

STS-115/ISS-12A			SpaceCalc Shuttle Mission Planner				
Eastern Time	DD	HH	MM	Updated 09/17/06 through End of Mission			
09/09/06	Sat	11:15	AM	00	00	00	<b>STS-115 Launch (flight day 1)</b>
09/09/06	Sat	11:52	AM	00	00	37	OMS-2 rocket firing
09/09/06	Sat	01:45	PM	00	02	30	Post insertion complete
09/09/06	Sat	01:45	PM	00	02	30	GIRA installation, PGSC setup
09/09/06	Sat	01:50	PM	00	02	35	Group B computer powerdown
09/09/06	Sat	01:55	PM	00	02	40	Robot arm (RMS) powerup
09/09/06	Sat	02:02	PM	00	02	47	NC-1 rendezvous rocket firing
09/09/06	Sat	02:05	PM	00	02	50	Elevon park
09/09/06	Sat	02:10	PM	00	02	55	RMS checkout
09/09/06	Sat	02:55	PM	00	03	40	RMS powerdown
09/09/06	Sat	03:05	PM	00	03	50	Umbrella downlink
09/09/06	Sat	03:15	PM	00	04	00	Wing leading edge system activation
09/09/06	Sat	03:25	PM	00	04	10	OCAC setup
09/09/06	Sat	03:40	PM	00	04	25	ET video downlink
09/09/06	Sat	03:40	PM	00	04	25	SEE setup
09/09/06	Sat	05:15	PM	00	06	00	Crew sleep begins
09/10/06	Sun	01:15	AM	00	14	00	Crew wakeup
09/10/06	Sun	02:45	AM	00	15	30	PGSC setup (part 2)
09/10/06	Sun	03:09	AM	00	15	54	NC2 rendezvous rocket firing
09/10/06	Sun	03:45	AM	00	16	30	TV setup
09/10/06	Sun	03:45	AM	00	16	30	RMS/OBSS unberth
09/10/06	Sun	05:00	AM	00	17	45	Starboard wing survey
09/10/06	Sun	05:15	AM	00	18	00	Spacesuit checkout preps
09/10/06	Sun	05:45	AM	00	18	30	Spacesuit checkout
09/10/06	Sun	06:30	AM	00	19	15	Nose cap survey
09/10/06	Sun	06:50	AM	00	19	35	OMS pod inspection
09/10/06	Sun	07:15	AM	00	20	00	Crew meals begin

09/10/06	Sun	08:15 AM	00	21	00	EVA prep for transfer
09/10/06	Sun	09:00 AM	00	21	45	Port wing survey
09/10/06	Sun	10:15 AM	00	23	00	Transfer preps
09/10/06	Sun	10:30 AM	00	23	15	OBSS berthing
09/10/06	Sun	11:15 AM	01	00	00	Upper surface survey
09/10/06	Sun	12:00 PM	01	00	45	Centerline camera installation
09/10/06	Sun	12:15 PM	01	01	00	Rendezvous tools checkout
09/10/06	Sun	12:30 PM	01	01	15	Orbiter docking system ring extension
09/10/06	Sun	01:55 PM	01	02	40	Laser dynamic range imager (LDRI) downlink
09/10/06	Sun	02:29 PM	01	03	14	NC3 rendezvous rocket firing
09/10/06	Sun	04:15 PM	01	05	00	Crew sleep begins
09/11/06	Mon	12:15 AM	01	13	00	STS/ISS crew wakeup
09/11/06	Mon	01:25 AM	01	14	10	Group B computer powerup
09/11/06	Mon	01:40 AM	01	14	25	Rendezvous timeline begins
