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Electronic Availability of Microgravity Experiments Safety and Integration Requirements Documents

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Summary

This report is a follow–on to NASA Contractor Report 195447, Microgravity Experiments Safety and Integration Requirements Document Tree It provides the details for accessing the systems that contain the official, electronic versions of the documents initially researched in NASA Contractor Report 195447. The data in this report serves as a valuable information source for the NASA Lewis Research Center Project Documentation Center (PDC), as well as for all developers of space experiments The PDC has acquired the hardware, software, IDs and passwords necessary to access most of these systems and is now able to provide customers with current document information as well as immediate delivery of available documents in either electronic or hard copy format

Background

The Lewis Research Center Office of Mission Safety and Assurance initially tasked Cortez III Service Corporation with the development of a requirements document tree that shows the relationship between the safety requirements documents and the corresponding integration documents for each of the shuttle carriers (NASA Contractor Report 195447). That report provided pertinent information for each of the top level safety and integration documents, and their applicable and reference documents (referred to as Tier 1 and Tier 2 documents) The full–text, electronic availability of the documents was one of the areas researched in an effort to reduce the number of paper copies being produced and distributed. This report provides further details for accessing the systems that contain the official versions of the documents (see table 2). As an added reference, table 3 lists some available databases that contain information about some of the documents

Process

Systems containing the official, electronic versions of the requirements documents were initially identified in NASA Contractor Report 195447 The lengthy process for obtaining the required information about these systems and the documents involved contacting the respective Center libraries, contractors, project offices and document owners via telephone or datafax

The process to acquire access was then started This involved working directly with system administrators, system librarians, and computer support personnel both at the originating Center and here at the Lewis Research Center to obtain the necessary user IDs and passwords and to work out the system problems to enable downloading and/or printing. In some instances, the PDC was required to purchase software in order to transfer the files through File Transfer Protocol (FTP)

Findings and Recommendations

A. The most important finding of this research is that no single system exists that allows centralized access to all safety and integration documents initially identified in NASA Contractor Report 195447 (see table 1). It is recommended that an official library be created and maintained on the World Wide Web which contains full text of these documents, or possibly pointers to the systems that contain the documents.

B. Less that half of the documents are available in an electronic format. An effort should be made to make these documents available

C The electronic availability of documents is widely scattered across systems and is not publicized. Each system requires specific software to perform downloads. It is recommended that the charts contained in this report serve as an initial source for this information This list should be continually updated and a process should be initialized to allow input to this list.

Conclusion

The Lewis PDC has acquired the hardware, software, IDs and passwords necessary to access most of the systems Though the PDC has print capability, more software is required in order to perform full–text downloads and viewing of the documents.

The database of document information maintained by the PDC has been expanded to include the electronic availability of each document Future plans include the design of a more comprehensive, relational database, and the identification of and access to other available electronic libraries

CENTER	DOCUMENT NUMBER (Documents from NASA CR 195447)	ELECTRONIC AVAILABILITY
HQ	NASA–STD–3000	
HQ	NHB 1700 1	NODIS
HQ	NHB 5300 4(3G)	NODIS
HQ	NHB 8060 1	NODIS
HQ	NMI 1052 72	NODIS
JSC	ICD A–14021	
JSC	ICD A–21202	
JSC	ICD 2–19001	
JSC	JSC 08934, VOL II	
JSC	JSC 11123	
JSC	JSC 20545	
JSC	JSC 20584	
JSC	JSC 23834	
JSC	NSTS 07700, VOL XIV & APPEND 1–10	
JSC	NSTS 08060	PDC
JSC	NSTS 08242	PDC
JSC	NSTS 1700 7	PILS
JSC	NSTS 13830	PILS
JSC	NSTS 14046	PILS
JSC	NSTS 16979, PTS 1 & 2	PILS
JSC	NSTS 18468	PILS
JSC	NSTS 18798	PILS
JSC	TA–87–079 (Part of NSTS 18798)	PILS
JSC	TA–92–038 (Part of NSTS 18798)	PILS
JSC	NSTS 19943	
JSC	NSTS 20793	
JSC	NSTS 21000–A01 through A11	PILS
JSC	NSTS–21000–IDD–MDK	
JSC	NSTS–21000–IDD–PSC	
JSC	NSTS–21000–IDD–SL	
JSC	NSTS–21000–IDD–SML	
JSC	NSTS–21000–IDD–STD	
JSC	NSTS–21000–SIP–ATT	PILS
JSC	NSTS–21000–SIP–DEP	PILS
JSC	NSTS–21000–SIP–DRP	PILS

Table 1 – Electronic Availability of Microgravity Experiments Safety and Integration Documents.

CENTER	DOCUMENT NUMBER (Documents from NASA CR 195447)	ELECTRONIC AVAILABILITY
JSC	NSTS–21000–SIP–GAS	PILS
JSC	NSTS–21000–SIP–MDK	PILS
JSC	NSTS–21000–SIP–SLB	PILS
JSC	NSTS–21000–SIP–SLM	PILS
JSC	NSTS–21000–SLP–SML	PILS
JSC	NSTS–22648	
JSC	SN–C–0005	
JSC	SP–R–0022	
JSC	SW–E–0002	PDC
KSC	KCS IV 0018 0	
KSC	KHB 1700 7	
KSC	KHB 1840 1	
KSC	KSC–K–STSM–14 1	
KSC	79K09560	
KSC	79K09561	
GSFC	GAS Experimenter User's Handbook	
GSFC	GAS Safety Manual	
GSFC	GAS Thermal Design Study	
GSFC	GEVS–SE	
GSFC	GHB 1771 1	
GSFC	GMI 1771 1	
GSFC	GSFC–731–0005–83	
GSFC	GSFC S–311–P–4	
GSFC	GSFC SPOC	
GSFC	HHG–730–1503	INTERNET
GSFC	NASA RP 1124–2	
GSFC	Sounding Rocket User's Handbook	
GSFC	S–313–100	
MSFC	JA–009	
MSFC	JA–012	
MSFC	JA–053	
MSFC	JA–061	
MSFC	JA–077	
MSFC	JA–081	
MSFC	JA–276	

Table 1 – Continued.

