

\*\*\*\*\*  
 NASA TELEVISION SCHEDULE  
 STS-128 / ISS 17A  
 LEONARDO MULTIPURPOSE LOGISTICS MODULE  
 REV 1  
 9/4/09  
 \*\*\*\*\*

Standard-Definition NASA TV satellite coordinates are available at: <http://www1.nasa.gov/multimedia/nasatv/digital.html>. High -Definition NASA TV Channel #105 is broadcast at 720p @ 59.94 fps, carried on an MPEG-2 digital signal on satellite AMC-6, Transponder 17C, at 72 degrees west longitude, 4040 MHz, vertical polarization. A Digital Video Broadcast (DVB) - compliant Integrated Receiver Decoder (IRD) with modulation of QPSK/DBV, data rate of 36.86, symbol 26.665 and FEC 3/4 will be needed for reception. Mission Audio can be accessed at: <http://www.nasa.gov/ntv>. Clients actively participating in Standard-Definition on-orbit interviews, interactive press briefings and satellite interviews must use the LIMO Channel, accessed via satellite AMC-6, 72 degrees west longitude, transponder 5C, 3785.5 MHz, vertical polarization. A Digital Video Broadcast (DVB) - compliant Integrated Receiver Decoder (IRD) with modulation of QPSK/DBV, data rate of 6.00 and FEC 3/4 will be needed for reception.

**ALL TIMES SUBJECT TO CHANGE**

This TV schedule is available via the Internet. The address is: <http://www.nasa.gov/shuttletv>  
 Launch occurred at 10:59pm CT (11:59pm ET) on Friday, August 28th, 2009.  
 An asterisk (\*) denotes changes made to the previous revision to the television schedule.

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
<b>FRIDAY, SEPTEMBER 4</b>						
<b>FD 8</b>						
104	DISCOVERY / ISS CREW WAKE UP (begins FD 8)		06/ 12:00	10:59 AM	11:59 AM	15:59
106	DISCOVERY / ISS OFF-DUTY PERIOD BEGINS		06/ 15:00	01:59 PM	02:59 PM	18:59
107	MISSION STATUS BRIEFING	JSC	06/ 17:01	04:00 PM	05:00 PM	21:00
109	JOINT CREW NEWS CONFERENCE	ISS Ku	06/ 20:55	07:54 PM	08:54 PM	00:54
110	MPLM TRANSFERS RESUME		06/ 21:35	08:34 PM	09:34 PM	01:34
110	JOINT CREW NEWS CONFERENCE REPLAY WITH ENGLISH INTERPRETATION	JSC	06/ 22:01	09:00 PM	10:00 PM	02:00
111	EVA # 3 PROCEDURE REVIEW		06/ 23:55	10:54 PM	11:54 PM	03:54
<b>SATURDAY, SEPTEMBER 5</b>						
<b>FD 8 / FD 9</b>						
113	EVA # 3 CAMPOUT BEGINS (Olivas and Fuglesang)		07/ 02:25	01:24 AM	02:24 AM	06:24
114	ISS CREW SLEEP BEGINS		07/ 03:30	02:29 AM	03:29 AM	07:29

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
114	DISCOVERY CREW SLEEP BEGINS		07/ 04:00	02:59 AM	03:59 AM	07:59
115	FLIGHT DAY 8 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	07/ 04:01	03:00 AM	04:00 AM	08:00
117	HIGH DEFINITION FLIGHT DAY 8 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC	07/ 08:01	07:00 AM	08:00 AM	12:00
118	ISS FLIGHT DIRECTOR UPDATE	JSC	07/ 09:31	08:30 AM	09:30 AM	13:30
119	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	07/ 10:46	09:45 AM	10:45 AM	14:45
119	DISCOVERY / ISS CREW WAKE UP (begins FD 9)		07/ 12:00	10:59 AM	11:59 AM	15:59
120	EVA #3 PREPARATIONS RESUME		07/ 12:35	11:34 AM	12:34 PM	16:34
122	MPLM TRANSFERS RESUME		07/ 16:35	03:34 PM	04:34 PM	20:34
123	EVA #3 BEGINS (Olivas and Fuglesang)		07/ 16:50	03:49 PM	04:49 PM	20:49
123	S3 PAS DEPLOYMENT		07/ 17:25	04:24 PM	05:24 PM	21:24
124	RGA #2 REMOVAL / REPLACEMENT BEGINS		07/ 18:55	05:54 PM	06:54 PM	22:54
125	PMA 3 HEATER CABLE CONNECTIONS / S0 RPCM REMOVAL & REPLACEMENT		07/ 19:55	06:54 PM	07:54 PM	23:54
125	TRANQUILITY NODE 3 AVIONICS CABLE ROUTING		07/ 20:40	07:39 PM	08:39 PM	00:39
126	EVA #3 ENDS		07/ 23:20	10:19 PM	11:19 PM	03:19
<b>SUNDAY, SEPTEMBER 6</b>						
<b>FD 9 / FD 10</b>						
128	MISSION STATUS BRIEFING	JSC	08/ 01:01	12:00 AM	01:00 AM	05:00
129	ISS CREW SLEEP BEGINS		08/ 03:00	01:59 AM	02:59 AM	06:59
130	DISCOVERY CREW SLEEP BEGINS		08/ 03:30	02:29 AM	03:29 AM	07:29

