Interim Rev. F 10-15-02

GRC/MSD ISS Utilization Traffic Model

	2001									2002												2003												2004												2005		
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
PP	2				3				3				3		4				4	4				4		4		5			5	5		5	5					6			6			6		
Increment	2				3				4				4		5				5	6				7		7		8			8	8		9	9					10			10			11		
Flight	6A			7A	7A.1				UF-1				8A		UF-2				9A	11A				ULF-1		12A		12A.1			13A	13A.1		15A	10A					ULF-2			1E			UF-3		
Launch Date	19Apr			12Jul	10Aug				5Dec				8Apr		5Jun				7Oct	10Nov				1Mar		23May		24Jul			2Oct	13Nov		15Jan	19Feb					29Jul			7Oct			13Jan		
Facilities	ER#1, ER#2 (ARIS)				ER#4, ER#5										MSG OR, ER#3 (ARIS)																									CIR, ER#6 (PaRIS), FSL						MSRR (ARIS)		
Combustion Science Payloads																																								CIR - MDCA; DCE-2, BCDCE						SEDC, DCE-2		
Non-GRC Payloads																																																
Fluid Physics Payloads	PCS														PCS													PCS+							PCS++, PCS+											PCS++		
Acceleration Measurement Payloads	MAMS, ICU, RTS-D1, RTS-D2, EE-ER#2, SE-PCS														RTS-MSG, EE-ER#3, SE-PCS									SE-SAMS F07, SE-SAMS F02					SE-PCS+ F06, SE-SAMS F03			SE-SAMS F02, SE-SAMS F03, SE-SAMS F04, SE-SAMS F05			SE-MSG F04, SE-MSG F08						TSH-CIR, SE-SAMS F05, SE-SAMS F07									RTS-MSRR, SE-SAMS F08, SE-SAMS F02, SE-PCS+ F06		
MSG PI																				CSLM-2				g-LIMIT, CSLM-2				CSLM-2				CSLM-2, CSLM-2			CFM-2, CSLM-2						MSG - BXF; MABE, NPBX, CFM-2, MABE, NPBX											
MSG GI															InSPACE									InSPACE				FSDC-3				SPICE, FSDC-3			SHERE, SPICE						SHERE								

Legend:

Facility
- CIR
- FIR
- MSG-GI
- MSG-PI
- ER
- MSRR
- LTMPF
- FSL
- MPLM Flight — UF-2
- Spacehab Flight — 12A.1

Discipline
- Combustion Science
- Fluid Physics
- Acceleration Measurement
- Materials Science

Mini-Facility

Upmass - Filled
Downmass – Empty

Acronyms:
CIR - Combustion Integrated Rack
FIR - Fluids Integrated Rack
MSG - Microgravity Science Glovebox
ER - ExPRESS Rack
MSRR – Materials Science Research Rack
LTMPF – Low Temperature Microgravity Physics Facility
FSL – Fluids Science Laboratory
MDCA - Multi-user Droplet Combustion Apparatus
FEANICS - Flow Enclosure Accommodating Novel Investigations in Combustion of Solids
MGFA - Multi-use Gaseous Fuel Apparatus
BXF – Boiling Experiment Facility
LMM - Light Microscopy Module
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Notes:
1) PCS had data disks returned on 8A (4/02)
2) SAMS had ICU hard drives and battery sent up on UF-2 (6/02) and had others returning on 9A (10/02)
3) CSLM-2 had foam inserts and insulated stowage containers going up on 9A (10/02)
4) InSPACE has coil assemblies going up on 11A (11/02)
5) PCS+ has data disks returning on 13A.1 (11/03), 15A (2/04), and 10A (3/04)

Combustion Science PIs
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CIR (Pearlman)
MSG (Dietrich, Urban) MSG GI (Williams, Faeth)

Fluid Physics PIs
LMM (Wayner, Chaikin, Weitz, Yodh, Gast)
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ER/DECLIC (Maxworthy)
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GRC Microgravity Science Division Chief: /s/ Jack A. Salzman **10/23/02**

Interim Rev. F 10-15-02

GRC/MSD ISS Utilization Traffic Model

	2005									2006													2007													2008													2009		
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
PP	6			7			7			7		7				8			8			8			8		9					9		9																	
Increment	11			12			12			13		14				14			15			15			16		16					17		17																	
Flight	UF-4			UF-5			UF-4.1			UF-6		1J/A				1J			ULF-3			9A.1			UF-7		2J/A					ULF-5		14A																	
Launch Date	Apr			Jul			Oct			Jan		Mar				Jul			Oct			Jan			Apr		Jun					Nov		Jan																	

