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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Astronaut Office Rep exercising crew interfaces as part of an HFIT evaluation
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 hardware crew 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