



HUMAN FACTORS ENGINEERING (HFE) | WarSTAR

DEFINITION:

The comprehensive integration of human characteristics into system definition, design, development, and evaluation to optimize human-system performance under operational conditions.

HFE GOALS AT NSRDEC:

Through the systematic application of ergonomic principles to product design, ensure that NSRDEC's commodity items — tents, shelters, field services equipment, airdrop equipment, food & food services equipment and clothing & individual equipment — are compatible with the intended users and the users' physical environment; maintain users' health and safety; and enhance users' functional effectiveness

HFE ROLES:

- Provide design recommendations to enhance soldier-system interface, utilizing sound human factors engineering criteria found in relevant HF design standards and handbooks.
- Conduct laboratory and field evaluations to assess HF issues of initial prototypes, developmental items, commercial off-the-shelf products and source selection candidates. By utilizing the NSRDEC Human Systems Integration (HSI) Laboratory, equipment and military test subjects, we are able to conduct user evaluations to assess:
 - Comfort and fit of clothing & individual equipment (coordinated with anthropologists).
 - Equipment/system's impact on the user's mobility, range of motion, dexterity, vision & hearing/communication and ability to accomplish mission-relevant tasks.
 - Compatibility and integration of systems with the user and other relevant components.
 - User Acceptability.
 - Ability for the user to operate, maintain and support a system easily, safely and effectively.
 - Ease of understanding instructions for use, maintenance and repair.

POINT OF CONTACT:

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