

STS-121/ISS-ULF1.1			SpaceCalc Shuttle Mission Planner				
Eastern Time	DD	HH	MM	Updated 07/16/06 (updating FD-13, FD-14)			
07/04/06	Tue	02:38	PM	00	00	00	STS-121 Launch (flight day 1)
07/04/06	Tue	02:47	PM	00	00	09	Main engine cutoff
07/04/06	Tue	03:15	PM	00	00	37	OMS-2 rocket firing
07/04/06	Tue	03:28	PM	00	00	50	Post-insertion timeline
07/04/06	Tue	05:08	PM	00	02	30	PGSC, OCAC setup
07/04/06	Tue	06:08	PM	00	03	30	Elevon park; SEE setup
07/04/06	Tue	06:13	PM	00	03	35	RMS powerup
07/04/06	Tue	06:28	PM	00	03	50	FRED setup
07/04/06	Tue	06:33	PM	00	03	55	Umbilical camera download
07/04/06	Tue	07:23	PM	00	04	45	Group B computer powerdown
07/04/06	Tue	07:38	PM	00	05	00	NC1 rendezvous rocket firing (placeholder)
07/04/06	Tue	08:38	PM	00	06	00	Crew sleep begins
07/05/06	Wed	04:38	AM	00	14	00	Crew wakeup (flight day 2)
07/05/06	Wed	06:43	AM	00	16	05	NC2 rendezvous rocket firing
07/05/06	Wed	07:03	AM	00	16	25	RMS checkout
07/05/06	Wed	07:18	AM	00	16	40	Centerline camera installation
07/05/06	Wed	07:48	AM	00	17	10	Middeck transfer preps
07/05/06	Wed	07:48	AM	00	17	10	OBSS unberthing
07/05/06	Wed	07:48	AM	00	17	10	PGSC setup (part 2)
07/05/06	Wed	08:38	AM	00	18	00	OBSS starboard survey
07/05/06	Wed	09:48	AM	00	19	10	OMS pod survey from flight deck
07/05/06	Wed	10:08	AM	00	19	30	Ergometer setup
07/05/06	Wed	10:08	AM	00	19	30	OBSS nose survey
07/05/06	Wed	10:38	AM	00	20	00	Crew meals begin
07/05/06	Wed	11:13	AM	00	20	35	NPC rendezvous rocket firing
07/05/06	Wed	11:53	AM	00	21	15	Docking ring extension
07/05/06	Wed	12:53	PM	00	22	15	Spacesuit checkout

07/05/06	Wed	12:53 PM	00	22	15	OBSS port survey
07/05/06	Wed	02:23 PM	00	23	45	OBSS berthing
07/05/06	Wed	03:28 PM	01	00	50	SRMS survey
07/05/06	Wed	04:58 PM	01	02	20	Rendezvous tools checkout
07/05/06	Wed	05:43 PM	01	03	05	NC3 rendezvous rocket firing
07/05/06	Wed	07:38 PM	01	05	00	Crew sleep begins
07/06/06	Thu	03:38 AM	01	13	00	STS crew wakeup (flight day 3)
07/06/06	Thu	03:38 AM	01	13	00	ISS crew wakeup
07/06/06	Thu	04:53 AM	01	14	15	Group B computer powerup
07/06/06	Thu	05:13 AM	01	14	35	Rendezvous timeline begins
07/06/06	Thu	05:38 AM	01	15	00	NH rendezvous rocket firing (placeholder)
07/06/06	Thu	06:34 AM	01	15	56	NC4 rendezvos rocket firing
07/06/06	Thu	07:23 AM	01	16	45	RPM photo setup verification
07/06/06	Thu	08:05 AM	01	17	27	TI rendezvous rocket firing
07/06/06	Thu	09:18 AM	01	18	40	Approach timeline begins
07/06/06	Thu	09:51 AM	01	19	13	RMP photo documentation
07/06/06	Thu	10:53 AM	01	20	15	ISS docking
07/06/06	Thu	11:13 AM	01	20	35	Leak checks
07/06/06	Thu	11:43 AM	01	21	05	Group B computer powerdown
07/06/06	Thu	11:43 AM	01	21	05	ODS preps for ingress
07/06/06	Thu	12:13 PM	01	21	35	Hatches open; welcome aboard!
07/06/06	Thu	01:03 PM	01	22	25	Safety briefing
07/06/06	Thu	01:28 PM	01	22	50	Russian seat liner installation
07/06/06	Thu	01:48 PM	01	23	10	OBSS grapple
07/06/06	Thu	02:13 PM	01	23	35	OBSS unberthing
07/06/06	Thu	02:39 PM	02	00	01	OBSS handoff ungrapple
07/06/06	Thu	02:43 PM	02	00	05	SSRMS moves to OBSS handoff position
07/06/06	Thu	02:43 PM	02	00	05	ROOBA leak check
07/06/06	Thu	03:28 PM	02	00	50	Reiter officially joins ISS crew
07/06/06	Thu	03:53 PM	02	01	15	OBSS handoff from SSRMS
07/06/06	Thu	04:23 PM	02	01	45	Spacewalk tools transfer
07/06/06	Thu	04:23 PM	02	01	45	SRMS moves to ACBM inspection point

