



# Space Shuttle Mission 2007



Designed By: Michael Swannick

## Mission Checklist STS-26

### Crew Members

Commander - Frederick H. Hauck | Pilot - Richard O. Covey

#### Mission Specialist

John M. Lounge | George D. Nelson | David C. Hilmers

### Mission Highlights

Carried out by Discovery on September 29, 1988. Primary payload, NASA Tracking and Data Relay Satellite-3 (TDRS-3) attached to an Inertial Upper Stage (IUS), became the second TDRS deployed. After deployment, the IUS propelled the satellite to geosynchronous orbit.

### Payload

Tracking & Data Relay Satellite (TDRS-C). Boosted to GEO orbit by an Inertial Upper Stage (IUS)

Physical Vapor Transport of Organic Solids (PVTOS). A 3M sponsored experiment to produce organic thin films with ordered crystalline structures.

Protein Crystal Growth Experiment (PCG). Experiments to be conducted that are expected to help advance a technology attracting intense interest from major pharmaceutical houses, the biotech industry and agrochemical companies.

Infrared Communications Flight Experiment (IRCFE). Experimental voice communications via infrared, rather than standard radio frequency waves.

Automated Directional Solidification Furnace (ADSF). A space furnace developed and managed by Marshall Space Flight Center, designed to demonstrate the possibility of producing better performing magnetic composite materials in a microgravity environment.

Aggregation of Red Blood Cells (ARC). Blood samples from donors with such medical conditions as heart disease, hypertension, diabetes and cancer will help determine if microgravity can play a beneficial role in new and existing clinical research and medical diagnostic tests.

Isoelectric Focusing (IEF). A type of electrophoresis experiment which separates proteins in an electric field according to their surface electrical charge.

Mesoscale Lighting Experiment (MLE). An experiment designed to obtain night time images of lighting in an attempt to better understand the effects of lightning discharges, storm microburst's, wind patterns and to determine interrelationships over an extremely large geographical area.

Phase Partitioning Experiment (PPE). Experiment designed to understand the role of gravity and other physical forces in separating and partitioning biological substances between two unmixable liquid phases.

Earth Limb Radiance Experiment (ELRAD). Experiment developed by the Barnes Engineering Co., designed to photograph the Earth's horizon twilight glow near sunrise and sunset.

Orbiter Experiments Autonomous Supporting Instrumentation System (OASIS). Instruments designed to collect and record a variety of environmental measurements during various in-flight phases of the Shuttle.

Shuttle Student Involvement Program (SSIP). Two experiments from the State University of New York, and University of Missouri.

### Flight Summary

Launchpad: Kennedy Space Center (KSC) 39B | Orbit: 204NM | Inclination: 28.5 | Orbits: 64

Duration: 4 Days, 1 Hour, 0 Minutes, 11 Seconds | Landing: Edwards Air Force Base



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 1 of 2

## PRE-LAUNCH CHECKLIST

Page 1 of 2

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	PANEL AREA & NOTES
1	T-00:01:50:00				Astronauts Enter The Shuttle
2	T-00:01:40:00	Overhead Left Panel	O5	* Set Left Audio XMIT/ICOM MODE To VOX/VOX * Set Left Audio A/G (1 & 2) To T/R * Set Left Audio A/A To T/R * Set Left Audio ICOM (A & B) To T/R * Set Left Audio (AUD) Power Switch To AUD/TONE	Activates Commander Communications
3	T-00:01:35:00	Overhead Right Panel	O9	* Set Right Audio XMIT/ICOM MODE To VOX/VOX * Set Right Audio A/G (1 & 2) To T/R * Set Right Audio A/A To T/R * Set Right Audio ICOM (A & B) To T/R * Set Right Audio (AUD) Power Switch To AUD/TONE	Activates Pilot Communications
5	T-00:01:20:00	Front Left Panel	F6	* Check ABORT Light (DIM/BRIGHT/DIM) For 8 Seconds	Abort Advisory Check
6	T-00:01:10:00				Flight Control Confirms With Commander That The Side Hatch Is Closed & Locked
7	T-00:01:05:10	Left Panel	L2	* Set CABIN VENT ISOL To CLOSE	Cabin Leak Check
		Front Left Panel	F2	* Set CABIN VENT To CLOSE * Press MASTER ALARM	Cancel Master Alarm Sound
8	T-00:00:51:00				Pilot Confirms IMU Alignment
9	T-00:00:50:00	Right Panel	R2	* Check BOILER PWR (1/2/3) Are ON * Check BOILER CNTLR/HTR (1/2/3) Are On - A * Set BOILER N2 Supply (1/2/3) To ON	Confirm Boiler Power On
10	T-00:00:45:00	Left Panel	L2	* Set CABIN VENT/VENT To OPEN	Open Cabin Vent
11	T-00:00:42:00	Center Panel	C3	* Set BFC CRT DISPLAY To ON	Enable Backup Flight System (BFS) And
			C2	* Confirm BFC CRT SELECT Is At (3+1) * Enter ITEM 25 EXEC (Use Left Keypad)	Execute Computer Data Transfer To BFS Copy Primary Avionics SW To BFS
12	T-00:00:36:40	Left Panel	L2	* Set CABIN VENT To CLOSE	Cabin Leak Check - Continued
		Overhead Low Panel	O1	* Set CABIN VENT ISOL To OPEN * Check CABIN dP/dT Gauge For Possible Depressurization	
13	T-00:00:33:20	Left Panel	L2	* Set CABIN VENT ISOL To Close * Check CABIN VENT Is CLOSED	Cabin Pressurization Check Complete
14	T-00:00:30:00	Center Panel	C2	* Enter OPS 101 PRO (Use Right Keypad) * Enter SPEC 99 PRO (Use Right Keypad) * Press RESUME (Use Right Keypad)	Load OPS 1 - Planned 10 Minute Hold Load First Stage SW Into Primary Avionics System
15	T-00:00:29:00	Center Panel	C2	* Enter OPS 101 PRO (Use Left Keypad)	Load OPS 1 Into The BFS
16	T-00:00:26:00	Right Panel	R2	* Set He ISOLATION A (LEFT/CRT/RIGHT) To Open * Set He ISOLATION B (LEFT/CRT/RIGHT) To Open * Set PNEUMATICS He ISOL To Open * Set 6 ENGINE POWER Switches (LEFT/CTR/RIGHT) To ON	Begin The Main Propulsion System (MPS) Helium (He) Pressurization
17	T-00:00:15:00	Front Left Panel	F6	* Check ABORT Light ON/OFF For 8 Seconds	Final Test Of The ABORT System
		Center Panel	C3	* Set CAUTION/WARNING MEMORY To CLEAR	Clear C/W Memory
18	T-00:00:09:00	Center Panel	C3	* Set Timer Thumbwheels To 0900 * Set TIMER Switch To SET * Check EVENT TIMER MODE Is DOWN	Enable Countdown From Nine (9) Minutes
605	T-00:00:09:00	Center Panel Front Center Panel	C3 F7	* Set EVENT TIMER CONTROL To START * Confirm EVENT TIMER Display Continues The Countdown	Start The Nine (9) Minute Countdown
19	T-00:00:08:00	Right Panel	R1 R2	* Set ESS BUS SOURCE (MN B/C, MN C/A, MN A/B) To ON * Check APU FUEL TK VLV (1/2/3) Are CLOSED * Check APU AUTO SHUT DOWN (1/2/3) Are Enable * Check HYD MAIN PUMP PRESS (1/2/3) Are LOW * Check APU SPEED SELECT (1/2/3) Are NORM * Check HYD CIRC PUMP (1/2/3) Set To GPC * Set APU CNTLR PWR (1/2/3) To ON	Enable Fuel Cells The Crew Access Arm Is Retracting APU Prestart Check Is Underway
20	T-00:00:05:10	Right Panel  Front Center Panel Right Panel Front Center Panel Front Left Panel Right Panel	R2  F7 R2 F7 F2 R2	* Set APU FUEL TK VLV (1/2/3) To Open * Check APU/HYD READY To START (1/2/3) Repeaters-(White) * Set APU OPERATE (1/2/3) To START/RUN * Check HYDRAULIC (APU) Pressure 900psi (Use MFD #2) * Set HYD MAIN PUMP PRESS (1/2/3) To NORM * Check HYDRAULIC (APU) Pressure 3000psi (Use MFD #2) * Press MASTER ALARM (If Required) * Set HYD CIRC PUMP (1/2/3) Set To OFF	APU Start   The Master Alarm May Sound Until APU Pressure Reaches 3000 PSI. (Silence Alarm)
21	T-00:00:04:30 T-00:00:04:10	Left Panel	L2	* Set FLASH EVAP FEEDLINE HTR A & B SUPPLY To OFF	The Shuttle Is On Internal Power. Turn Off Flash Evaporator Feed Line & Heater Supply APU Check Complete
22	T-00:00:03:45 T-00:00:03:05				Start Hydraulic Check, Aero Surfaces Are Moved, A Gimbal Check Is Performed Hydraulic Check Complete
23	T-00:00:02:55				External Tank Liquid Oxygen (LOX) Vents Are Closing & The External Tank Begins To Pressurize. External Tank Cap Is Retracted.
24	T-00:00:02:00	Right Panel  Center Panel	R2 R1 C3	* Set APU AUTO SHUT DOWN (1/2/3) To INHIBIT * Set AC BUS SNSR (1/2/3) To MONITOR * Set CAUTION/WARNING MEMORY To CLEAR	APU Power - Inhibit
25	T-00:00:01:40 T-00:00:01:20				Liquid Hydrogen External Tanks Close. Go For Launch Announcement.