09/11/06	Mon	02:37 AM	01	15	22	NC4 rendezvous rocket firing
09/11/06	Mon	04:00 AM	01	16	45	ISS: Verify RPM photo setup ready
09/11/06	Mon	04:08 AM	01	16	53	TI rendezvous rocket firing
09/11/06	Mon	04:20 AM	01	17	05	ISS in attitude
09/11/06	Mon	04:44 AM	01	17	29	Sunset
09/11/06	Mon	05:07 AM	01	17	52	Range: 10,000 feet
09/11/06	Mon	05:15 AM	01	18	00	Range: 5,000 feet
09/11/06	Mon	05:17 AM	01	18	02	Sunrise
09/11/06	Mon	05:20 AM	01	18	05	Begin final approach
09/11/06	Mon	05:21 AM	01	18	06	Range: 3,000 feet
09/11/06	Mon	05:25 AM	01	18	10	MC-4 rendezvous burn
09/11/06	Mon	05:29 AM	01	18	14	Range: 1,500 feet
09/11/06	Mon	05:31 AM	01	18	16	RPM start window open
09/11/06	Mon	05:34 AM	01	18	19	Range: 1,000 feet
09/11/06	Mon	05:37 AM	01	18	22	KU antenna to low power
09/11/06	Mon	05:38 AM	01	18	23	+R bar arrival directly below ISS
09/11/06	Mon	05:41 AM	01	18	26	Rendezvous pitch maneuver
09/11/06	Mon	05:43 AM	01	18	28	Range: 600 feet

09/11/06	Mon	05:46 AM	01	18	31	Noon
09/11/06	Mon	05:53 AM	01	18	38	End pitch maneuver
09/11/06	Mon	05:54 AM	01	18	39	RPM full window close
09/11/06	Mon	05:56 AM	01	18	41	Initiate pitch up maneuver
09/11/06	Mon	06:02 AM	01	18	47	RPM start window close
09/11/06	Mon	06:07 AM	01	18	52	+V bar arrival; range: 310 feet
09/11/06	Mon	06:08 AM	01	18	53	Range: 300 feet
09/11/06	Mon	06:12 AM	01	18	57	Range: 250 feet
09/11/06	Mon	06:16 AM	01	19	01	Sunset
09/11/06	Mon	06:16 AM	01	19	01	Range: 200 feet
09/11/06	Mon	06:19 AM	01	19	04	Range: 170 feet
09/11/06	Mon	06:21 AM	01	19	06	Range: 150 feet
09/11/06	Mon	06:25 AM	01	19	10	Range: 100 feet
09/11/06	Mon	06:28 AM	01	19	13	Range: 75 feet
09/11/06	Mon	06:32 AM	01	19	17	Range: 50 feet
09/11/06	Mon	06:35 AM	01	19	20	Range: 30 feet; start stationkeeping
09/11/06	Mon	06:40 AM	01	19	25	End stationkeeping; push to dock
09/11/06	Mon	06:45 AM	01	19	30	Range: 10 feet
09/11/06	Mon	06:46 AM	01	19	31	<b>Atlantis docks with space station</b>
09/11/06	Mon	06:49 AM	01	19	34	Sunrise
09/11/06	Mon	07:05 AM	01	19	50	Hatch leak checks
09/11/06	Mon	07:20 AM	01	20	05	Group B computer powerdown
09/11/06	Mon	07:35 AM	01	20	20	ODS preps for entry
09/11/06	Mon	07:55 AM	01	20	40	Hatches opened
09/11/06	Mon	08:05 AM	01	20	50	SRMS P3/P4 grapple
09/11/06	Mon	08:20 AM	01	21	05	Welcome aboard!
