

NASA GSFC FLIGHT SOFTWARE SYSTEMS BRANCH

FSW VERSION DESCRIPTION DOCUMENT

CFS HS APPLICATION

BUILD: HS 2.3.1

RELEASE DATE: 6/25/2019

1.0 FSW VERSION DESCRIPTION

1.1 PURPOSE AND SUMMARY

This build is a minor build of the Health & Safety (HS) application to provide compatibility with cFE 6.6. This build provides compatibility with cFE 6.6, compatibility with the CMake build system, and some minor code cleanup.

1.2 NEW/CHANGED FUNCTIONALITY IN THIS VERSION

Table 1.2-1 identifies the DCRs that have been implemented in this FSW version. For each DCR the “Key” column shows the corresponding DCR in the GSFC cFS tracking system.

Table 1.2-1 – DCRs Implemented in this Version

Key	Summary	Description
GSFCCFS-730	HS app incorrectly defines table filenames	During a regular make build there is an inconsistency between what the source says, the actual files and what the hstables.mak uses.
GSFCCFS-903	HS must be tested with cFE 6.6	
GSFCCFS-946	Fix HS compilation error with cFE 6.6	Building HS with cFE 6.6 generates an error

No new functionality was added in this build.

1.3 MISSING PLANNED FEATURES AND KNOWN PROBLEMS

Table 1.3-1 identifies currently open DCRs that are not addressed in this build.

Any workarounds that may apply are identified.

Refer to the Delivery Letter for any additional DCRs submitted after preparation of this VDD.

Table 1.3-1 – Currently open DCRs

Key	Summary
GSFCCFS-727	HS idle task consumes 100% CPU on POSIX systems
GSFCCFS-726	HS idle task needs modification to support SMP

2.0 DELIVERED PRODUCTS

Table 2-1 identifies the locations of FSW products relevant to this FSW Build. The version or date of the Build and where the product can be located are provided. Changes from a previous VDD are identified.

Table 2-1 – Delivered Products and their Locations

Software Element	Changed with this Version?	New Version or Date	Location
Source Code of this FSW Build	Yes		
Unit Test Results	No		

4.0 CONFIGURATION SUMMARY AND VERSION IDENTIFICATION

This software can be found in the HS GitHub repository under the tag “HS-2.3.1”.

ACRONYMS

ACS	Attitude Control System
C&DH.....	Command and Data Handling
cFS.....	Core Flight System
CM	Configuration Management
COTS	Commercial Off-The-Shelf
DCR	Discrepancy/Change Request
ETU	Engineering Test Unit
FSB	Flight Software Branch
FSW	Flight Software
HS	Health & Safety
I&T	Integration & Test
RTOS	Real-Time Operating System
T&C.....	Telemetry and Command
URL.....	Universal Resource Locator
VDD	Version Description Document