



U.S. ARMY
RDECOM

Mobile Apps for Human System Integration

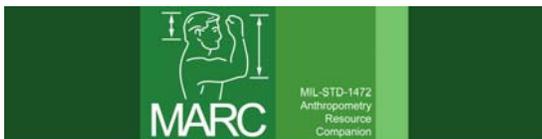
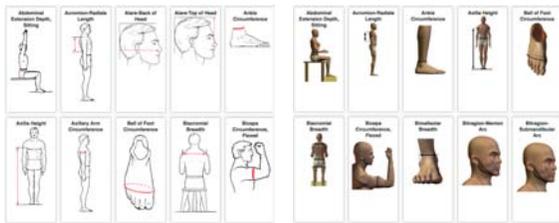


S&T Campaign: Human Sciences
Integration of Humans and Systems

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Research Objective

- Develop and evaluate new applied mobile software tools to enhance data collection and analysis activities conducted as part of human factors evaluations



Explore Anthropometry

This feature enables the exploration of anthropometric reference data and their definitions, provides summary statistics for men and women, and permits the download of raw data for one or more dimensions.

Explore Anthropometry

Collect Anthropometry

This feature aids in the collection of anthropometric data during an experimental activity requiring a small sample of users (i.e., user jury). The evaluator may enter any of 180 different dimensions for any number of participants and assess the representativeness of the sample in real time.

Collect Anthropometry

Evaluate Accommodation

This feature allows for the selection of up to 180 anthropometric dimensions, with sliders that set limits on each dimension. Total accommodation is returned using a method that properly accounts for the multiple measures. An estimate of the effect of clothing and equipment may also be considered.

Evaluate Accommodation

MIL-STD-1472G S5.8 Text | About MARC | Options | Beta (Updated 11.04.14)

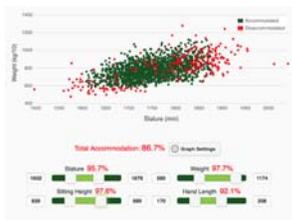
Hand Length

The length of the right hand between the styloid landmark on the wrist and the tip of the middle finger is measured with a Pouch sliding caliper. The subject places the palm on a table, the fingers together, and the thumb abducted. The middle finger is parallel to the long axis of the forearm. The two distal phalanges of the fingers lie on a flat surface 8 mm higher than the table.

Use the sliders to specify the percentile for the measure

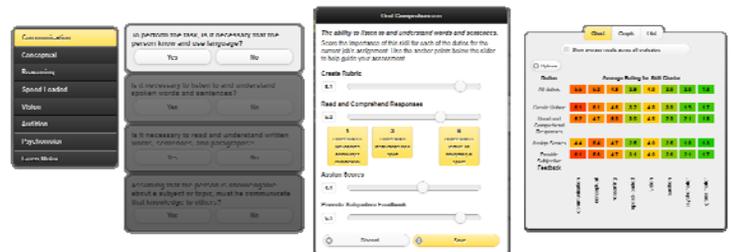
Men	64	197 mm
Women	52	175 mm

Select this measure for download



ARL Facilities and Capabilities Available to Support Collaborative Research

- System Assessment and Usability Laboratory (SAUL): a reconfigurable laboratory space suitable for empirical data collection and software assessment and usability tests



JASS

Job Assessment Software System

Begin Job Assessment

Help Me Get Started...

Add or Edit Jobs

View Assessment Results

Export All Results

Learn About JASS

United States Army Research Laboratory

v. 01.00d. 0726019
This software is under development and may contain bugs or missing features. Please contact the author (christopher.j.garneau.civ@mail.mil) with bug reports, comments, or questions.

MARC: MIL-STD-1472 Anthropometry Resource Companion. MARC is an app intended to provide a resource for accessing standardized body size data, guidance on applying the data, and tools that aid in collection and evaluation of such data as applied to the design of Army materiel.

JASS: Job Assessment Software System. JASS is an app to define and measure human aptitudes required to do a job. JASS permits evaluators to identify both the need for a particular aptitude to complete a job as well as the amount of the aptitude that is required, and yields valuable results when many subject matter experts (SME's) rate the same job.

Challenges

- Better analysis tools are required in multiple domains. For instance, in the area of physical accommodation, research is being conducted to develop an app enabling on-the-fly physical accommodation assessment using direct analysis of large datasets. New tools in this area might capitalize on body scanning technology (e.g., Kinect) to enhance data collection, as an example.

Complementary Expertise/ Facilities/ Capabilities Sought in Collaboration

- Human factors specialists and software developers interested in tool development and/or human performance modeling