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 2 of 2

## PRE-LAUNCH CHECKLIST

Page 2 of 2

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	PANEL AREA & NOTES
25	T-00:00:01:00 T-00:00:00:30				One Minute Countdown Announcement Thirty Seconds Countdown Announcement
26	T-00:00:00:15				Begin Countdown To Liftoff The Shuttles Main Engines Will Ignite At T-00:00:00:05. A Staggered Start Of The Main Engines Will Commence In 120 millisecond Intervals. The Two SRB's Will Ignite At T-00:00:00:00, Followed By An Almost Instantaneous Liftoff. Once The Shuttle Clears The Tower, It Will Complete A Roll Maneuver.
26	T-00:00:00:00				Shuttle Liftoff

## Commence Ascent Checklist



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 1 of 3

## ASCENT CHECKLIST

Page 1 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
27	T+00:00:00:30 T+00:00:01:05				Main Engines Throttle Down To 65% Main Engines Throttle Up To 104%
28	T+00:00:02:00 T+00:00:02:05	Front Center Panel	F7	* Check Pressure Pc<50 (MFD / CRT 1)	Standby For SRB Separation SRB Separation
602	T+00:00:03:00	Overhead Low Panel	O1	* Check FREON - EVAP OUT TEMP Gauge Shows Below 60 Degrees	Check Flash Evaporator Is Operational
29	T+00:00:04:20				Negative Return
30	T+00:00:06:56				Single Engine Press To MECO
31	Mission Dep.				Engines Throttle Down In Preparation For Main Engine Cutoff (MECO) MECO
32	Mission Dep.	Front Center Panel	F7	* Check MAIN ENGINE STATUS Lights (Left/CTR/Right) Are Red	Confirm Main Engine Shutdown External Tank Separation
34	Mission Dep.	Left Panel  Center Panel Right Panel  Front Left Panel Front Right Panel Center Panel	L1 L2 C3 R1  F6 F8 C3	* Set FLASH EVAP CONTROLLER PRI A & PRI B To ON * Set FLASH EVAP FEEDLINE HTR A SUPPLY & B SUPPLY To 1 * Set BFC CRT DISPLAY To OFF * Set AC BUS SNSR (1/2/3) To AUTO TRIP * Set O2 TK 1 (B) & O2 TK 2 (B) HEATERS To AUTO * Set H2 TK 1 (B) & H2 TK 2 (B) HEATERS To AUTO * Check FLT CNTLR POWER Is OFF * Check FLT CNTLR POWER Is OFF * Check ORBIRAL DAP - CONTROL Is Set To AUTO	Remaining MPS Propellants Are Dumped Automatically.  Main Engines Are Gimbaled Down During The Dump
35	Mission Dep.	Center Panel	C3	* Enter OPS 105 PRO (Use Left Keypad)	Prepare To Circularize Orbit
36	Mission Dep.	Center Panel  Overhead Aft Panel  Center Panel	C3 C2  O14 O16 C3	* Check ORBIRAL DAP - CONTROL Is Set To AUTO * Enter ITEM 22 EXEC (Use Right Keypad) * Enter ITEM 27 EXEC (Use Right Keypad) * Enter ITEM 23 EXEC (Use Right Keypad) * Set L OMS ENG VLV Is ON * Set R OMS ENG VLV Is ON * Set OMS ENG (LEFT & RIGHT) Are Set To ARM/PRESS	Circularize Orbit
37	Mission Dep.	Right Panel	R2  R4	* Set 6 ENGINE POWER Switches (LEFT/CTR/RIGHT) To OFF * Set He ISOL A (LEFT/CTR/RIGHT) To GPC * Set He ISOL B (LEFT/CTR/RIGHT) To GPC * Set PNEUMATICS He ISOL To GPC * Set H2 PRESS LINE VENT To OPEN	Propellant Dump Complete
38	Mission Dep.	Right Panel	R2  R4	* Set ET UMBILICAL DOOR - MODE GPC To GPC/MAN * Set CENTERLINE LATCH To STOW * Set LEFT & RIGHT Door To CLOSE * Check Talkback Shows CLOSE * Set LEFT & RIGHT LATCH To LATCH * Check Talkback Shows CLOSED & LATCHED * Set LEFT & RIGHT DOOR To OFF * Set LEFT & RIGHT LATCH To OFF * Set HYD MAIN PUMP PRESS (1/2/3) To LOW * Set APU OPERATE - START/RUN (1/2/3) To OFF * Set APU FUEL TK VLV (1/2/3) To CLOSE * Set APU CNTLR PWR (1/2/3) To OFF * Set BOILER PWR (1/2/3) To OFF * Set BOILER N2 SUPPLY (1/2/3) To OFF * Set HYD CIRC PUMP (1/2/3) To GPC * Set H2 PRESS LINE VENT To GND	Close & Latch The ET Umbilical Doors. APU Shutdown
39	Mission Dep.	Center Panel	C2	* Press EXEC - Confirms ready for OMS burn (Use Right Keypad)	Confirm OMS Burn
40	Mission Dep.	Right Panel Center Panel	R4 C3	* Set PROPELLANT FILL/DRAIN LH 2 OUTBD & INBD To OPEN * Set OMS ENG LEFT & RIGHT To OFF	Liquid He Manual Dump
41	Mission Dep.	Overhead Aft Panel  Right Panel	O17  R4	* Set ATVC (1/2/3/4) To OFF * Set Engine Interface Units - EIU (L-C / C-R / R-L) To OFF * Set MEC (1 & 2) To OFF * Set MPS/TVC ISOL VLV - (SYS 1, SYS 2, SYS 3) To CLOSE	Turn Off Main Engine Controllers
42	Mission Dep.	Right Panel  Center Panel Front Left Panel	R4  C3 F6	* Set PROPELLANT FILL/DRAIN - LH2 OUTBD To GND * Check PROPELLANT FILL/DRAIN - LH2 INBD To OPEN * ORBITAL DAP/MANUAL MODE - ROTATION YAW, VERN=ON * Set FLIGHT CNTLR POWER To ON * Rotate The Shuttle To Zero Attitude (Pitch/Roll)   (Joystick - RHC)	Set Liquid H2 Outboard Fill And Drain Valve To Ground Control.  Enable Manual Control Of The RCS Align All ADI Needles
43	Mission Dep.	Right Panel Aft Left Panel  Right Panel Aft Left Panel	R4 A12  R4 A12	* Set HYDRAULICS - BRAKE HEATERS (A/B/C) To AUTO * Set APU HEATER - GAS GEN/FUEL PUMPS (1/2/3) To A AUTO * Set APU HEATER - LUBE OIL LINES (1/2/3) To A AUTO * Set TANK/FUEL LINE/H2O (SYS 1A, SYS 2A, SYS 3A) To AUTO * Set HYDRAULIC HEATER - RUDDER SPD BRK To A AUTO * Set HYDRAULICS - BRAKE HEATERS (A/B/C) To AUTO * Set APU HEATER - GAS GEN/FUEL PUMPS (1/2/3) To A AUTO * Set APU HEATER - LUBE OIL LINES (1/2/3) To A AUTO * Set TANK/FUEL LINE/H2O (SYS 1A, SYS 2A, SYS 3A) To AUTO * Set HYDRAULIC HEATER - RUDDER SPD BRK To A AUTO	Thermal Condition The Shuttle
44	Mission Dep.	Aft Right Panel	A14	* Set RCS/OMS HEATERS - FWD RCS To A AUTO * Set RCS/OMS HEATERS - LEFT POD To A AUTO	





# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 2 of 3

## ASCENT CHECKLIST

Page 2 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
44	Mission Dep.	Aft Right Panel	A14	* Set RCS/OMS HEATERS - RIGHT POD To A AUTO * Set RCS/OMS HEATERS - FWD RCS JET (1/2/3/4/5) To AUTO * Set RCS/OMS HEATERS - AFT RCS JET (1/2/3/4/5) To AUTO * Set RCS/OMS HEATERS - OMS CRSFD LINES To A AUTO * Set PORT RMS HEATER To AUTO A * Set TOPPING EVAP HEATER - NOZZLE (L & R) To A AUTO * Set TOPPING EVAP HEATER - DUCT Selector To A/B * Set HI LOAD EVAP - HI LOAD DUCT HTR Selector To A/B	
45	Mission Dep.	Left Panel Left Panel  Overhead Aft Panel	L2  L1 O14 O15 O16  O15	* Set O2 SYS 2 SUPPLY To CLOSE * Set N2 SYS 2 SUPPLY To CLOSE * Set N2 SYS 2 REG INLET To CLOSE * Set H2O LOOP 2 BYPASS - MODE To AUTO * Set H2O PUMP - LOOP 1 To OFF   H2O PUMP - LOOP 2 To GPC * Set RGA 1 To OFF * Set RGA 2 & 4 To OFF * Set RGA 3 To OFF * Set ACCEL 3 To OFF * Set ACCEL 4 To OFF	
46	Mission Dep.	Overhead Left Panel Right Aft Panel  Overhead Left Panel	O6 R11L  O6	* Set GENERAL PURPOSE COMPUTER - MODE 5 To HALT * Check MAJ FUNC Set To GNC * Enter OPS 201 PRO (AFT Keypad) * Set MAJ FUNC To SM * Press GPC/CRT (AFT Keypad) * Enter 4 EXEC (AFT Keypad) * Enter OPS 201 PRO (AFT Keypad) * Set GENERAL PURPOSE COMPUTER - MODE 3 To HALT	Configure Computers For Orbit Switch To On-Orbit SW Mode Load GPC 1/2/3 With GNC SW  GPC 3 Preserves Independent Source Data GPC 4 Contains System Management Data GPC 5 Retains The Backup Flight System
47	Mission Dep.	Left Panel	L1 L2	* Set RAD CONTROLLER - (LOOP 1 & LOOP 2) To AUTO A * Set RAD CONTROLLER - BYPASS MODE (1 & 2) To AUTO * Set FREON LOOP ISOLATION - MODE To AUTO	Activate Radiator Cooling
48	Mission Dep.	Right Aft Panel	R11L  R13L	* Confirm MAJOR FUNC Is Set To SM * Enter OPS 202 PRO (AFT Keypad) * Enter ITEM 3 EXEC * Enter ITEM 1 EXEC * Set PL BAY DOOR (SYS 1 & SYS 2) To ENABLE * Set PL BAY DOOR To OPEN * Confirm PL BAY DOOR Talkbacks Show DEP	Open Payload Doors PL BAY DOOR SPEC Display Enable Auto Mode Enable AC Power  Opening Both PL Doors Takes 3 Minutes Indicating Both PL Doors Are Open
49	Mission Dep.	Right Aft Panel	R13L	* Set PL BAY MECH PWR (SYS 1 & SYS 2) To ON * Set RADIATOR LATCH (SYS A & SYS B) To RELEASE * Check RADIATOR LATCH SYS Talkbacks Indicate REL * Set RADIATOR CONTROL (SYS A & SYS B) To DEPLOY * Check RADIATOR CONTROL SYS Talkbacks Indicate DEP	Deploy Radiators Indicating That The Radiators Are Ready For DEP. Deploying Both Radiators Takes 30 Seconds. Indicating Both Radiators Are Deployed.
50	Mission Dep.	Right Aft Panel	R13L  R11L	* Set RADIATOR LATCH (SYS A & SYS B) To OFF * Set RADIATOR CONTROL (SYS A & SYS B) To OFF * Set PL BAY DOOR To STOP * Set PL BAY MECH PWR (SYS 1 & SYS 2) To OFF * Set PL BAY DOOR (SYS 1 & SYS 2) To DISABLE * Enter ITEM 2 EXEC (AFT Keypad)	Disable All Power To PL Doors And Radiators.  Disable AC Power To The Doors
51	Mission Dep.	Right Aft Panel	R11U	* Set FUEL CELL - PURGE HEATER To GPC * Set H2O LINE HTR & H2O RELIEF HTR To A AUTO * Confirm PURGE VALVES (1/2/3) Are On GPC * Confirm STARTUP HEATER (1/2/3) Are Set To ENABLE * Set GPC PURGE SEQ To START - Press START For 3 Seconds * Confirm GPC PURGE SEQ START Talkback Is WHITE	Initiate Fuel Cell Purge
52	Mission Dep.	Right Aft Panel  Left Panel	R11L  L1	* Confirm MAJOR FUNC Is Set To SM * Enter SPEC 69 PRO (AFT Keypad) * Enter SPEC 88 PRO (AFT Keypad) * Set FLASH EVAP CONTROLLER (PRI A & PRI B) To OFF * Set FLASH EVAP CONTROLLER - SEC To OFF * Set HILOAD EVAP To OFF	Check Purge Process On The SPEC Display Check Coolant Loops  Secure The Flash Evaporator
53	Mission Dep.	Overhead Left Panel  Right Aft Panel	O6  R11L	* Set STAR TRACKER POWER (-Y & -Z) To ON * Set DOOR CONTROL (SYS 1 & SYS 2) To OPEN * Check DOOR CONTROL (SYS 1 & SYS 2) Talkbacks Are OP * Set DOOR CONTROL (SYS 1 & SYS 2) To OFF * Set MAJ FUNC To GNC * Enter SPEC 22 PRO (AFT Keypad) * Enter ITEM 3 EXEC (AFT Keypad) * Enter ITEM 4 EXEC (AFT Keypad)	Deploy & Activate The Star Trackers  Indicating The ST Doors Are Open
54	Mission Dep.	Right Aft Panel	R11L	* Check MAJ FUNC To GNC * Enter SPEC 21 PRO (AFT Keypad) * Enter ITEM 16 EXEC (AFT Keypad)	Initiate IMU Alignment
55	Mission Dep.	Overhead Center Panel	O7	* Set GPS 1 POWER To ON * Set GPS 1 PRE AMPL UPPER To ON * Set GPS 1 PRE AMPL LOWER To ON * Set GPS 2 POWER To ON * Set GPS 2 PRE AMPL UPPER To ON * Set GPS 2 PRE AMPL LOWER To ON	Activate Global Positioning System (GPS) Activate GPS 1 Activate GPS 2 Activate GPS 3



