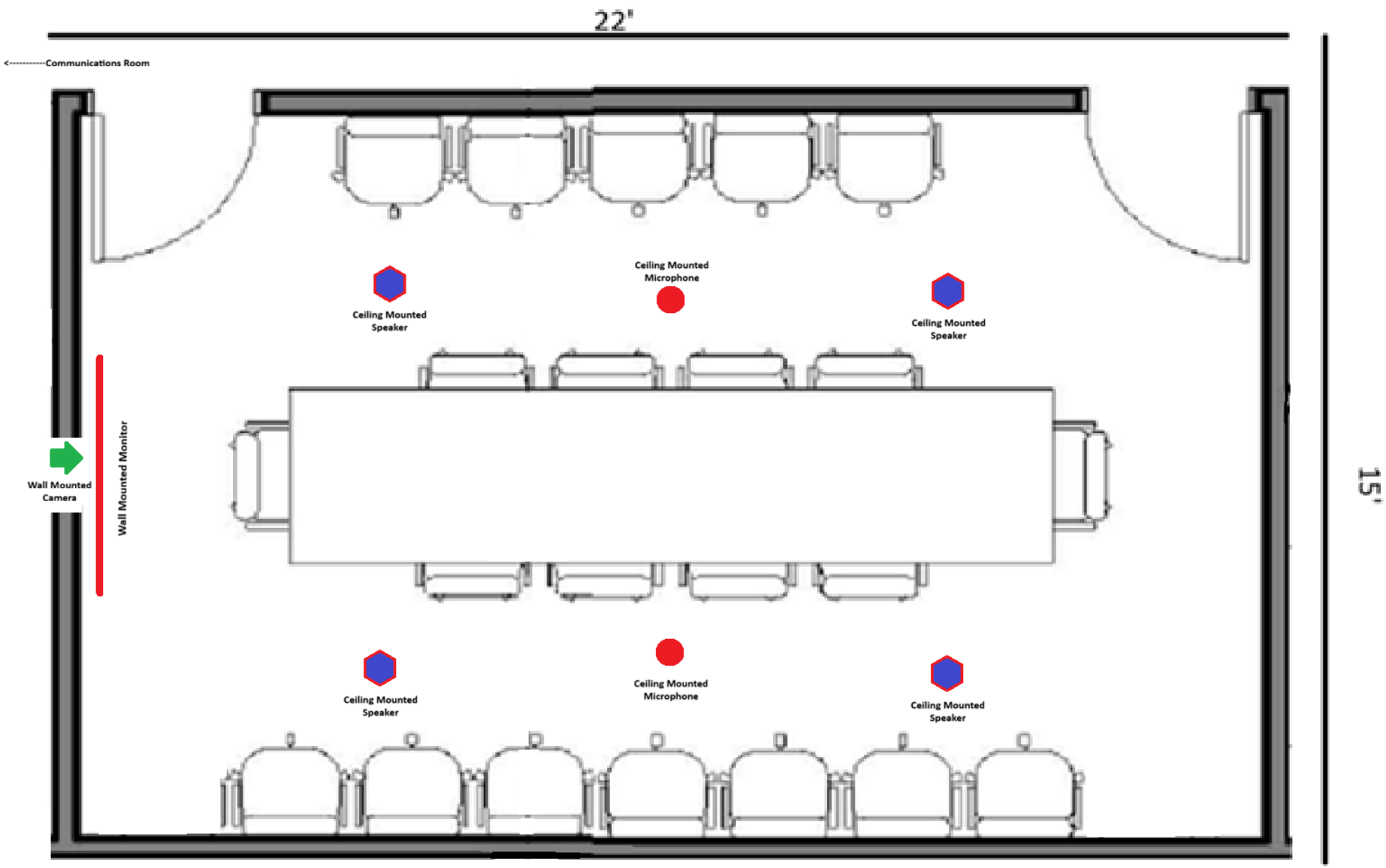
- **Encryption:** End-to-end encryption for all audio, video, and data streams (e.g., AES-256).
- **Compliance:** Adherence to all relevant organizational, national, or defense-related security standards (e.g., FIPS 140-2/3 compliance, TEMPEST standards if deployed in a Sensitive Compartmented Information Facility - SCIF).
- **Access Control:** Strict authentication mechanisms for system administrators and end-users.

- **Data Isolation:** Ensuring complete separation between secure VTC networks and unclassified/public networks.

6. Deliverables

The following high-level deliverables are expected upon project completion:

1. **Comprehensive System Design Document (SDD):** Including network topology, hardware schematics, and software configurations.
2. **Procured and Configured Hardware/Software:** Fully functional and securely configured VTC equipment installed on-site.
3. **Site Acceptance Test (SAT) Report:** Documentation proving the system passes all functional, performance, and security testing parameters.
4. **Operations and Maintenance (O&M) Manuals:** Detailed documentation for system administrators.
5. **Training Sessions:** Conducted for both end-users (basic operation) and technical staff (troubleshooting and maintenance).


22'
<----------Communications Room
Ceiling Mounted Speaker
Ceiling Mounted Microphone
Ceiling Mounted Speaker
Wall Mounted Monitor
Wall Mounted Camera
Ceiling Mounted Speaker
Ceiling Mounted Microphone
Ceiling Mounted Speaker
15'