Statement of Objectives

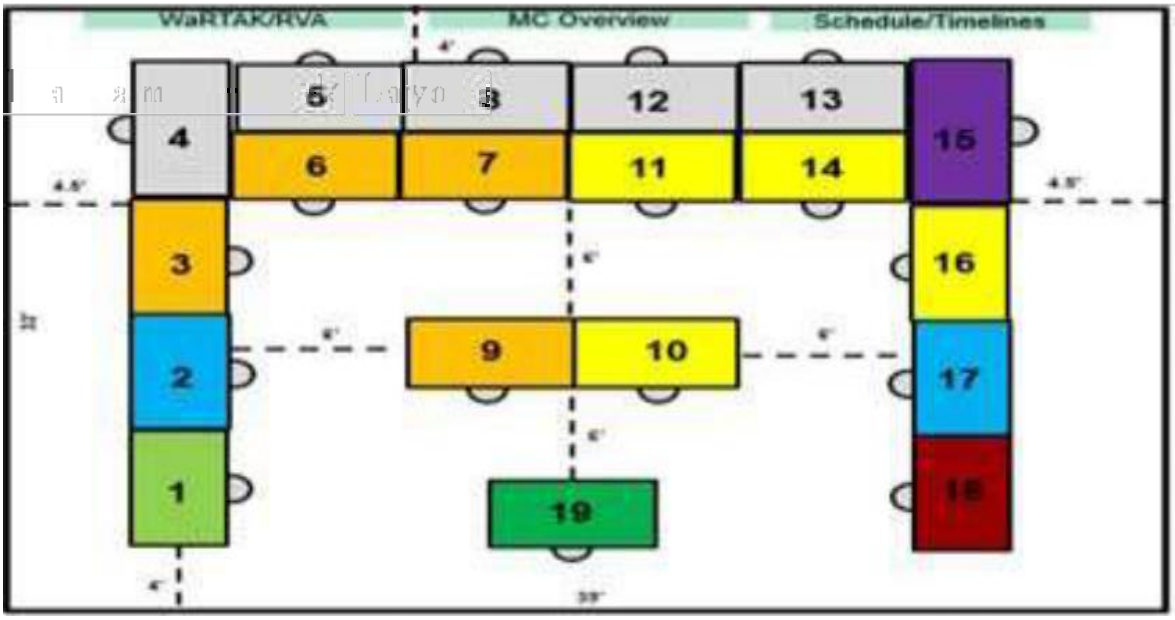
Wing Operation Center Common Operating Picture Displays
Dated: 24 June 2026

PART I - NIPR

I. Overview:

The contractor will replace the current projectors (2) that are installed from the ceiling behind desk #19 as shown in diagram 1. Additionally, the contractor will perform a technical refresh of the Crestron Audio/Video over IP (AVoIP) system, replacing the current components with the latest generation of Crestron NVX hardware. This includes replacing all encoders, decoders, network switches, and touch panel controllers, as well as any additional cables, components, hardware, or software required to ensure the entire system is fully operable and integrated before leaving the work site.

Diagram 1 – Desk Layout



II. Objectives:

Unplug cabling from previous projectors and remove the projectors from the mounts. Install two new projectors where mounts are located and attach cabling. Conduct a full system function check to ensure operability. Provide in-depth training to assigned personnel on system capabilities, troubleshooting, and overall familiarization. The procured projectors and A/V components shall be compatible with the existing operating

components where applicable. Provide removed equipment to the end-user for proper accountability and disposal.

a. Projector Requirements. Image quality must be high definition or better (i.e., 4K). The display system must be user-maintainable/plug-and-play to the greatest extent possible. Displays need to be designed to operate 24 hours a day and 7 days a week without experiencing degradation. The entire system should be designed to be modularly replaceable, with a high priority placed on system longevity. Projectors shall be ceiling mounted and attached to the existing anti-vibration mounts (MICEO Adj Projector Mount, MODEL JR3XL) or an equivalent vibration protection solution shall be provided and installed. Projectors must be rated for at least 16,500 lumens. The device must NOT contain wireless signal capability.

b. Environmental Requirements. Projectors need to be able to project onto the current display wall, which is angled at 9.58 degrees inward, without distorting the image. Proposed solutions must be able to perform keystone correction to account for the wall angle. Projectors must be bright enough for low ambient light with adjustable brightness. Projectors will cover a composite image of 30'x9.53' and must be compatible with the NP18ZL-4K zoom lens. The distance from the projector to the video wall is approximately 27ft.

c. Input Types. Input types should include but not be limited to VGA, SVGA, HDMI, DVI-D, USB-C, and IP. Each projector must provide four 4K inputs into a single quad display.

III. Video System Refresh:

The current first-generation Crestron AVoIP system is approaching the end of its warranted life and shall be replaced to ensure continued trouble-free operation and to leverage new system capabilities.