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 3 of 3

## ASCENT CHECKLIST

Page 3 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
55	Mission Dep.	Overhead Center Panel	O7	* Set GPS 3 POWER To ON * Set GPS 3 PRE AMPL UPPER To ON * Set GPS 3 PRE AMPL LOWER To ON * Set DUMP ISOL VLV To OPEN	Activate Global Positioning System (GPS)
59	Mission Dep.	Right Aft Panel  Right Aft Panel   Aft Right Panel Right Aft Panel	R11L  R13L  A1U R11L	* Check MAJ FUNC To GNC * Enter SPEC 25 PRO (AFT Keypad) * Set KU ANTENNA To DEPLOY * Check KU ANTENNA Talkback For DEP * Set KU ANTENNA To GND * Set KU BAND POWER To STBY * Check MAJ FUNC To GNC * Enter SPEC 33 PRO (AFT Keypad) * Enter ITEM 2 EXEC (AFT Keypad)	Deploy KU Antenna Indicates Status For All THC/RHC (Joysticks). KU Antenna Deployment Takes 15 Seconds Indicates KU Antenna Is Deployed  Enable KU Antenna
60	Mission Dep.				Shuttle Is Configured & Ready For Mission

### Commence On-Orbit Mission



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 1 of 1

## STS-26 MISSION CHECKLIST

Page 1 of 1

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	PANEL AREA & NOTES
1100	Mission Dep.				Deploy Data Tracking Relay Satellite: TDRS-3 Select Next Event
1105	Mission Dep.	Right Panel	R1	* Set Power Distribution (PRI MN B-PRI FC 3-PRI MN C) To ON	Enable Shuttle Power To The IUS
1110	Mission Dep.	Left Aft Panel	L12	* STANDARD SWITCH PANEL   Set IUS LATCH To RELEASE	Releases The TDRS-3 Latch
1111	Mission Dep.			* STANDARD SWITCH PANEL   Set IUS ELEV Switch UP	Pitch IUS Up To 29 Degrees
1113	Mission Dep.				Ground Control Checkout Of The IUS Next Event
1115	Mission Dep.	Front Left Panel	F6	* Rotate Shuttle To Release Attitude (Pitch/Roll)   Joystick - RHC)	(Roll=0 - Pitch=35 - Yaw=90)
1116	Mission Dep.	Left Aft Panel	L12	* STANDARD SWITCH PANEL   Set IUS POWER To ON	Enable IUS Internal Power
1117	Mission Dep.	Left Aft Panel	L12	* Set IUS ELEV Switch To The UP Position	On Internal Power, IUS Pitched Up To 57*
1118	Mission Dep.	Left Aft Panel	L12	* Set The SEPARATE IUS Switch To The UP Position	The IUS Is Released
1120	Mission Dep.				The IUS Is Now Spring Jettisoned From The Shuttle
1125	Mission Dep.	Center Panel	C2 C3 C2	* Enter OPS 202 PRO (Right Keypad) - If Not Already Entered * Enter ITEM 22 EXEC (Left Keypad) * Enter ITEM 27 EXEC (Left Keypad) * Enter ITEM 23 EXEC (Left Keypad) * Set OMS ENG (Left & Right) To ARM/PRESS * Press EXEC - (Right Keypad) Confirms ready for OMS burn	OMS Separation Burn
1126	Mission Dep.	Center Panel	C3	* Set OMS ENG (Left & Right) To OFF	Disable OMS
1127	Mission Dep.	Left Aft Panel	L12	* Set IUS ELEV To The UP Position	Stow The IUS
1128	Mission Dep.				Next Event
1130	Mission Dep.				IUS Stage 1 Ignites & Raises The Apogee Of The TDRS
1131	Mission Dep.				First Stage Burn Time Is Approximately 145 Seconds
1132	Mission Dep.				First Stage Burns Out, 15 Seconds Latter The IUS First Stage Is Jettisoned
1133	Mission Dep.				IUS Separation Is Complete Next Event
1135	Mission Dep.				The Satellite Approaches Apogee IUS Stage 2 Ignites Shortly After Apogee Is Achieved
1136	Mission Dep.				Second Stage Burn Time Is Approximately 145 Seconds
1137	Mission Dep.				Second Stage Burns Out, 15 Seconds Latter The IUS Second Stage Is Jettisoned
1138	Mission Dep.				Onboard Mission Complete Next Event
				Commence Deorbit & Landing	