07/06/06	Thu	07:08 PM	02	04	30	STS/ISS crew sleep begins
07/07/06	Fri	03:08 AM	02	12	30	STS crew wakeup (flight day 4)
07/07/06	Fri	03:38 AM	02	13	00	ISS crew wakeup
07/07/06	Fri	05:18 AM	02	14	40	SSRMS grapples MPLM
07/07/06	Fri	05:48 AM	02	15	10	MPLM unberthing
07/07/06	Fri	06:43 AM	02	16	05	MPLM installation
07/07/06	Fri	07:48 AM	02	17	10	MPLM bolt torquing; crew meals begin
07/07/06	Fri	08:28 AM	02	17	50	PAO radio interviews
07/07/06	Fri	08:58 AM	02	18	20	SSRMS ungrapples MPLM
07/07/06	Fri	09:13 AM	02	18	35	SSRMS grapples MBS
07/07/06	Fri	09:53 AM	02	19	15	MPLM vestibule pressurization
07/07/06	Fri	09:58 AM	02	19	20	SSRMS ungrapples lab
07/07/06	Fri	10:13 AM	02	19	35	Spacesuit transfer and reconfig
07/07/06	Fri	10:28 AM	02	19	50	SSRMS moves to survey support position
07/07/06	Fri	10:48 AM	02	20	10	SRMS/OBSS TPS survey
07/07/06	Fri	12:08 PM	02	21	30	MPLM activation (part 1)
07/07/06	Fri	01:28 PM	02	22	50	SSRMS grapples lab
07/07/06	Fri	01:38 PM	02	23	00	MPLM vestibule ingress
07/07/06	Fri	02:23 PM	02	23	45	MPLM ingress
07/07/06	Fri	03:38 PM	03	01	00	EVA-1: Procedures review
07/07/06	Fri	07:08 PM	03	04	30	STS/ISS crew sleep begins
07/08/06	Sat	03:08 AM	03	12	30	STS crew wakeup (flight day 5)
07/08/06	Sat	03:38 AM	03	13	00	ISS crew wakeup
07/08/06	Sat	04:23 AM	03	13	45	EVA-1: Preps with ISS oxygen
07/08/06	Sat	07:13 AM	03	16	35	EVA-1: Spacesuit purge
07/08/06	Sat	07:28 AM	03	16	50	MPLM transfers
07/08/06	Sat	07:28 AM	03	16	50	EVA-1: Spacesuit prebreathe
07/08/06	Sat	08:23 AM	03	17	45	SSRMS ungrapples lab module
07/08/06	Sat	08:28 AM	03	17	50	EVA-1: Crew lock depressurization
07/08/06	Sat	09:13 AM	03	18	35	EVA-1: Airlock egress; tool setup
07/08/06	Sat	09:33 AM	03	18	55	EVA-1: Zenith IUA replacement

