



**Human Factors
Engineering Services**

Studies and Analyses

- Mission Area Analysis/Needs Assessment
- Function Analysis/Allocation
- Predecessor System Analysis
- Target Audience Description
- Task Inventory
- Critical Task Analysis
- Cognitive Task Analysis
- Workload Analysis

Design Support

- Critical Design Consideration Analysis
- Usability Metric Specification
- Control & Display Assessment/Design/Layout
- Device Assessment/Design
- Screen Analysis/Design
- Alarm Assessment/Design
- Workstation Analysis/Design
- Workplace Analysis/Design/Environmental Assessment
- Procedures/Manuals Design/Assessment

Test and Evaluation

- T&E Planning/Development/Execution/Reporting
- Operational Test and Evaluation
- Usability Testing
- User Acceptance Testing
- System vs. Human Performance Testing
- Experimental Design and Analysis
- Laboratory Studies/Testing/Experimentation
- Field Studies/Testing Experimentation

Systems Design with a Human Face

Human factors engineering applies the science of human capability and limitations in the design of complex systems - maximizing system performance by optimizing human performance, reducing human error, increasing safety, and enhancing user satisfaction.

AMTI offers the full range of human factors engineering support, applying general systems theory to the human factors engineering analysis, design, test and evaluation of complex systems, to include hardware, software, personnel, support, and doctrine subsystems. Whether a full-scale development or a commercial-off-the-shelf acquisition, AMTI human factors personnel can ensure that the system fits the capabilities of the intended users without challenging their human limitations.

Human Factors Engineering Support to the FAA

For the past 10 years, AMTI has provided the total human factors engineering program for the Federal Aviation Administration Wide Area Augmentation and Local Area Augmentation System program offices. This support has included acquisition document development, design supervision, human performance issue identification and correction, usability testing, screen design and reviews.

MANPRINT and Human-System Integration

AMTI human factors engineers are intimately familiar with MANPRINT, the US Army's Manpower and Personnel Integration initiative, and the Department of Defense's Human Systems Integration (HSI) programs. Expert assistance can be provided both for MANPRINT/HSI program management and for the domain areas of human factors, system safety, and health hazards analysis.

AMTI – A Tetra Tech Company

A wholly-owned subsidiary of Tetra Tech, AMTI is the information technology arm of a \$1.8 billion engineering services firm. With credentials grounded in over 15 years of support to our nation's aviation, scientific, and national defense communities, AMTI provides information technology solutions, program management support services and technical consulting services.

We Can Make a Difference for Your Program

To learn more about AMTI's capabilities in human factors engineering services and support, please contact Daniel Welch, PhD, CPE, Principal Human Factors Engineer, at (703) 841-2662 or via email at Daniel.Welch@amti.com.