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 1 of 3

## DEORBIT & LANDING CHECKLIST

Page 1 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
1000	Mission Dep.	Left Panel	L1	* Set RAD CONTROLLER - OUT TEMP To HIGH * Set RAD CONTROLLER (LOOP 1 & LOOP 2) To OFF * Set RAD CONTROLLER - BYPASS MODE (1 & 2) To MAN * Confirm RAD FLOW BYPASS VALVE Talkbacks Display (BYP) * Confirm The HI LOAD EVAP ENABLE Is Set To OFF * Set FLASH EVAP CONTROLLER (PRI A & PRI B) To ON * Set FLASH EVAP CONTROLLER - SEC   GPC To ON	Trap Cold Freon In The Bay Radiators  If The Rad Bypass Valve Talkbacks Do Not Display (BYP), Set The Manual Rad Flow Bypass Switches 1 & 2 To Bypass.
1001	Mission Dep.	Right Aft Panel  Aft Right Panel Right Aft Panel	R11L  A1U R13L  R11L	* Set The MAJ FUNC Switch To GNC * Enter SPEC 33 PRO (AFT Keypad) * Enter ITEM 2 EXEC (AFT Keypad) * Enter ITEM 1 EXEC (AFT Keypad) * Set KU BAND POWER To OFF * Set KU Antenna To STOW * When KU Antenna Talkback Shows STO, Set KU Antenna To GND * Enter SPEC 22 PRO (Aft Keypad) * Enter ITEM 9 EXEC (Aft Keypad) * Enter ITEM 10 EXEC (Aft Keypad)	Deactivate & Stow The KU Antenna  <b>NOTE:</b> Rendezvous Navigation Has Been Used It Must Be Disabled.  Confirm On CRT 4 There Are No Asterisks Besides The Following Entries. RNDZ NAV ENA 1 KU ANT ENA 2 MEAS ENA 3
1002	Mission Dep.	Right Aft Panel	R13L	* Set PL BAY MECH PWR (SYS 1 & SYS 2) To ON * Set RADIATOR CONTROL (SYS A & SYS B) To STOW * Set LATCH CONTROL (SYS A & SYS B) To LATCH * Set LATCH CONTROL (SYS A & SYS B) To OFF * Set RADIATOR CONTROL (SYS A & SYS B) To OFF * Set PL BAY MECH PWR (SYS 1 & SYS 2) To OFF	Stow The Radiators  Wait Until The RADIATOR CONTROL Talkbacks Show STO Before Setting The LATCH CONTROLS SYS 1 & SYS 2 To LATCH. Wait Until Latch Control Talkbacks Show LAT Before Turning Off ALL Radiators.
1003	Mission Dep.	Overhead Left Panel Center Panel  Right Panel	O6 C3  R2	* Set GENERAL PURPOSE COMPUTER - MODE 5 To STBY * Set The BFC/CRT - Display To ON * Confirm The BFC/CRT SELECT Is Set To (3+1) * Confirm BOILER CNTLR/HTR Switches (1/2/3) Are ON * Set HYD CIRC PUMP Switches (1/2/3) To OFF	Activate Backup Flight System
1004	Mission Dep.	Overhead Aft Panel   Right Aft Panel	O14 O15 O16  O15 R11L	* Set RGA 1 To ON * Set RGA (2 & 4) To ON * Set RGA 3 To ON * Set ACCEL 3 To ON * Set ACCEL 4 To ON * Set SUPPLY H2O - Crossover Valve To OPEN	Gyro Assemblies & Accelerators
1090	Mission Dep.	Aft Left Panel	A8L	* Set RMS POWER To PRIMARY * Set RMS SELECT To STBD * Set STARBOARD RMS (DEPLOY/OFF/STOW) To STOW * Set STARBOARD RMS (DEPLOY/OFF/STOW) To OFF	Stow The OBSS Boom  Wait Until Talkbacks Indicate (STO)
1091	Mission Dep.	Aft Left Panel  Aft Right Panel Aft Left Panel	A8L  A6U A8U	* Set RMS POWER To PRIMARY * Set RMS SELECT To PORT * Set FLT CNTLR POWER To ON * Set RMS BRAKES To OFF * Set The MODE Rotary Selector To SINGLE * Press ENTER Just Below The MODE Rotary Selector * Set The PARAMETER Rotary Selector To JOINT ANGLE * Set The JOINT Rotary Selector As Required * Depress The SINGLE/DIRECT DRIVE (+/-) Spring Switch	Stow The RMS  Return All Joint Angles To Their Stowed Position.  By Returning All Joint Angles To Zero, You Will Eventually Reach The RMS Latch Position.
1092	Mission Dep.	Aft Left Panel   Front Left Panel	A8L   F6	* Port RMS   Retention Latches   Ready For Latch Talkbacks (White) * Set PORT RMS (RELEASE/OFF/LATCH) To LATCH * Set PORT RMS (RELEASE/OFF/LATCH) To OFF * Set PORT RMS (DEPLOY/OFF/STOW) To STOW * Set PORT RMS (DEPLOY/OFF/STOW) To OFF * Set RMS POWER To OFF * Set FLT CNTLR POWER To ON	Latch The RMS  Wait Until Talkbacks Indicate (LAT)  Wait Until Talkbacks Indicate (STO)
1093	Mission Dep.	Aft Left Panel	A7U	* Check/Set All PAYLOAD BAY FLOOD Lights To OFF	Turn Off All Payload Bay Flood Lights
1006	Mission Dep.	Right Aft Panel	R11L  R13L  R11L	* Set MAJ FUNC Switch To SM * If Required, Enter OPS 202 PRO (AFT Keypad) * Enter ITEM 1 EXEC (AFT Keypad) * If Not Already Enabled, Enter ITEM 3 EXEC (AFT Keypad) * Set PL BAY DOOR (SYS 1 & SYS 2) To ENABLE * Set PL BAY DOOR To CLOSE * Set PL BAY DOOR To STOP * Set PL BAY DOOR (SYS 1 & SYS 2) To DISABLE * Enter ITEM 2 EXEC (AFT Keypad)	Close Payload Bay Doors  Wait Until The PL BAY DOOR Talkback Shows CL.
1008	Mission Dep.	Right Aft Panel   Overhead Left Panel Right Aft Panel	R11L   O6 R11L	* Set MAJ FUNC To GNC * Press GPC/CRT (AFT Keypad) * Enter 4 EXEC (AFT Keypad) * Enter OPS 201 PRO (AFT Keypad) * Set GENERAL PURPOSE COMPUTER - MODE 3 To RUN * Enter OPS 301 PRO (AFT Keypad)	Reconfigure GNC's For Deorbit
1009	Mission Dep.	Overhead Left Panel	O6	* STAR TRACKER DOOR CONTROL (SYS 1 & SYS 2) To CLOSE * STAR TRACKER DOOR CONTROL (SYS 1 & SYS 2) To OFF * Set The STAR TRACKER POWER Switches (-Y & -Z) To OFF	Close Star Tracker Doors Wait Until STAR TRACKER DOOR POSITION Talkback Shows CL.





# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 2 of 3

## DEORBIT & LANDING CHECKLIST

Page 2 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
1010	Mission Dep.	Right Panel Overhead Aft Panel  Center Panel  Left Panel        Aft Right Panel	R4 O15 O14 O16 C3  L2  L1  L2    A12	* Check HYDRAULICS BRAKE HEATER (A/B/C) Set To AUTO * Set BRAKES MN B To ON * Set BRAKES MN A To ON * Set BRAKES MN C To ON * ORBITAL DAP / MANUAL MODE / ROTATION - ROLL To PRI * Check ORBITAL DAP / CONTROL To AUTO * Confirm ANTI SKID - Set To ON * Confirm NOSE WHEEL STEERING - Set To 1 * Confirm ENTRY MODE - Set To AUTO * Set FLASH EVAP CONTROLLER (PRI A & PRI B) To GPC * Set FLASH EVAP CONTROLLER SEC To GPC * FREON LOOP ISOLATION - MODE To OFF * Set O2 SYS 2 SUPPLY To OPEN * Set N2 SYS 2 SUPPLY To OPEN * Set N2 SYS 2 REG INLET To OPEN * Set O2/N2 CNTLR VLV SYS 1 To OPEN * Set APU HEATER - GAS GEN/FUEL PUMP (1/2/3) To OFF * Set APU HEATER - LUBE OIL LINE (1/2/3) To OFF * Set All TANK/FUEL LINE/H2O SYS Switches To OFF * HYDRAULIC HEATER - RUDDER SPD BRK (A & B) To OFF * HYDRAULIC HEATER - BODY FLAP (A & B) To OFF * HYDRAULIC HEATER - ELEVON (A & B) To OFF * HYDRAULIC HEATER - AFT FUSELAGE (A & B) To OFF	Final Switch Configuration Check
1012	Mission Dep.	Right Panel	R2	* Set He ISOLATION A LEFT/CENTER/RIGHT To OPEN * Set He ISOLATION B LEFT/CENTER/RIGHT To OPEN * Set PNEUMATICS L ENG He XOVR To OPEN * Set PNEUMATICS He ISOL To OPEN * Set LEFT He INTERCONNECT To - IN OPEN * Set CENTER & RIGHT INTERCONNECT To - OUT OPEN	Main Propulsion System / Helium Release
1013	Mission Dep.	Right Aft Panel	R11L	* Confirm MAJ FUNC Set To GNC * Enter SPEC 21 PRO (AFT Keypad) * Enter ITEM 16 EXEC	Final IMU Alignment
1014	Mission Dep.	Center Panel Right Panel       Center Panel	C2 R2      C2	* Enter ITEM 34 EXEC (Right Keypad) * Set BOILER N2 SUPPLY (1/2/3) To ON * Set BOILER PWR (1/2/3) To ON * Set APU FUEL TK VLV (1/2/3) To OPEN * Set APU CNTLR PWR (1/2/3) To ON * Set APU AUTO SHUT DOWN (1/2/3) Set To INHIBIT * Confirm HYD MAIN PUMP PRESS (1/2/3) Set To LOW * Confirm APU SPEED SELECT Set To NORM * Confirm APU/HYD Ready To Start Talkbacks Are WHITE * Confirm GIMBAL CK 34 On CRT 2 Is Complete (No Asterisk) * Enter OPS 302 PRO (Right Keypad)	Perform OMS Gimbal       If there's an asterisk next to GMBL CK 34 It means the gimbal check is incomplete. You must wait for the asterisk to Disappear.
1015	Mission Dep.	Center Panel	C2	* Confirm (CRT 1, CRT 3, CRT 2) Are Set To MAJ FUNC GNC * Enter SPEC 50 PRO (Left Keypad) * Enter SPEC 51 PRO (Right Keypad) * Enter ITEM 44 EXEC (Right Keypad)	Horizontal Situation & Override Displays
1016	Mission Dep.	Center Panel Right Panel	C2 R2	* Press RESUME (Right Keypad) * Set APU OPERATE - START/RUN For APU 1	
1017	Mission Dep.	Center Panel   Overhead Aft  Center Panel	F7 C2  O14 O16 C3 C2	* Check CRT 1 Confirm Display Of OPS MODE 3021 * ITEM 22 EXEC (Right Keypad) * ITEM 27 EXEC (Right Keypad) * ITEM 23 EXEC (Right Keypad) * Confirm L OMS ENG VLV Is ON * Confirm R OMS ENG VLV Is ON * Set OMS ENG (LEFT & RIGHT) To ARM/PRESS * Press EXEC - (Right Keypad) Confirms ready for OMS burn	Perform Deorbit Burn
1018	Mission Dep.	Center Panel Overhead Aft Panel	C3 O14 O16	* Set OMS ENG (LEFT & RIGHT) To OFF * Set L OMS ENG VLV To OFF * Set R OMS ENG VLV To OFF	Deorbit Burn Complete
1020	Mission Dep.	Center Panel Front Left Panel	C2 F6	* Enter OPS 303 PRO (Right Keypad) * Position The Shuttle To The Correct Attitude	Correct Attitude Align All ADI Needles
1022	Mission Dep.	Center Panel  Right Panel  Overhead Aft Panel Right Panel Center Panel	C2  R2  O17 R1 C2	* Enter ITEM 36 EXEC (Right Keypad) * Enter ITEM 37 EXEC (Right Keypad) * Set APU OPERATE - START/RUN For APU (2 & 3) * Set HYD MAIN PUMP PRESS (1/2/3) To NORM * Set ATVC - (1/2/3/4) To ON * Set AC BUS SNSR (1/2/3) To MONITOR * Enter ITEM 39 EXEC (Right Keypad)	Dump RCS Propellant  Pressure Should Rise To 3000 psi
1023	Mission Dep.	Center Panel  Overhead Right Panel	C2  O8	* Enter ITEM 38 EXEC (Right Keypad) * Enter ITEM 40 EXEC (Right Keypad) * Set FWD RCS - He PRESS (A & B) To CLOSE * Set TANK ISOLATION (1/2 & 3/4/5) To CLOSE * Set MANIFOLD ISOLATION (1/2/3/4/5) To CLOSE	Wait Until The Cycle Completes