07/08/06	Sat	10:03 AM	03	19	25	EVA-1: Tool setup
07/08/06	Sat	10:43 AM	03	20	05	EVA-1: OBSS setup (part 1)
07/08/06	Sat	10:48 AM	03	20	10	MELFI transfer
07/08/06	Sat	11:33 AM	03	20	55	EVA-1: 1 EV position 1 evaluation
07/08/06	Sat	11:48 AM	03	21	10	Oxygen generation system transfer
07/08/06	Sat	12:13 PM	03	21	35	EVA-1: OBSS setup (part 2)
07/08/06	Sat	12:43 PM	03	22	05	EVA-1: 2 EV position 3 evaluation
07/08/06	Sat	01:18 PM	03	22	40	EVA-1: 2 EV push evaluation
07/08/06	Sat	01:48 PM	03	23	10	EVA-1: OBSS cleanup
07/08/06	Sat	02:38 PM	04	00	00	EVA-1: Tool cleanup
07/08/06	Sat	03:23 PM	04	00	45	MPLM transfer tagup
07/08/06	Sat	03:28 PM	04	00	50	EVA-1: Airlock ingress
07/08/06	Sat	03:43 PM	04	01	05	EVA-1: Airlock repressurization
07/08/06	Sat	07:08 PM	04	04	30	STS/ISS crew sleep begins
07/09/06	Sun	03:08 AM	04	12	30	STS crew wakeup (flight day 6)
07/09/06	Sun	03:38 AM	04	13	00	ISS crew wakeup
07/09/06	Sun	05:38 AM	04	15	00	Lab rack transfer to ISS
07/09/06	Sun	06:13 AM	04	15	35	MPLM transfers
07/09/06	Sun	07:48 AM	04	17	10	EVA tools configured
07/09/06	Sun	09:18 AM	04	18	40	Spacesuit checkout
07/09/06	Sun	10:18 AM	04	19	40	SAFER checkout
07/09/06	Sun	10:48 AM	04	20	10	Joint crew meal
07/09/06	Sun	11:48 AM	04	21	10	Joint crew news conference
07/09/06	Sun	12:28 PM	04	21	50	Joint crew photo
07/09/06	Sun	12:48 PM	04	22	10	MPLM transfers resume
07/09/06	Sun	12:48 PM	04	22	10	Lithium hydroxide transfer for CO2 removal
07/09/06	Sun	01:53 PM	04	23	15	MPLM transfer tagup
07/09/06	Sun	02:08 PM	04	23	30	EVA-2: Procedures review
07/09/06	Sun	06:08 PM	05	03	30	STS/ISS crew sleep begins
07/10/06	Mon	02:08 AM	05	11	30	STS crew wakeup (flight day 7)
07/10/06	Mon	02:38 AM	05	12	00	ISS crew wakeup

07/10/06	Mon	03:38 AM	05	13	00	EVA-2: Preparations with ISS oxygen
07/10/06	Mon	06:13 AM	05	15	35	EVA-2: Spacesuit purge
07/10/06	Mon	06:13 AM	05	15	35	MPLM transfers
07/10/06	Mon	06:28 AM	05	15	50	EVA-2: Spacesuit prebreathe
07/10/06	Mon	07:28 AM	05	16	50	EVA-2: Crew airlock depressurization
07/10/06	Mon	08:14 AM	05	17	36	EVA-2: Airlock egress
07/10/06	Mon	08:28 AM	05	17	50	EVA-2: EV1: FGB retrieval
07/10/06	Mon	08:28 AM	05	17	50	EVA-2: EV2: APFR setup
07/10/06	Mon	09:08 AM	05	18	30	EVA-2: EV2: Pump module retrieval
07/10/06	Mon	09:08 AM	05	18	30	SSRMS grapples pump module
07/10/06	Mon	09:28 AM	05	18	50	SSRMS moves pump module to ESP-2
07/10/06	Mon	09:28 AM	05	18	50	EVA-2: EV1: Nadir IUA replacement
07/10/06	Mon	09:28 AM	05	18	50	EVA-2: EV2: APFR reconfig and TUS setup
07/10/06	Mon	10:18 AM	05	19	40	EVA-2: Pump module installation
07/10/06	Mon	10:53 AM	05	20	15	SSRMS removes TUS
07/10/06	Mon	10:58 AM	05	20	20	EVA-2: Nadir TUS replacement
07/10/06	Mon	11:23 AM	05	20	45	SSRMS maneuvers to cargo carrier
07/10/06	Mon	11:53 AM	05	21	15	SSRMS TUS swap
07/10/06	Mon	12:18 PM	05	21	40	SSRMS moves to S0 truss
07/10/06	Mon	12:53 PM	05	22	15	SSRMS supports TUS installation
07/10/06	Mon	01:23 PM	05	22	45	SSRMS to park position
07/10/06	Mon	01:43 PM	05	23	05	EVA-2: TUS cable routing
07/10/06	Mon	02:28 PM	05	23	50	EVA-2: Airlock ingress
07/10/06	Mon	02:48 PM	06	00	10	EVA-2: Airlock repressurization
07/10/06	Mon	06:08 PM	06	03	30	Crew sleep begins
07/11/06	Tue	02:38 AM	06	12	00	STS crew wakeup (flight day 8)
07/11/06	Tue	02:38 AM	06	12	00	ISS crew wakeup
07/11/06	Tue	04:38 AM	06	14	00	MPLM transfers
07/11/06	Tue	05:28 AM	06	14	50	Spacesuit servicing
07/11/06	Tue	05:58 AM	06	15	20	Middeck transfers
07/11/06	Tue	07:18 AM	06	16	40	Spacewalk tools configured for EVA-3
07/11/06	Tue	08:18 AM	06	17	40	PAO event

