Based on Revision G Assembly Sequence (CR8937A) and OZ Working Launch Dates 10-26-04

GRC/ESD ISS Utilization Traffic Model

	2004												2005												2006												2007											
	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	J	A	S	O	N	D
Increment	8			9	9			9		10		10		10		11	11	11	11	11	12	12		12		12		13	13		13		13	14	14	14			14	15	15			15	15	16	16	16
Russian Flt.	13P			8S	14P			15P		9S		16P		17P		10S		18P		19P	11S							12S						13S						14S							15S		
ATV Flight																						ATV-1													ATV-2													ATV-3
ISS Flight																	LF-1		ULF-1.1					12A		12A.1			13A		13A.1		15A			10A			1E		ULF-2			1J/A	1J			17A
Facilities																	HRF-2		MELFI EMCS SpaceDRUMS																			FSL		CIR FIR MARES MSRR-1		MELFI Ex					HHR-1 LSG WORF
Combustion Integrated Rack Payloads	TO BE MANIFESTED CSLM-2 SHERE BCAT-3 Batteries												AVAILABLE CFM-2 FSDC-3 SPICE																											Extinguishment-1 Extinguishment-2					Extinguishment-1		
Fluids Integrated Rack Payloads																																								FIR - LMM CVB							CVB
ExPRESS Rack or Stand-Alone or FSL Payloads	BCAT-3 CFE – CL2												DAFT-1 DAFT-2						DAFT-3 DAFT-4			CFE – CL1 CFE - ICF CFE - VG					BCAT-3				CFE-CL1 CFE-CL2																	
Microgravity Science Glovebox Payloads																	CSLM-2					InSPACE-2 g-LIMIT									MSG - BXF MABE NPBX SAME							MABE NPBX SAME							LME
Non-GRC Payloads																																																MPCI
Acceleration Measurement Payloads																			SE-SAMS F07 SE-SAMS F02							SE-SAMS F06 SE-SAMS F03						SE-SAMS F02 SE-SAMS F04			SE-SAMS F03 TSH-MSG TSH-SAMS Spare SE-SAMS F05 SE-MSG F08							SE-SAMS F05 TSH-CIR TSH-FIR SE-SAMS F07							

Legend:

- CIR
- FIR
- MSG-GI
- MSG-PI
- ER
- MSRR
- FSL
- Stand-Alone
- MPLM Flight — UF-2
- Spacehab Flight — 12A.1
- ATV Flight — ATV-1

Mini-Facility

Ascent - Filled
Descent - Empty

Progress Flight — 13P
Soyuz Flight — 8S

Acronyms:

AMS – Alpha Magnetic Spectrometer
BXF – Boiling Experiment Facility
CAM – Centrifuge Accommodations Module
CCA – Commercial CIR Apparatus
CIR - Combustion Integrated Rack
Cryo Freezer – Cryogenic Freezer
EMCS – European Modular Cultivation System
ER – ExPRESS Rack
FEANICS – Flow Enclosure Accommodating Novel Investigations in Combustion of Solids
FIR – Fluids Integrated Rack
FSL – Fluids Science Laboratory
HHR – Holding Habitat Rack
HRF – Human Research Facility
LMM – Light Microscopy Module
LSG – Life Sciences Glovebox
MARES – Muscle Atrophy Research and Exercise System
MELFI – Minus Eighty Laboratory Freezer
MSG – Microgravity Science Glovebox
MSRR – Materials Science Research Rack
SpaceDRUMS – Space Dynamically Responding Ultrasonic Matrix System
WORF – Window Observational Rack Facility

- Advanced Life Support Systems
- Fire Prevention, Detection, & Suppression
- Advanced Environmental Monitoring & Control
- Advanced Extra Vehicular Activity
- Multiphase Flow Technology
- In-Situ Fabrication & Repair
- In-Situ Resource Utilization
- Fundamental Science

Notes:

1) InSPACE and BCAT-3 will conduct additional operations during Increment 10 if crew time is available
2) InSPACE has a broken coil assembly returning on LF-1; remaining coil assemblies to return on 12A.1
3) SAMS has a Thinkpad and hard drives going up on ULF1.1
3) CSLM-2 has 12 SC/SPUs still to be manifested

GRC Exploration Systems Division Chief: /s/ Jack A. Salzman 12/14/04

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GRC/ESD ISS Utilization Traffic Model

	2008												2009												2010												2011											
	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	J	A	S	O	N	D
Increment	16		16	17	17		17			18	18		19		19	20			21	21		22	22		23		23	24			25	25		26		26												
Russian Flt.				16S						17S-1			17S-2			18S-1			18S-2			19S-1			19S-2			20S-1			20S-2			21S-1													
ATV Flight											ATV-4												ATV-5																									
ISS Flight	UF-3		UF-4		2J/A		UF-5			20A			19A		14A				UF-7	ULF-3		9A.1			ULF-4		ULF-5				9A.2	ULF-6				ULF-7													
Facilities	HHR-2 ER#6		AMS				Cryo Freezer MELFI Ex												CAM						MELFI Ex																							
Combustion Integrated Rack Payloads	CIR - FEANICS - 1 FEANICS-A FEANICS-B Extinguishment-2						FEANICS-A						FEANICS-B							EVA-1					Fab-1 EVA-1						Fab-1																	
Fluids Integrated Rack Payloads	PBR						PBR						TΦFFy CHESS							TΦFFy CHESS																												
ExPRESS Rack or Stand-Alone or FSL Payloads							FOAM						FOAM																																			
Microgravity Science Glovebox Payloads							CCF-1 SEP LME						CCF-1 SEP							CCF-2					CCF-2						Waste-1					Waste-1												
Non-GRC Payloads							MPCI						Firewire							Firewire											CCA-3					Tarifa CCA-3	Tarifa											
Acceleration Measurement Payloads	SE-SAMS F04 TSH-MSG TSH-SAMS Spare SE-SAMS F06 TSH-MSG TSH-SAMS Spare						SE-SAMS F07 SE-SAMS F08 SE-SAMS F02 SE-SAMS F03						TSH-CIR TSH-FIR TSH-CIR TSH-FIR							SE-SAMS F06 SE-SAMS F05			TSH-MSG TSH-SAMS Spare TSH-MSG TSH-SAMS Spare																													

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