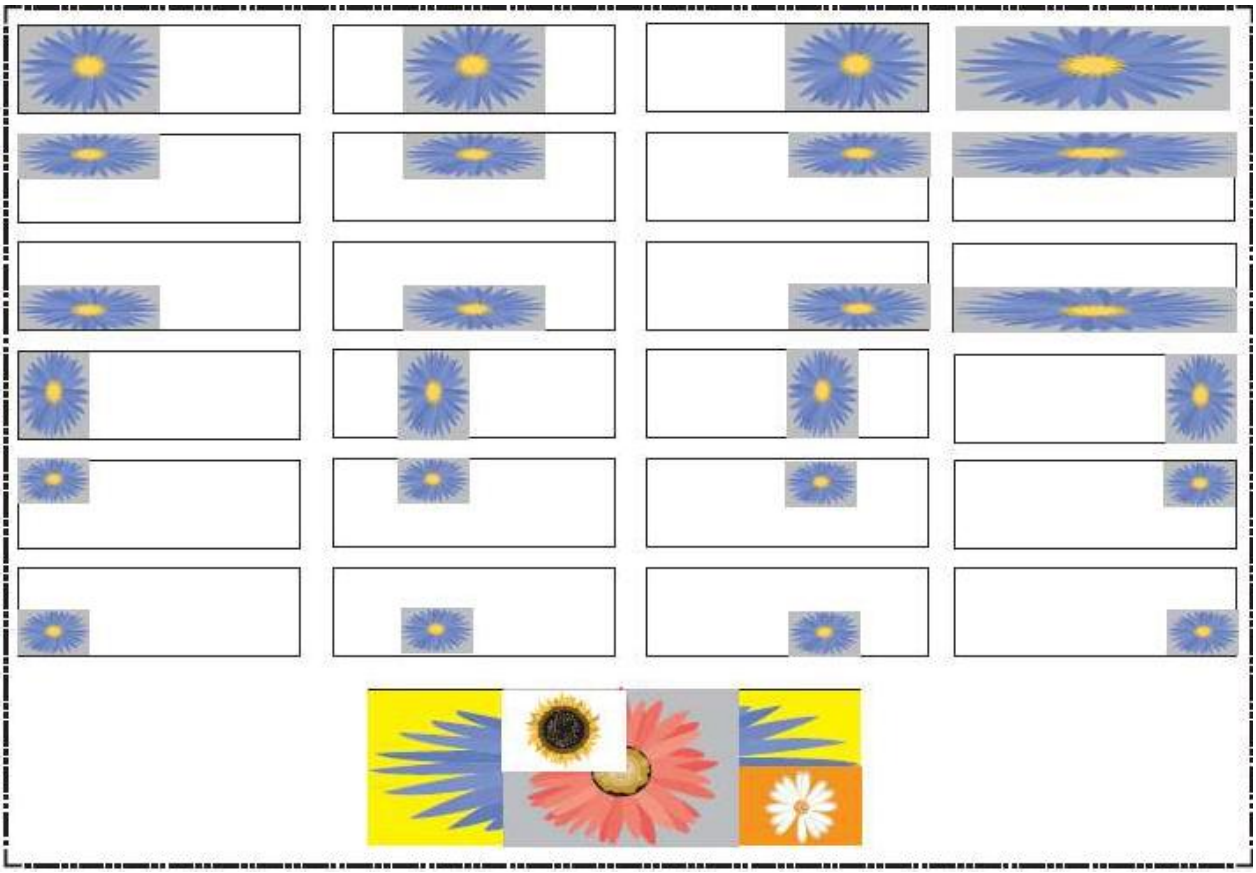
a. Encoding. The current 20 Crestron DM-NVX-E30 video encoders at each of the 19 desks and the TV feed shall be replaced. The new encoder units (Crestron DM-NVX-384) shall be installed at each location, utilizing existing network cabling where possible. The new encoders must support 4K video and provide options for both HDMI and USB-C inputs.

b. Decoding and Multi-Window Capability. The current eight Crestron DM-NVX-350 encoder/decoder units and associated card frame shall be replaced with new

decoder units (such as Crestron DM-NVX-384) capable of native multi-window (multiview) processing. The new system must allow for dynamic composition of multiple sources into various layouts on the main display, removing the need for external multiviewer hardware. The system shall allow at least twelve sources to be displayed simultaneously across the two projectors.

c. Network Switch. The existing network switch in the main rack will be replaced with a new model capable of delivering the higher power (POE++) required by the new encoder/decoder units (such as a Crestron CEN-SW-POE-48-ULTRA).

Diagram 2 – Decoding Video



IV. Deliverables:

a. The contractor shall provide a detailed schedule showing the critical path from award to installation of a fully operational system.

b. Include all owner's manuals, specifications, and warranty documents along with complete, as-built drawings. PDF is preferable.

c. The contractor is to provide/furnish all labor, materials, equipment, and supervision necessary to complete the project within 120 days of contract award.

V. Installation:

a. All installation will be performed in accordance with the approved design.

b. Any technical integration must be coordinated with government representatives and meet all Air Force and DoD network, telecommunications, and security standards.

c. The contractor shall integrate and conceal all cabling.

d. The contractor shall verify all site measurements prior to implementation.

e. The contractor shall perform work in a controlled area and will be escorted at all times.

f. Desk 9, Desk 10, and Desk 19 controller positions are equipped with Crestron TSW-1060 touch panels. These shall be replaced with new, larger HD touch panels (such as Crestron TS-1080). The new panels must provide control for selecting display layouts and allocating sources to windows.

g. The contractor shall remove all debris from packaging and handle the proper disposal of their waste containers daily.

VI. Shipping:

a. The contractor shall factor into their quote the cost of shipping and installing the system in 77th St. N., Bldg. 500 Room 127, Malmstrom AFB, Montana 59405.

b. The facility does not have a dock that can be used to unload equipment or materials.

c. The installation agency must be able to gain access to the installation by passing a basic background check.

VII. Warranty of Components & Maintenance:

a. The contractor shall provide a detailed synopsis of the warranty.

b. The system will have a minimum of a 5-year warranty included in the quote. The contractor must also provide an option quote for an extended service contract to cover items like adjustments, software updates, and troubleshooting.

c. The contractor shall provide a process for maintenance once the system is operational.