09/11/06	Mon	08:30 AM	01	21	15	Safety briefing
09/11/06	Mon	08:55 AM	01	21	40	SSRMS configured
09/11/06	Mon	08:55 AM	01	21	40	Post-docking EVA transfer
09/11/06	Mon	09:25 AM	01	22	10	SRMS unberths P3/4
09/11/06	Mon	09:30 AM	01	22	15	REBA checkout
09/11/06	Mon	10:15 AM	01	23	00	EVA tools configured
09/11/06	Mon	10:45 AM	01	23	30	SRMS hands P3/P4 to SSRMS

09/11/06	Mon	10:55 AM	01	23	40	SRMS ungrapples P3/4
09/11/06	Mon	11:30 AM	02	00	15	EVA camera setup
09/11/06	Mon	11:55 AM	02	00	40	EVA-1: Procedures review
09/11/06	Mon	02:40 PM	02	03	25	EVA-1: EV1, EV2 campout prebreathe
09/11/06	Mon	03:25 PM	02	04	10	EVA-1: 10.2 depress
09/11/06	Mon	03:45 PM	02	04	30	ISS crew sleep begins
09/11/06	Mon	04:15 PM	02	05	00	STS crew sleep begins (EV1/EV2 in airlock)
09/12/06	Tue	12:15 AM	02	13	00	STS/ISS crew wakeup
09/12/06	Tue	12:45 AM	02	13	30	EVA-1: Hygiene break; prebreathe
09/12/06	Tue	01:00 AM	02	13	45	EVA-1: Airlock repress
09/12/06	Tue	01:30 AM	02	14	15	EVA-1: 10.2 depress
09/12/06	Tue	02:05 AM	02	14	50	EVA-1: Campout EVA preps
09/12/06	Tue	02:05 AM	02	14	50	SSRMS moves P3/4 to pre-install position
09/12/06	Tue	03:25 AM	02	16	10	SSRMS maneuver to "ready to latch" position
09/12/06	Tue	03:35 AM	02	16	20	EVA-1: Spacesuit purge
09/12/06	Tue	03:50 AM	02	16	35	EVA-1: Spacesuit prebreathe
09/12/06	Tue	03:55 AM	02	16	40	P1/P3 bolts engaged
09/12/06	Tue	04:40 AM	02	17	25	EVA-1: Crew lock depressurization
09/12/06	Tue	04:55 AM	02	17	40	SSRMS ungrapple
09/12/06	Tue	05:10 AM	02	17	55	SSRMS moves to viewing position
09/12/06	Tue	05:15 AM	02	18	00	<b>EVA-1: Airlock egress; tool setup</b>
09/12/06	Tue	05:50 AM	02	18	35	EVA-1: EV1: Connect P1/P3 lower cable tray
09/12/06	Tue	05:50 AM	02	18	35	EVA-1: EV2: Release aft solar array blanket box restraint
09/12/06	Tue	06:50 AM	02	19	35	EVA-1: EV1: Release aft BGA restraint
09/12/06	Tue	06:50 AM	02	19	35	EVA-1: EV2: Release forward solar array blanket box restraint
09/12/06	Tue	07:15 AM	02	20	00	ISS: EVA-2 tools configured
09/12/06	Tue	07:35 AM	02	20	20	EVA-1: EV1: Solar alpha rotary joint rotate
09/12/06	Tue	07:45 AM	02	20	30	EVA-1: EV1: Unstow aft solar array blanket box restraint
09/12/06	Tue	07:50 AM	02	20	35	EVA-1: EV2: Release forward BGA restraint
09/12/06	Tue	08:15 AM	02	21	00	EVA-1: EV1: SARJ preps
09/12/06	Tue	08:15 AM	02	21	00	ISS: Expedition 13 departure preps
09/12/06	Tue	08:35 AM	02	21	20	EVA-1: EV2: unstow forward solar array blanket box

09/12/06	Tue	08:50 AM	02	21	35	EVA-1: EV1: Connect P1/P3 upper cable tray
09/12/06	Tue	09:05 AM	02	21	50	EVA-1: EV2: SARJ prep
09/12/06	Tue	10:05 AM	02	22	50	EVA-1: EV1: SARJ prep
09/12/06	Tue	10:55 AM	02	23	40	EVA-1: Cleanup
09/12/06	Tue	11:35 AM	03	00	20	EVA-1: Airlock ingress/repress
09/12/06	Tue	11:50 AM	03	00	35	12A post EVA-1
09/12/06	Tue	01:25 PM	03	02	10	EVA-2: Procedures review