07/11/06	Tue	08:38 AM	06	18	00	Infrared camera setup for EVA-3
07/11/06	Tue	09:33 AM	06	18	55	Joint crew meal
07/11/06	Tue	10:33 AM	06	19	55	Crew downlink opportunity
07/11/06	Tue	10:58 AM	06	20	20	MPLM, middeck transfers resume
07/11/06	Tue	01:08 PM	06	22	30	EVA-3: Procedures review
07/11/06	Tue	05:08 PM	07	02	30	STS/ISS crew sleep begins
07/12/06	Wed	01:08 AM	07	10	30	STS crew wakeup (flight day 9)
07/12/06	Wed	01:38 AM	07	11	00	ISS crew wakeup
07/12/06	Wed	02:38 AM	07	12	00	EVA-3: Preparations with ISS oxygen
07/12/06	Wed	05:13 AM	07	14	35	EVA-3: Spacesuit purge
07/12/06	Wed	05:13 AM	07	14	35	MPLM transfers
07/12/06	Wed	05:28 AM	07	14	50	EVA-3: Spacesuit prebreathe
07/12/06	Wed	06:28 AM	07	15	50	EVA-3: Crew airlock depressurization
07/12/06	Wed	07:13 AM	07	16	35	EVA-3: Airlock egress
07/12/06	Wed	07:28 AM	07	16	50	EVA-3: SSRMS setup
07/12/06	Wed	07:28 AM	07	16	50	SSRMS foot restraint installation
07/12/06	Wed	07:58 AM	07	17	20	ISS meals
07/12/06	Wed	08:03 AM	07	17	25	SSRMS moves to TPS repair demo work site
07/12/06	Wed	08:08 AM	07	17	30	EVA-3: Payload bay setup; IR RCC photography
07/12/06	Wed	08:48 AM	07	18	10	EVA-3: Heat shield repair demonstration
07/12/06	Wed	08:58 AM	07	18	20	ISS crew resumes MPLM transfers
07/12/06	Wed	11:48 AM	07	21	10	EVA-3: Payload bay cleanup
07/12/06	Wed	12:33 PM	07	21	55	EVA-3: SSRMS cleanup
07/12/06	Wed	12:48 PM	07	22	10	SSRMS moves to airlock
07/12/06	Wed	01:08 PM	07	22	30	SSRMS foot restraint removal
07/12/06	Wed	01:28 PM	07	22	50	EVA-3: Airlock ingress
07/12/06	Wed	01:28 PM	07	22	50	SSRMS moves to MLPM
07/12/06	Wed	01:43 PM	07	23	05	EVA-3: Airlock repressurization
07/12/06	Wed	01:58 PM	07	23	20	Post EVA water recharge
07/12/06	Wed	05:08 PM	08	02	30	Crew sleep begins
07/13/06	Thu	01:08 AM	08	10	30	STS crew wakeup (flight day 10)

07/13/06	Thu	01:38 AM	08	11	00	ISS crew wakeup
07/13/06	Thu	04:13 AM	08	13	35	Crew off duty time begins
07/13/06	Thu	04:13 AM	08	13	35	ISS European Space Agency PAO event
07/13/06	Thu	09:03 AM	08	18	25	Crew meal
07/13/06	Thu	09:08 AM	08	18	30	ISS Russian PAO event
07/13/06	Thu	10:03 AM	08	19	25	Crew off duty time resumes
07/13/06	Thu	10:18 AM	08	19	40	ISS CPA installation
07/13/06	Thu	12:53 PM	08	22	15	MPLM cleanup
07/13/06	Thu	01:23 PM	08	22	45	MPLM racks configured
07/13/06	Thu	01:23 PM	08	22	45	PAO event (Fossum, Nowak)
07/13/06	Thu	05:08 PM	09	02	30	STS/ISS crew sleep begins
07/14/06	Fri	01:08 AM	09	10	30	STS crew wakeup (flight day 11)
07/14/06	Fri	01:38 AM	09	11	00	ISS crew wakeup
07/14/06	Fri	03:48 AM	09	13	10	MPLM egress
07/14/06	Fri	04:03 AM	09	13	25	MPLM deactivation
07/14/06	Fri	04:03 AM	09	13	25	PAO event (combined crew)
07/14/06	Fri	04:23 AM	09	13	45	Middeck transfers
07/14/06	Fri	05:28 AM	09	14	50	Spacesuit transfer
07/14/06	Fri	05:53 AM	09	15	15	MPLM vestibule depressurization
07/14/06	Fri	07:13 AM	09	16	35	Crew meals begin
07/14/06	Fri	08:13 AM	09	17	35	SSRMS grapples MPLM
07/14/06	Fri	08:23 AM	09	17	45	MPLM bolts backed out
07/14/06	Fri	09:08 AM	09	18	30	MPLM pulled away from Unity
07/14/06	Fri	10:43 AM	09	20	05	MPLM berthed in shuttle bay
07/14/06	Fri	11:23 AM	09	20	45	SSRMS ungrapples MPLM
07/14/06	Fri	11:38 AM	09	21	00	SSRMS grapples MBS
07/14/06	Fri	12:28 PM	09	21	50	SSRMS ungrapples lab
07/14/06	Fri	01:18 PM	09	22	40	OBSS port survey
07/14/06	Fri	03:13 PM	10	00	35	Rendezvous tools checkout
07/14/06	Fri	05:08 PM	10	02	30	STS/ISS crew sleep begins
07/15/06	Sat	01:08 AM	10	10	30	STS crew wakeup (flight day 12)

