HUMAN PERFORMANCE MONITORING, PLANNING

AND

MANAGEMENT

Electrode 1

Electrode 2

Electrode 3

Are your personnel prepared?
Will they perform their jobs successfully?

When personnel from your training program are selected by leaders to work in high-stress jobs, everyone involved needs to know that your personnel are ready to perform.
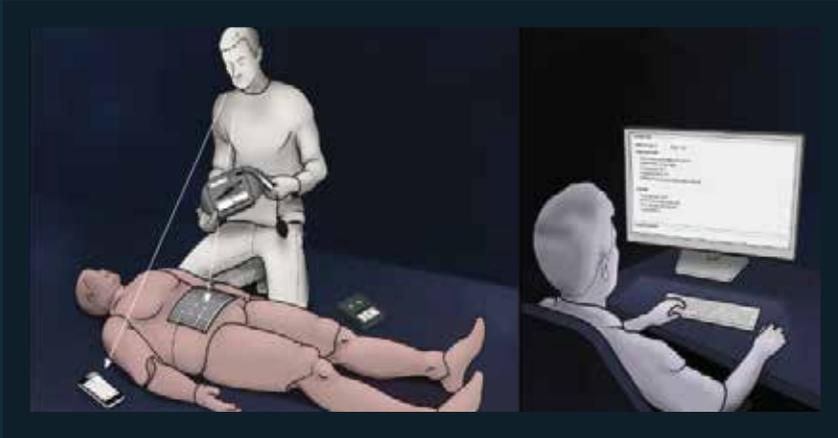
Our scientists and engineers have specifically developed processes, software, and hardware to measure and evaluate how well a trainee will perform when facing the pressures that occur in their job environment. We offer the following types of assessment:
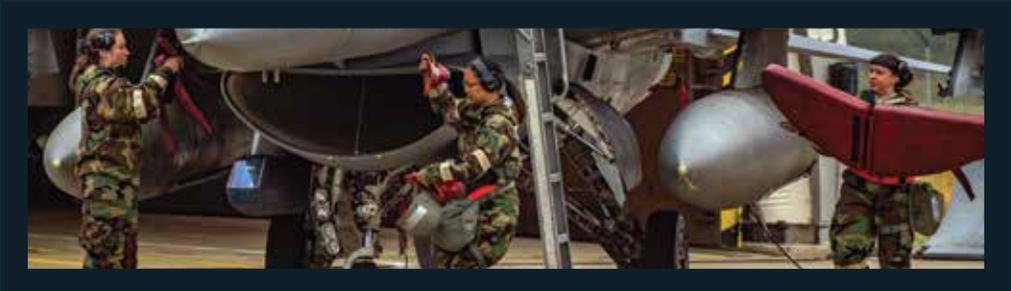
State Assessment – Both qualitative and quantitative continuous testing of operators during training or on the job to spot situations in which pressures could later become significant problems

Performance – Objective evaluation of trainee performance on target knowledge, skills, and tasks

Readiness – Getting ahead of changes that will influence future individual and team performance during continuously evolving operations

When you implement Charles River Analytics' technology to help monitor, plan, and manage human performance within your training or operational program, you can ensure that your personnel will gain a real understanding of their work environment and gain confidence that they will emerge well-prepared for their mission. The leaders who bring them onto their teams will also be confident that the people they select will be up to the demands of their new jobs and become assets to their teams.

Our proprietary processes and tools ensure that your training is effective, that trainees master the critical skills required for their job, and that leaders better understand how the operational environment will impact their workforce.

Measuring Cognitive Workload During Training

Charles River Analytics worked closely with NASA to assess and measure astronaut workload and performance. We applied our proprietary tools, software, and hardware systems to measure cognitive workload of subjects undergoing training and individuals on the job.

From this data, we evaluated new tools and systems being developed to assist astronauts in carrying out mission objectives. The measurement system (CAPT PICARD) can also be deployed during space missions to inform astronauts and Mission Control when performance begins to deteriorate, so they can take action before a crisis occurs.

CAPT PICARD uses Sherlock™, Charles River's open and extensible software and hardware platform that provides a unified, end-to-end solution. With Sherlock, you can rapidly prototype applications to collect, analyze, visualize, and reason about human physiological, neurological, and behavioral data.

We have built on the R&D under CAPT PICARD along with several other cognitive workload assessment projects to measure training effectiveness during realistic training simulations.

About Charles River Analytics

Founded in 1983, Charles River Analytics is an Employee-Owned Small Business, now with nearly 200 employees, many of whom hold advanced degrees. Our clients are a "who's who" of government and industry. The original focus of our business was working with the Department of Defense, and we continue to enjoy ongoing relationships supporting DoD, Army, Air Force, and Navy organizations. Today, our relationships with clients throughout government and industry enable us to bring best-in-class research and ideas to the projects we undertake for our customers.

We work with our clients to translate new ideas and research into actionable solutions to the opportunities most important to their success. Charles River Analytics has a solid track record of success in providing our clients with AI systems, technology, software tools, and design and analytic services in a variety of settings. In recent years, we have worked defense, intelligence, medical technology and health care, training, transportation, space, cyber security, and more.

U.S. Prime Contractor   Employee-owned Small Business

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