09/12/06	Tue	02:40 PM	03	03	25	EVA-2: EV3/EV4 campout mask prebreathe
09/12/06	Tue	03:25 PM	03	04	10	EVA-2: Crew lock to 10.2 psi
09/12/06	Tue	03:45 PM	03	04	30	ISS crew sleep begins
09/12/06	Tue	04:15 PM	03	05	00	STS crew sleep begins (EV3/EV4 in airlock)
09/13/06	Wed	12:15 AM	03	13	00	STS/ISS crew wakeup
09/13/06	Wed	12:45 AM	03	13	30	EVA-2: Hygiene break/prebreathe
09/13/06	Wed	01:00 AM	03	13	45	EVA-2: Crew lock repress
09/13/06	Wed	01:05 AM	03	13	50	EVA camera setup
09/13/06	Wed	01:30 AM	03	14	15	EVA-2: Crew lock depress to 10.2 psi
09/13/06	Wed	02:05 AM	03	14	50	EVA-2: Campout EVA prep
09/13/06	Wed	03:35 AM	03	16	20	EVA-2: EMU purge
09/13/06	Wed	03:50 AM	03	16	35	EVA-2: EMU prebreathe
09/13/06	Wed	04:40 AM	03	17	25	EVA-2: Crew lock depressurization
09/13/06	Wed	05:15 AM	03	18	00	<b>EVA-2: Airlock egress; setup</b>
09/13/06	Wed	05:40 AM	03	18	25	SSRMS camera viewing
09/13/06	Wed	05:55 AM	03	18	40	EVA-2: EV4: SARJ prep (remove covers/restraints)
09/13/06	Wed	05:55 AM	03	18	40	EVA-2: EV3: SARJ prep (remove covers/restraints)
09/13/06	Wed	08:30 AM	03	21	15	ISS: Transfer operations
09/13/06	Wed	10:10 AM	03	22	55	EVA-2: Stow P3 keel pin and drag link
09/13/06	Wed	10:55 AM	03	23	40	EVA-2: Payload bay cleanup, airlock ingress
09/13/06	Wed	11:15 AM	04	00	00	MCC: SA/SARJ activation and checkout begins
09/13/06	Wed	11:15 AM	04	00	00	Transfer tagup
09/13/06	Wed	11:35 AM	04	00	20	EVA-2: Airlock repressurization
09/13/06	Wed	01:15 PM	04	02	00	12A EMU swap EVA-2
09/13/06	Wed	03:45 PM	04	04	30	ISS crew sleep begins

09/13/06	Wed	04:15 PM	04	05	00	STS crew sleep begins
09/14/06	Thu	12:15 AM	04	13	00	STS/ISS crew wakeup
09/14/06	Thu	03:35 AM	04	16	20	EVA tool config
09/14/06	Thu	05:40 AM	04	18	25	ERCA troubleshooting
09/14/06	Thu	06:10 AM	04	18	55	SSRMS reconfig
09/14/06	Thu	06:45 AM	04	19	30	Crew meals begin
09/14/06	Thu	07:55 AM	04	20	40	STS: 4A solar array mast deploy to 49 percent
09/14/06	Thu	08:40 AM	04	21	25	STS: 4A solar array mast deploy to 100 percent
09/14/06	Thu	09:30 AM	04	22	15	STS: 2A solar array mast deploy to 49 percent
09/14/06	Thu	10:05 AM	04	22	50	STS: 2A solar array mast deploy to 100 percent
09/14/06	Thu	11:25 AM	05	00	10	PAO event (Jett, MacLean)
09/14/06	Thu	11:45 AM	05	00	30	Transfer tagup
09/14/06	Thu	11:50 AM	05	00	35	PAO event (Jett, Vinogradov, Williams)
09/14/06	Thu	11:50 AM	05	00	35	Infrared camera setup
09/14/06	Thu	12:10 PM	05	00	55	EVA-3: Procedures review
09/14/06	Thu	02:20 PM	05	03	05	EVA-3: Campout mask pre-breathe
09/14/06	Thu	03:05 PM	05	03	50	EVA-3: Crew lock 10.2 depress
09/14/06	Thu	03:45 PM	05	04	30	ISS crew sleep begins
09/14/06	Thu	04:15 PM	05	05	00	STS crew sleep begins (EV1/EV2 in airlock)
09/15/06	Fri	12:15 AM	05	13	00	STS/ISS crew wakeup
09/15/06	Fri	12:45 AM	05	13	30	EVA-3: Hygiene break/pre-breathe
