NASA Human Integration Design Handbook (HIDH)

Revitalization of Space-Related Human Factors, Environmental and Habitability Data

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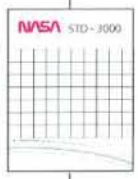
NASA-STD-3000:

Served as NASA's first human factors standard;

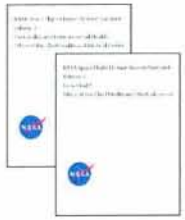
Specified how to design systems to support human health, safety, and productivity during space flight;

Was applicable to all NASA systems with human crews; and

Was written primarily for the International Space Station.



STANDARDS



Space Flight Human Systems Standard, Volumes 1&2:

- Updates crew health and performance standards to apply to all future systems with human crews (spacecraft, landers, habitats, rovers, EVA suits, etc.) and
- Requires that program specific requirements be derived from the standard plus guidance from the HIDH

IMPLIMENTATION HANDBOOK

THESE NEW DOCUMENTS CAPTURE THE SCOPE OF NASA-STD-3000 TO DRIVE PROGRAM-SPECIFIC HUMAN SYSTEM REQUIREMENTS DOCUMENTS

Human Integration Design Handbook (HIDH)
This is being developed as a new reference handbook for designing systems which accomodate the capabilities and limitations of the human crew. This will also serve as a guideline and include updated information of the type formerly contained in NASA-STD-3000, and will include materials that will help in the development of program specific requirements.

CHAPTERS → ***MODULES*** → ***ELEMENTS***

ANTHROPOMETRY / BIOMECHANICS / STRENGTHY

HUMAN PERFORMANCE CAPABILITIES

NATURAL AND INDUCED ENVIRONMENTS

ARCHITECTURE

USER INTERFACES

HARDWARE AND EQUIPMENT

FACILITY MANAGEMENT

EXTRA-VEHICULAR ACTIVITY (EVA)

STOWAGE, ETC.

TRASH MANAGEMANT

SLEEP ACCOMODATIONS

FOOD SYSTEM

PERSONAL HYGIENE

LIGHTING

WINDOWS

HATCHES

TRAFFIC FLOW/TRANSLATION

LOCATION/ORIENTATION AIDS

OVERALL DESIGN

INTRODUCTION

DESIGN CONSIDERATIONS

-LESSONS LEARNED

BACKGROUND RESEARCH

RESEARCH NEEDS

REFERENCES

STANDARDS

REQUIREMENTS

-RATIONAL

-VARIFICATION

-SOURCE

-CONFIDENCE LEVEL

WE INVITE YOUR PARTICIPATION !

NASA-JSC HIDH development team is finalizing the format, prioritizing topic areas for expansion and update, and inviting subject matter experts to contribute. Handbook expansion and maintenance is planned to assure its retention as a resource for human factors and human spaceflight. If you are interested in participating in the writing of this document, contact any of the below:

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