



## US AIR FORCE

### **MTI'S SERVICES/PRODUCTS UNDER THE SUBCONTRACT**

MTI provided the Air Force with Human Factors (HF) studies related to the CAPS controller – workstation interaction issues. The HF engineering processes used on EPS CAPS are identical to those employed on FAA projects investigating the HF impacts on Air Traffic Control (ATC) workstation improvements, Unmanned Aerial System (UAS) workstation design, or commercial aircraft cockpit design. MTI served as a subcontractor to NGC to perform the human engineering tasks. MTI received one of two awards for excellence from the Air Force as a result of this effort.

### **Technical Support for System Analysis:**

MTI conducted the following system analysis tasks in support of the CAPS program.

- Applying user-centered design principles for new/developing systems
- Performing front end analysis work for a new system
- Assisting in defining the architecture, workflows, and information requirements
- Conducting mission, task, and function analysis
- Working with users to interpret user needs and requirements (multiple methods)
- Conduct job/task analysis
- Conducted applied research methodologies for developing prototype UI's
- Worked on the systems engineering IPT and software IPT for decision support UI design
- Conducted usability testing in the lab and in the field (Schriever AFB)
- Analyzed human interaction needs of the CAPS segment and developed the Human Engineering design for all aspects of the CAPS segments that required human interaction.
- Developed the Test & Training Element (TTE) HMI design.