CENTER	DOCUMENT NUMBER (Documents from NASA CR 195447)	ELECTRONIC AVAILABILITY
MSFC	JA–346	
MSFC	JA–418	
MSFC	JA–447	
MSFC	JA–655	
MSFC	JA–710	
MSFC	JA–713	
MSFC	MDC–G6854	
MSFC	MDC–G6862	
MSFC	MDC W5165B	
MSFC	MDC W5187	
MSFC	MM 8040 12	
MSFC	MSFC–HDBK–505	MSFC REPOSITORY
MSFC	MSFC–HDBK–527	MSFC REPOSITORY
MSFC	MSFC–PROC–1301	MSFC REPOSITORY
MSFC	MSFC–SPEC–504	MSFC REPOSITORY
MSFC	MSFC–SPEC–521	MSFC REPOSITORY
MSFC	MSFC–SPEC–522	MSFC REPOSITORY
MSFC	MSFC–SPEC–560	MSFC REPOSITORY
MSFC	MSFC–STD–126	MSFC REPOSITORY
MSFC	MSFC–STD–481	MSFC REPOSITORY
MSFC	MSFC–STD–486	MSFC REPOSITORY
MSFC	MSFC–STD–506	MSFC REPOSITORY
MSFC	MSFC–STD–561	MSFC REPOSITORY
MSFC	MSFC–STD–630	MSFC REPOSITORY
MSFC	SLP/2104	
MSFC	SL–PA–210	MSFC REPOSITORY
MSFC	40A99005	
MSFC	40M39569	MSFC REPOSITORY
DOD	MIL–B–5087	IHS
DOD	MIL–HDBK–5	IHS
INDUSTRY	EIA–232–D	
INDUSTRY	NC–50	
INDUSTRY	NR–50	

Table 1 – Concluded.

SYSTEM	DESCRIPTION	ADMINISTRATOR (contact)	LOCATION (Center)	IP ADDRESS	HARDWARE/ SOFTWARE REQUIRED
IHS	Commercially available subscription service of Military, Federal, Regulatory, and Industry data Full text or summary information available on CD–ROM.	800–341–7824	Commercial	Not applicable	
MSFC Repository	Raster image storage of MSFC project documents	Roger Bochek 205–544–5776	MSFC	128 158.48 138	All documents are raster image. Require viewing software to view CAL 1 type format such as: TMS View Director or Mirad. User ID/Password.
NODIS	Mainframe application for the display and print of full text of currrent NASA Directives.	NASA Help Desk 202–358–HELP	NASA HQ	192 77 77.3	Macintosh, IBM Compatible, or 3270–type terminal. "Natural Connection" software. User ID/Password
PALS	Electronic storage of Space Station Program and International Space Station Program documents.	Warren Badgely 713–280–7593 Shari Frisinger 713–280–7486	JSC	139.169 51.252	Interleaf (for full download) User ID/Password

Table 2 – System Information.

SYSTEM	DESCRIPTION	ADMINISTRATOR (contact)	LOCATION (Center)	IP ADDRESS	HARDWARE/ SOFTWARE REQUIRED
PDC	Electronic storage of some NSTS documents. Documents are stored in Interleaf 5 3.	Theresa Sjurseth 713–282–3644	JSC		Interleaf Worldview User ID/Password
PILS	Electronic document production and storage system used to develop and manage payload integration documents. Contains PIPs, SIPs, Annexes, and Safety documents	713–483–6654	JSC	161 40.111 5 (FTP)	WORD 6.0 ANONYMOUS logon

Table 2 – Concluded.

OTHER AVAILABLE INFORMATION SOURCES					
SYSTEM	**DESCRIPTION**	**ADMINISTRATOR (contact)**	**LOCATION (Center)**	**IP ADDRESS**	**HARDWARE/ SOFTWARE REQUIRED**
AMPTS	Database tracking system for payload documents Does not contain full text of documents, only index information	Kay Compton or Mike Corbin 713–483–8329 AMPTS/IMIC Help Desk 713–282–7406 AMPTS Programmers, Helen Childs 713–282–4926 IMIC Help Desk 713–282–7406	JSC	192 160.91 2	User ID/Password
ARIN	Online library management system of summary and bibliographic information of books and conference papers	NASA Access Help Desk 301–621–0390	NASA HQ	192.68 52.2	Available via Internet, NASANET, Telnet, or Direct Dial User ID/Password.
RECON	Online information retrieval system for finding reference citations for predominately technical publications.	NASA Access Help Desk 301–621–0390	NASA HQ	192.68 52.2	Available via Internet, NASANET, Telnet, or Direct Dial User ID/Password

Table 3 – Other Available Information Sources.

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