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 3 of 3

## DEORBIT & LANDING CHECKLIST

Page 3 of 3

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
1023	Mission Dep.	Center Panel	C2	* Enter OPS 304 PRO (Right Keypad)	
1024	Mission Dep.	Front Left Panel Front Right Panel	F6 F8	* Set Commander ATTITUDE INRTL To LVLH * Set Pilot ATTITUDE INRTL To LVLH	
1025	Mission Dep.	Front Right Panel	F4	* Check PITCH & ROLL/YAW Set To AUTO	
1026	Mission Dep.				The Shuttle Will Perform Roll Reversals
1027	Mission Dep.	Left Panel	L1	* Set RAD CONTROLLER - OUT TEMP To NORM * Set RAD CONTROLLER (LOOP 1 & LOOP 2) To AUTO A * Set RAD CONTROLLER - BYPASS MODE (1 & 2) To AUTO	
1080	Mission Dep.	Right Panel Left Panel	R4 L1	* Set MPS/TVC/ISOL/VLV (SYS1, SYS2, SYS3) To OPEN * Set NH3 BOILER - NH3 CONTROLLER (A & B) To PRI/GPC	Hydraulics / Brake Heater
1028	Mission Dep.	Center Panel Front Left Panel Front Right Panel Overhead Right Panel	C3 F6 F8 O8	* Set AIR DATA PROBE (Left & Right) To DEPLOY HEAT * Set AIR DATA To LEFT * Set AIR DATA To RIGHT * Set RADAR ALTIMETERS (1 & 2) To ON	Deploy Air Data Probes
1029	Mission Dep.	Front Left Panel Front Right Panel Front Left Panel	F3 F3 F2	* Set HUD POWER To ON (Commander) * Set HUD POWER To ON (Pilot) * Set PITCH & ROLL/YAW To CSS (Commander)	Commander & Pilot HUD Power
1031	Mission Dep.	Overhead Right Panel	O8	* Set MLS (1/2/3) Switches To ON * Set MLS Thumbwheel To (111)	Auto Software Transition To OPS 305 Microwave Scan Beam Landing System
1033	Mission Dep.	HUD Display Window		* Press LANDING GEAR ARM (Twice)	Arm The Landing Gear
1034	Mission Dep.	HUD Display Window		* Press LANDING GEAR DOWN (Twice)	Deploy Landing Gear
1035	Mission Dep.	HUD Display Window		* Press SHUTE ARM (Twice) * Press DEPLOY SHUTE (Twice) * Press CHUTE JETT (Twice)	Touchdown: Gently Push The Nose Down Until The Nose Wheel Touches The Runway. Use The Rudder To Steer. Apply Wheel Brakes.
1036	Mission Dep.	HUD Display Window		* Press CHUTE JETT (Twice)	Release Brake Shute
1037	Mission Dep.				End Of Mission

### Commence Shutdown



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 1 of 2

## SHUTDOWN CHECKLIST

Page 1 of 2

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	NOTES
	Mission Dep.	Left Panel  Right Panel  Front Left Panel Front Right Panel Front Left Panel Front Right Panel	L2  R2  R1 F6 F8 F3 F3	* SPD BK - MAN (Full FWD) * NWS - OFF * APU Auto Shutdown (1/2/3) - ENABLE * APU Speed Select (1/2/3) - NORM * AC BUS SNSR (1/2/3) - AUTO TRIP * Commander FLT CNTLR POWER - OFF * Pilot FLT CNTLR POWER - OFF * Commander HUD POWER - OFF * Pilot HUD POWER - OFF	
	Mission Dep.	Center Panel	C3	(PERFORMED IF ELS) * MSTR MADS - OFF (DoD ELS, MCC call DoD OSC on NCC)	Note: MCC Will Report Go/No-Go To DOFF Suits. (Post Safety Assessment)
	Mission Dep.	Center Panel Overhead Aft Panel	C3 O14  O15  O16  O14  O15  O16  O14 O16	* OMS ENG (Left & Right) - OFF * RJDA 1A DRIVER (L2/R2 MANF) - OFF * RJDA 2A DRIVER (L4/R4 MANF) - OFF * RJDF 1B DRIVER (F1 MANF) - OFF * RJDA 1B DRIVER (L1/R1 MANF) - OFF * RJDF 1A DRIVER (F2 MANF) - OFF * RJDA 2B DRIVER (L1/R1 MANF) - OFF * RJDF 2A DRIVER (F1 MANF) - OFF * RJDF 2B DRIVER (F1 MANF) - OFF * RJDA 1A LOGIC (L2/R2 MANF) - OFF * RJDA 2A LOGIC (L4/R4 MANF) - OFF * RJDF 1B LOGIC (F1 MANF) - OFF * RJDA 1B LOGIC (L1/R1 MANF) - OFF * RJDF 1A LOGIC (F2 MANF) - OFF * RJDA 2B LOGIC (L1/R1 MANF) - OFF * RJDF 2A LOGIC (F1 MANF) - OFF * RJDF 2B LOGIC (F1 MANF) - OFF * L OMS ENG VLV - OFF * R OMS ENG VLV - OFF	RMS OMS Safing (RDJs)
	Mission Dep.	Overhead Aft Panel	O15 O16 F2 F3 F4	(NOT PERFORMED IF ELS) * MNB - DRAG CHUTE SYS 2 - op * MNC - DRAG CHUTE SYS 1 - op * DRAG SHUTE - LT OFF * DRAG SHUTE - LT OFF * DRAG SHUTE - LT OFF	Drag Chute Safing
	Mission Dep.	Center Panel	C3	* AIR DATA PROBE (Left & Right) - DEPLOY	Deactivate Air Data Probe HTRS
	Mission Dep.	Right Aft Panel Aft Right Panel Front Left Panel Front Right Panel Aft Right Panel Right Aft Panel	R14 A12 F6 F8 A12 R14	(NOT PERFORMED IF ELS) * ESS 1BC LDG GEAR / ARM/DN - RESET CL * LG ARM/DN RESET - Set Switch To The RESET Position * LDG GEAR - LT OFF * LDG GEAR - LT OFF * LG ARM/DN RESET - Set Switch To The Down Position * ESS 1BC LDG GEAR / ARM/DN - RESET OP	Landing Gear Safing
	Mission Dep.	Right Panel	R2	* ET UMBILICAT DOOR / MODE - GCP/MAN * ET UMBILICAT DOOR / RIGHT LATCH - RELEASE * ET UMBILICAT DOOR / RIGHT LATCH - OFF * ET UMBILICAT DOOR / LEFT LATCH - RELEASE * ET UMBILICAT DOOR / LEFT LATCH - OFF * ET UMBILICAT DOOR / MODE - GCP	ET Umbilical Door Opening
	Mission Dep.	Front Right Panel Front Left Panel Right Panel Center Panel	F4 F8 R2 C3 R2	* BODY FLAP - MAN * FLT CNTLR PWR - ON * HYD MAIN PUMP PRESS #1 - LO * Run Full Load Test * HYD MAIN PUMP PRESS #1 - NORM * HYD MAIN PUMP PRESS #3 - LO * Repeat Load Test * HYD MAIN PUMP PRESS #3 - NORM	Hydraulic Load Test  A Minimum Of Two Operating Hydraulic Systems Are Required For This Test
	Mission Dep.	Center Panel  Front Right Panel Center Panel Right Panel  Center Panel  Right Panel  Center Panel	C3 C2  F4 C3 R4  C2  R4  C2	* BFC CRT DISPLAY - ON * Enter Item OPS 000 PRO (Right Keypad) * Enter Item OPS 901 PRO (Right Keypad) * BODY FLAP - MAN * BODY FLAP - DOWN * HYDRAULICS - MPS/TVC ISOL VLV (SYS 1, SYS 2, SYS 3) OPEN * Enter ITEM 8 EXEC (Right Keypad) * Enter ITEM 1 +0 2 EXEC (Right Keypad) * Enter ITEM 5 EXEC (Right Keypad) * HYDRAULICS - MPS/TVC ISOL VLV (SYS 1, SYS 2, SYS 3) CLOSE * Enter ITEM 23 EXEC (Right Keypad) * Enter ITEM 1 EXEC (Right Keypad) * Enter ITEM 29+1 EXEC (Right Keypad) * Enter ITEM 30+8 EXEC (Right Keypad) * Enter ITEM 31 EXEC (Right Keypad) * Enter ITEM 32 EXEC (Right Keypad)	DPS Transition GNC 9 (If Pass)