Facilities

FIR (ARIS): Jul 2005

LTMPF: Jan 2008

Combustion Science Payloads

CIR - MDCA (Apr 2005 – Jul 2006)
- BCDCE (Apr 2005)
- SEDC (Jul 2005)
- DDCE (Jan 2006)
- DDCE (Jul 2006)

CIR - FEANICS - A (Oct 2006 – Apr 2008)
- FIST (Oct 2006)
- REEFS (Oct 2006)
- FIST (Jan 2007)
- STAF (Apr 2007)
- REEFS (Apr 2007)
- ATHINA (Nov 2007)
- STAF (Nov 2007)
- ATHINA (Apr 2008)

CIR - FEANICS - B (Oct 2008 – Mar 2009)
- TIGER-3D (Oct 2008)
- SIBAL (Jan 2009)
- TIGER-3D (Jan 2009)

Non-GRC Payloads

- ALI-SCU1 (Jul 2005)
- Water Mist (Jan 2006)
- DSI-T1 (Jan 2006)
- Water Mist (Oct 2006)
- HTI-SCU1 (Oct 2006)
- ALI-SCU1 (Oct 2006)
- DSI-T1 (Oct 2006)
- ALI-SCU2 (Nov 2007)
- HTI-SCU1 (Nov 2007)
- CCA-2 (Apr 2008)
- CCF (Apr 2008)
- CCF (Jan 2009)
- DSI-T2 (Oct 2008)
- ALI-SCU2 (Oct 2008)
- CCA-2 (Oct 2008)

ER - DECLIC (Jul 2005 – Oct 2006)

Fluid Physics Payloads

FIR - LMM (Jul 2005 – Nov 2007)
- CVB (Jul 2005)
- MIDAS (Jul 2005)
- PHaSE-2 (Jan 2006)
- CVB (Jan 2006)
- MIDAS (Jan 2006)
- PCS-2 (Jul 2006)
- FOAM (Jul 2006)
- PHaSE-2 (Oct 2006)
- FOAM (Jan 2007)
- LΦ CA (Apr 2007)
- PCS-2 (Apr 2007)
- µMRF (Apr 2007)
- µg SEG (Nov 2007)
- LΦ CA (Nov 2007)
- µMRF (Nov 2007)
- SiGMA (Jan 2008)
- µg SEG (Jan 2008)
- GGM (Apr 2008)
- SiGMA (Apr 2008)
- MOBI (Jan 2009)
- GGM (Jan 2009)
- MOBI (Oct 2008)

FIR - GFM (Nov 2007 – Jan 2009)

Acceleration Measurement Payloads

- TSH-MSG (Apr 2005)
- SE-SAMS F07 (Apr 2005)
- SE-MSG F04 (Apr 2005)
- SE-SAMS F03 (Apr 2005)
- TSH-FIR (Jul 2005)
- SE-SAMS F06 (Jul 2005)
- TSH-LTMPF (Jan 2008)

MSG

PI
- CHAINS (Jul 2005)
- BDiSL (Oct 2005)
- CHAINS (Oct 2005)
- Smoke (Jan 2006)
- BDiSL (Jan 2006)
- Smoke (Mar 2006)
- UVIS (Oct 2006)
- UVIS (Nov 2007)

GI

Legend:

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GRC/MSD ISS Utilization Traffic Model

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PP																																																
Increment																																																
Flight																																																
Launch Date																																																
Facilities																																																
Combustion Science Payloads	CIR - FEANICS - B; SIBAL									CIR – MGFA; S-FLAME; Clean-FLAME; Flame Design; S-FLAME; Clean-FLAME; Flame Design; Cool Flames												Cool Flames																												
Non-GRC Payloads	CCA-3; HTI-SCU2; DSI-T2; Tarifa; CCA-3; ER - DECLIC									Tarifa; ALI-SCU3; HTI-SCU2												DSI-T3; ALI-SCU3; HTI-SCU3; DSI-T3																				ALI-SCU4; HTI-SCU3									
Fluid Physics Payloads																																																
Acceleration Measurement Payloads																																																
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