09/15/06	Fri	01:00 AM	05	13	45	EVA-3: Crew lock repress
09/15/06	Fri	01:30 AM	05	14	15	EVA-3: Crew lock depress to 10.2 psi
09/15/06	Fri	02:05 AM	05	14	50	EVA-3: Campout EVA prep
09/15/06	Fri	03:35 AM	05	16	20	EVA-3: EMU purge
09/15/06	Fri	03:50 AM	05	16	35	EVA-3: EMU pre-breathe
09/15/06	Fri	04:40 AM	05	17	25	EVA-3: Crew lock depressurization
09/15/06	Fri	05:15 AM	05	18	00	ISS: Departure preparation
09/15/06	Fri	05:15 AM	05	18	00	<b>EVA-3: Airlock egress/setup</b>
09/15/06	Fri	05:30 AM	05	18	15	EVA-3: EV1: EVA-P6 BGA clips installation
09/15/06	Fri	05:30 AM	05	18	15	EVA-3: EV2: MISSE 5 retrieval

09/15/06	Fri	06:00 AM	05	18	45	EVA-3: EV2: P4 radiator prep/deploy
09/15/06	Fri	06:25 AM	05	19	10	EVA-3: EV1: P4 radiator prep/deploy
09/15/06	Fri	06:50 AM	05	19	35	EVA-3: P3 cleanup/foot restraint move
09/15/06	Fri	07:20 AM	05	20	05	EVA-3: S-band antenna support assembly R&R
09/15/06	Fri	09:10 AM	05	21	55	EVA-3: EV2: S-band processor/transponder R&R
09/15/06	Fri	09:20 AM	05	22	05	EVA-3: EV1: KU thermal blanket install
09/15/06	Fri	09:40 AM	05	22	25	EVA-3: EV1: EWIS antenna installation
09/15/06	Fri	10:10 AM	05	22	55	EVA-3: EV2: EWIS antenna installation
09/15/06	Fri	10:30 AM	05	23	15	EVA-3: EV1: Infrared camera DTO
09/15/06	Fri	11:15 AM	06	00	00	EVA-3: Cleanup
09/15/06	Fri	11:35 AM	06	00	20	EVA-3: Airlock repressurization
09/15/06	Fri	11:50 AM	06	00	35	Post-EVA spacesuit servicing
09/15/06	Fri	12:50 PM	06	01	35	MT move from WS-7 to WS-8
09/15/06	Fri	01:45 PM	06	02	30	BSA init
09/15/06	Fri	02:20 PM	06	03	05	MT/WS-8 checkout
09/15/06	Fri	02:35 PM	06	03	20	MT move from WS-8 to WS-4
09/15/06	Fri	03:45 PM	06	04	30	ISS crew sleep begins
09/15/06	Fri	04:15 PM	06	05	00	STS crew sleep begins
09/16/06	Sat	12:15 AM	06	13	00	STS/ISS crew wakeup
09/16/06	Sat	03:15 AM	06	16	00	STS crew off duty time begins
09/16/06	Sat	07:15 AM	06	20	00	Joint crew meal
09/16/06	Sat	08:15 AM	06	21	00	Joint crew photo
09/16/06	Sat	08:35 AM	06	21	20	<b>Joint crew news conference</b>
09/16/06	Sat	09:10 AM	06	21	55	Speed brake
09/16/06	Sat	09:15 AM	06	22	00	REBA removal
09/16/06	Sat	09:35 AM	06	22	20	PAO event (STS CDR, MS1, MS2, MS3, MS4)
09/16/06	Sat	09:50 AM	06	22	35	Transfers continue
09/16/06	Sat	09:50 AM	06	22	35	EVA prep for shuttle transfer
09/16/06	Sat	01:25 PM	07	02	10	Transfer tagup
09/16/06	Sat	03:45 PM	07	04	30	ISS crew sleep begins
09/16/06	Sat	04:15 PM	07	05	00	STS crew sleep begins

09/17/06	Sun	12:15 AM	07	13	00	STS/ISS crew wakeup
09/17/06	Sun	02:35 AM	07	15	20	Transfers resume
09/17/06	Sun	03:35 AM	07	16	20	Rendezvous tools checkout
09/17/06	Sun	04:15 AM	07	17	00	O2 transfer hardware teardown
09/17/06	Sun	04:35 AM	07	17	20	Transfer tagup
09/17/06	Sun	05:00 AM	07	17	45	Joint crew meal
09/17/06	Sun	06:00 AM	07	18	45	Farewell ceremony