# Space Shuttle Mission 2007



Designed By: Michael Swannick

Page 2 of 2

## SHUTDOWN CHECKLIST

Page 2 of 2

COMM	MET	PANEL SECTION	PANEL	PROCEDURE	PANEL AREA & NOTES
	Mission Dep.	Overhead Left Panel Left Panel	O1 L1	* Confirm FREON EVAP OUT TEMP >40 degrees * RADIATORS / RAD CONTROLLER - OUT TEMP - HI * H2O PUMP LOOP 1 - ON	Radiator Reconfiguration
	Mission Dep.	Right Panel	R4  R2	* HYDRAULICS - MPS/TVC ISOL VLV (SYS 1, SYS 2, SYS 3) CLOSE * BOILER PWR (1/2/3) - OFF * BOILER N2 SUPPLY (1/2/3) - OFF * APU OPERATE (1/2/3) - OFF * APU FUEL TK VLV (1/2/3) - CLOSE * APU CNTLR PWR (1/2/3) - OFF	APU/HYD Shutdown
	Mission Dep.	Right Panel	R2	* He ISOLATION (A & B) - CLOSE * PNEUMATICS / L ENG He XOVR - CLOSE	Post Landing MPS Reconfiguration
	Mission Dep.	Left Panel	L2	* Set O2 SYS SUPPLY 1 - CLOSE * Set O2 SYS SUPPLY 2 - CLOSE * Confirm O2 EMER Talkback Indicates CL	PCS Deactivation
	Mission Dep.	Aft Left Panel  Overhead Center Panel	A13  O7	* GPS POWER (1 & 2) - OFF * GPS PRE AMPL UN - OFF * GPS PRE AMPL LC - OFF * GPS POWER (GPS 1, GPS 2, GPS 3) - OFF * GPS PRE AMPL UPPER (GPS 1, GPS 2, GPS 3) - OFF * GPS PRE AMPL LOWER (GPS 1, GPS 2, GPS 3) - OFF	GPS Power Down
	Mission Dep.	Center Panel	O2	* Enter ITEM 8 EXEC (Right Keypad) * Enter ITEM 1+03 EXEC (Right Keypad) * Enter ITEM 2 EXEC (Right Keypad) * Enter ITEM 5 EXEC (Right Keypad)	Vent Door Purge Positioning (PASS)
	Mission Dep.	Overhead Center Panel	O7 O8        O7	* MASTER RCS CROSSFEED - OFF * LEFT OMS / He PRESS/VAPOR ISOL (A & B) - GPC * RIGHT OMS / He PRESS/VAPOR ISOL (A & B) - GPC * LEFT OMS CROSSFEED (A & B) - OPEN/CLOSE * RIGHT OMS CROSSFEED (A & B) - OPEN/CLOSE * LEFT OMS TANK ISOLATION (A & B) - CLOSE/OPEN/GPC * RIGHT OMS TANK ISOLATION (A & B) - CLOSE/OPEN/GPC * LEFT OMS CROSSFEED (A & B) - OPEN/GPC * FWD RCS / He PRESS (A & B) - CLOSE/GPC * FWD RCS TANK ISOLATION (1/2 & 3/4/5) - CLOSE * FWD RCS MANIFOLD ISOLATION (1/2/3/4/5) - CLOSE * FWD RCS MANIFOLD ISOLATION (1/2/3/4/5) - OPEN/GPC * LEFT OMS / He PRESS/VAPOR ISOL (A & B) - CLOSE/GPC * RIGHT OMS / He PRESS/VAPOR ISOL (A & B) - CLOSE/GPC * LEFT MANIFOLD ISOLATION (1/2/3/4/5) - CLOSE * RIGHT MANIFOLD ISOLATION (1/2/3/4/5) - CLOSE * LEFT MANIFOLD ISOLATION (1/2/3/4/5) - OPEN/GPC * RIGHT MANIFOLD ISOLATION (1/2/3/4/5) - OPEN/GPC * LEFT RCS TANK ISOLATION (1/2 & A 3/4/5 B) - CLOSE * RIGHT RCS TANK ISOLATION (1/2 & A 3/4/5 B) - CLOSE * LEFT & RIGHT RCS CROSSFEED - OPEN/CLOSE/GPC	RCS, OMS Valve Test  Open, Then Close Open, Then Close Close, Then Open, Then GPC Close, Then Open, Then GPC Open, Then GPC Close, Then GPC  Open, Then GPC Close, Then GPC Close, Then GPC  Open, Then GPC Open, Then GPC  Open, Then Close, Then GPC
	Mission Dep.	Overhead Center Panel	O7	* LEFT RCS TANK ISOLATION (1/2 & A 3/4/5 B) - OPEN/GPC * RIGHT RCS TANK ISOLATION (1/2 & A 3/4/5 B) - OPEN/GPC	Open, Then GPC Open, Then GPC
	Mission Dep.	Overhead Left Panel	O6	* GPC MODE (1/2/3/4/5) - STBY/HALT	STBY, Then Halt
	Mission Dep.			IF LANDING AT (KSC, EDW, NOR)  <u>HATCH OPENING PROCEDURE</u> * Pull G SUIT Controller Clip - (If Inflated) * Lap Belt & Chute - Release * Egress Seat - (Helmet Required If ELS) * Unstow - 'Return To Houston' Bags - (Except ELS)	Hatch Opening
	Mission Dep.			IF YOU ARE NOT LANDING AT (KSC, EDW, NOR)  <u>HATCH OPENING PROCEDURE</u> * Tabs/Visor - CLOSE * Green Apple - PULL * Open Hatch/Deploy Slide Per Decal	Hatch Opening
	Mission Dep.			<u>ORBITER UNAIDED EGRESS</u> * Egress Orbiter * Hand Carry Landing Site Data Book * If ELS - (Reference ELS POST LANDING Procedures)	Orbiter Egress