SUMMARY

The ISS Payload Human Factors Implementation Team (HFIT) is the Payload Developer’s resource for Human Factors.

- HFIT is the interface between Payload Developers and ISS Payload Human Factors requirements in SSP 57000.
- HFIT provides recommendations on how to meet the Human Factors requirements and guidelines early in the design process.
- HFIT coordinates with the Payload Developer and Astronaut Office to find low cost solutions to Human Factors challenges for hardware operability issues.

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INTRODUCTION

Human Factors Implementation Team (HFIT) provides Human Factors support for ISS Payloads to meet Human Factors requirements and help them be successful on-orbit. The team is comprised of Human Factors and Astronaut Office representatives.

- HFIT verifies that hardware meets Space Station Program (SSP) 57000 Section 3.12 Human Factors Requirements and the labeling instructions Appendix O.
- HFIT evaluates all aspects of hardwarecrew interfaces, such as accessibility and strength to perform tasks, clearance between controls/connectors, labeling, etc.
- HFIT provides human factors design recommendations for hardware early in the design process when it is cost effective to influence the design.

HFIT Process – How It Works

- HFIT rep assigned at Payload Kickoff
- HFIT initial evaluation at or soon after Preliminary Design Review (PDR), or early in development
  - Assess prototype hardware for crew interfaces and labeling against Human Factors requirements and guidelines in SSP 57000.
  - Issues are identified early when it is more cost effective to influence design.
  - Recommendations for compliance are documented.
- Between evaluations: HFIT provides requirements and guidelines support as needed.
  - Negotiates solutions to requirements-design conflicts.
- HFIT final evaluation after Critical Design Review (CDR), or when flight hardware is ready
  - Verify flight hardware against Human Factors and labeling requirements in SSP 57000.
  - HFIT/Astronaut Office approve pre-coordinated, non-safety related non-compliances (out-of-board).
  - HFIT provides Certification of Compliance (CoC) after all issues closed.

Labeling Examples

Payload fire port labeling

Front Panel labeling

Cable labeling