NASA Space Flight Human System Standard

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

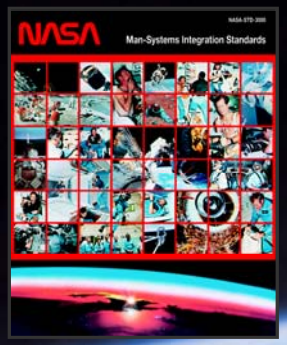
PROJECT TIMELINE

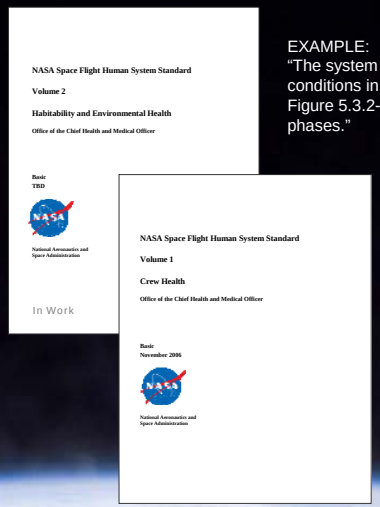
Subject Matter Expert Review	Release for NASA-Wide Review	Final Standard and Handbook Release
26 JAN 2009	*MAY 2009*	*TARGET: SEPT 2009*

Space Flight Human System Standard

- Updates crew health and performance standards
- Defines standards that shall be met on all systems with human crews (spacecraft landers, habitats, rovers, EVA suits, etc.)
- Requires that program-specific requirements be written to meet the standard

STANDARDS





EXAMPLE:
"The system shall be able to maintain thermal conditions in the Comfort Zone as shown in Figure 5.3.2-3 throughout all nominal mission phases."

These documents drive *Program -Specific Requirements*

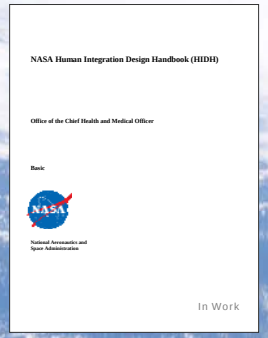
PROGRAM-SPECIFIC REQUIREMENTS

EXAMPLE:
"The system shall maintain the atmospheric temperature within the range of 18 ºC (64.4 ºF) to 27 ºC (80.6 ºF) during all nominal flight operations, excluding suited operations, ascent, entry, landing, and post landing."

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
- Written primarily for the Space Station
- Last update: 1995

HANDBOOK



EXAMPLE:
- Data on temperature effects on human physiology and performance
- Guidance for limits and implementation based on expertise, lessons learned

Human Integration Design Handbook (HIDH)

- Provides guidance and data as resources for *designers* of systems with crews
- Aids *requirements writers* in development of program-specific human-system integration requirements