09/17/06	Sun	06:24 AM	07	19	09	Hatch closure
09/17/06	Sun	06:45 AM	07	19	30	Centerline camera installation
09/17/06	Sun	06:45 AM	07	19	30	ODS leak check
09/17/06	Sun	07:30 AM	07	20	15	Spacesuit installation
09/17/06	Sun	07:30 AM	07	20	15	Group B computer powerup
09/17/06	Sun	08:00 AM	07	20	45	Undocking timeline begins
09/17/06	Sun	08:50 AM	07	21	35	<b>Atlantis undocks from space station</b>
09/17/06	Sun	10:05 AM	07	22	50	Separation burn No. 1
09/17/06	Sun	10:30 AM	07	23	15	PMA-2 depressurization
09/17/06	Sun	10:33 AM	07	23	18	Separation burn No. 2
09/17/06	Sun	10:35 AM	07	23	20	Group B computer powerdown
09/17/06	Sun	11:15 AM	08	00	00	Undocking videotape replay
09/17/06	Sun	12:15 PM	08	01	00	NC-5 rocket firing
09/17/06	Sun	03:15 PM	08	04	00	STS crew sleep begins
09/17/06	Sun	03:45 PM	08	04	30	ISS crew sleep begins
09/17/06	Sun	11:15 PM	08	12	00	STS crew wakeup
09/18/06	Mon	02:15 AM	08	15	00	NC-6 rocket firing
09/18/06	Mon	02:20 AM	08	15	05	OBSS unberth
09/18/06	Mon	03:25 AM	08	16	10	OBSS starboard wing leading edge survey
09/18/06	Mon	04:20 AM	08	17	05	Cabin stow begins
09/18/06	Mon	04:55 AM	08	17	40	OBSS nose cap survey
09/18/06	Mon	06:25 AM	08	19	10	Crew meal
09/18/06	Mon	07:25 AM	08	20	10	OBSS port wing leading edge survey
09/18/06	Mon	08:55 AM	08	21	40	OBSS berthing
09/18/06	Mon	09:30 AM	08	22	15	SRMS berthing and powerdown



09/18/06	Mon	10:15 AM	08	23	00	LDRI downlink
09/18/06	Mon	01:20 PM	09	02	05	NC-7 rocket firing
09/18/06	Mon	02:45 PM	09	03	30	Crew sleep begins
09/18/06	Mon	10:15 PM	09	11	00	Crew wakeup
09/19/06	Tue	12:50 AM	09	13	35	Cabin stow begins
09/19/06	Tue	02:05 AM	09	14	50	Flight control system checkout
09/19/06	Tue	02:18 AM	09	15	03	NC-8 rocket firing
09/19/06	Tue	03:15 AM	09	16	00	RCS hotfire
09/19/06	Tue	05:00 AM	09	17	45	Deorbit review
09/19/06	Tue	05:30 AM	09	18	15	Crew meal
09/19/06	Tue	06:35 AM	09	19	20	<b>PAO event (entire crew)</b>
09/19/06	Tue	06:55 AM	09	19	40	Crew off duty time begins
09/19/06	Tue	08:55 AM	09	21	40	Entry video setup
09/19/06	Tue	04:00 AM	09	16	45	CDR, PLT PILOT landing practice
09/19/06	Tue	10:25 AM	09	23	10	Laptop computer teardown (part 1)
09/19/06	Tue	10:30 AM	09	23	15	Ergometer stow
09/19/06	Tue	11:00 AM	09	23	45	Ku-band antenna stow
09/19/06	Tue	11:29 AM	10	00	14	NC-9 rocket firing
09/19/06	Tue	01:45 PM	10	02	30	Crew sleep begins
09/19/06	Tue	09:45 PM	10	10	30	Crew wakeup
09/19/06	Tue	11:50 PM	10	12	35	Group B powerup
09/20/06	Wed	12:05 AM	10	12	50	Navigation system alignment
09/20/06	Wed	12:35 AM	10	13	20	Laptop computer teardown (part 2)
09/20/06	Wed	12:40 AM	10	13	25	OCAC, GIRA stow
09/20/06	Wed	12:55 AM	10	13	40	<b>Deorbit timeline begins</b>
09/20/06	Wed	04:56 AM	10	17	41	<b>Deorbit ignition (orbit 170)</b>
09/20/06	Wed	05:58 AM	10	18	43	<b>Landing</b>

Compiled by William Harwood