07/15/06	Sat	01:38 AM	10	11	00	ISS crew wakeup
07/15/06	Sat	03:38 AM	10	13	00	Farewell ceremony
07/15/06	Sat	03:53 AM	10	13	15	Hatch closure
07/15/06	Sat	04:28 AM	10	13	50	Centerline camera installation
07/15/06	Sat	04:38 AM	10	14	00	Group B powerup
07/15/06	Sat	04:38 AM	10	14	00	ODS leak check
07/15/06	Sat	05:23 AM	10	14	45	Undocking timeline begins
07/15/06	Sat	06:08 AM	10	15	30	ISS undocking
07/15/06	Sat	07:08 AM	10	16	30	Shuttle separation burn
07/15/06	Sat	07:43 AM	10	17	05	Group B computer powerdown
07/15/06	Sat	07:43 AM	10	17	05	Crew meals begin
07/15/06	Sat	08:43 AM	10	18	05	Robot maneuvers to survey attitude
07/15/06	Sat	08:58 AM	10	18	20	OBSS starboard survey
07/15/06	Sat	10:08 AM	10	19	30	ISS: PMA-2 depressurization
07/15/06	Sat	10:28 AM	10	19	50	OBSS nose survey
07/15/06	Sat	12:28 PM	10	21	50	OBSS berthing
07/15/06	Sat	01:33 PM	10	22	55	RMS powerdown
07/15/06	Sat	03:24 PM	11	00	46	NC-5 rocket firing
07/15/06	Sat	05:08 PM	11	02	30	STS crew sleep begins
07/16/06	Sun	01:08 AM	11	10	30	Crew wakeup (flight day 13)
07/16/06	Sun	03:58 AM	11	13	20	FCS checkout
07/16/06	Sun	05:08 AM	11	14	30	Cabin stow begins
07/16/06	Sun	05:08 AM	11	14	30	RCS hotfire
07/16/06	Sun	08:58 AM	11	18	20	Crew meal
07/16/06	Sun	09:58 AM	11	19	20	L-1 communications check 1
07/16/06	Sun	09:58 AM	11	19	20	Entry video setup
07/16/06	Sun	11:38 AM	11	21	00	L-1 communications check 2
07/16/06	Sun	12:03 PM	11	21	25	PAO event (all crew members)
07/16/06	Sun	12:23 PM	11	21	45	Deorbit briefing
07/16/06	Sun	12:53 PM	11	22	15	PILOT landing training
07/16/06	Sun	01:08 PM	11	22	30	Wing leading edge gear stow
07/16/06	Sun	01:28 PM	11	22	50	Laptop computer teardown

07/16/06	Sun	01:33 PM	11	22	55	Ergometer stow
07/16/06	Sun	01:58 PM	11	23	20	NC7 rocket firing
07/16/06	Sun	02:03 PM	11	23	25	KU antenna stow
07/16/06	Sun	05:08 PM	12	02	30	Crew sleep begins
07/17/06	Mon	01:08 AM	12	10	30	Crew wakeup (flight day 14)
07/17/06	Mon	03:13 AM	12	12	35	Group B computer powerup
07/17/06	Mon	03:28 AM	12	12	50	IMU alignment
07/17/06	Mon	03:43 AM	12	13	05	GIRA stow; PGSC stow (part 2)
07/17/06	Mon	04:09 AM	12	13	31	Deorbit timeline begins
07/17/06	Mon	05:27 AM	12	14	49	Payload bay door closing
07/17/06	Mon	08:07 AM	12	17	29	Deorbit ignition (rev 186)
07/17/06	Mon	09:01 AM	12	18	23	C-band radar acquisition at KSC
07/17/06	Mon	09:14 AM	12	18	36	Landing

Compiled by William Harwood