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>		<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
130	FLIGHT DAY 9 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	08/	04:01	03:00 AM	04:00 AM	08:00
132	HIGH DEFINITION FLIGHT DAY 9 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC	08/	08:01	07:00 AM	08:00 AM	12:00
134	ISS FLIGHT DIRECTOR UPDATE	JSC	08/	09:01	08:00 AM	09:00 AM	13:00
134	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	08/	10:46	09:45 AM	10:45 AM	14:45
135	DISCOVERY / ISS CREW WAKE UP (begins FD 10)		08/	11:30	10:29 AM	11:29 AM	15:29
136	KFOX-TV / KXAN-TV / MILITARY TIMES LIVE INTERVIEWS	ISS Ku	08/	13:55	12:54 PM	01:54 PM	17:54
137	MPLM TRANSFERS RESUME		08/	14:30	01:29 PM	02:29 PM	18:29
138	HARMONY NODE 2 CBM CONTROLLER PANEL INSTALLATION		08/	15:40	02:39 PM	03:39 PM	19:39
138	MISSION STATUS BRIEFING	JSC	08/	17:01	04:00 PM	05:00 PM	21:00
141	DISCOVERY CREW OFF DUTY PERIOD BEGINS		08/	20:30	07:29 PM	08:29 PM	00:29
<b>MONDAY, SEPTEMBER 7</b>							
<b>FD 10 / FD 11</b>							
144	* ESA PAO EVENT	ISS Ku	09/	01:20	12:19 AM	01:19 AM	05:19
144	REPLAY OF ESA PAO EVENT WITH ENGLISH INTERPRETATION	JSC	09/	02:31	01:30 AM	02:30 AM	06:30
145	ISS CREW SLEEP BEGINS		09/	03:00	01:59 AM	02:59 AM	06:59
145	DISCOVERY CREW SLEEP BEGINS		09/	03:30	02:29 AM	03:29 AM	07:29
145	FLIGHT DAY 10 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	09/	04:01	03:00 AM	04:00 AM	08:00

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>		<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
147	HIGH DEFINITION FLIGHT DAY 10 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC		09/ 08:01	07:00 AM	08:00 AM	12:00
147	VIDEO FILE	HQ		09/ 08:01	07:00 AM	08:00 AM	12:00
148	ISS FLIGHT DIRECTOR UPDATE	JSC		09/ 08:31	07:30 AM	08:30 AM	12:30
150	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC		09/ 10:46	09:45 AM	10:45 AM	14:45
151	DISCOVERY / ISS CREW WAKE UP (begins FD 11)			09/ 11:30	10:29 AM	11:29 AM	15:29
151	* CREW CHOICE DOWNLINK	TDRE		09/ 13:00	11:59 AM	12:59 PM	16:59
151	MPLM EGRESS AND DEACTIVATION			09/ 13:35	12:34 PM	01:34 PM	17:34
152	TELEMUNDO / WTSP-TV / UNIVISION LIVE INTERVIEWS	ISS Ku		09/ 14:10	01:09 PM	02:09 PM	18:09
153	REPLAY OF LIVE INTERVIEWS WITH ENGLISH INTERPRETATION	JSC		09/ 15:31	02:30 PM	03:30 PM	19:30
154	SSRMS GRAPPLES MPLM			09/ 18:15	05:14 PM	06:14 PM	22:14
155	SSRMS DEMATE MPLM FROM HARMONY			09/ 19:30	06:29 PM	07:29 PM	23:29
156	SSRMS BERTHS MPLM IN DISCOVERY'S PAYLOAD BAY			09/ 21:00	07:59 PM	08:59 PM	00:59
156	MISSION STATUS BRIEFING	JSC		09/ 21:01	08:00 PM	09:00 PM	01:00
157	FAREWELL AND HATCH CLOSURE			09/ 22:30	09:29 PM	10:29 PM	02:29
158	RENDEZVOUS TOOL CHECKOUT			09/ 22:50	09:49 PM	10:49 PM	02:49
158	CENTERLINE CAMERA INSTALLATION			09/ 23:50	10:49 PM	11:49 PM	03:49
<b>TUESDAY, SEPTEMBER 8</b>							
<b>FD 11 / FD 12</b>							
160	ISS CREW SLEEP BEGINS			10/ 02:30	01:29 AM	02:29 AM	06:29
160	DISCOVERY CREW SLEEP BEGINS			10/ 03:00	01:59 AM	02:59 AM	06:59

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>		<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
161	FLIGHT DAY 11 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	10/	03:01	02:00 AM	03:00 AM	07:00
162	VIDEO FILE	HQ	10/	07:01	06:00 AM	07:00 AM	11:00
163	HIGH DEFINITION FLIGHT DAY 11 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC	10/	08:01	07:00 AM	08:00 AM	12:00
164	ISS FLIGHT DIRECTOR UPDATE	JSC	10/	08:31	07:30 AM	08:30 AM	12:30
165	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	10/	09:46	08:45 AM	09:45 AM	13:45
166	DISCOVERY / ISS CREW WAKE UP (begins FD 12)		10/	11:00	09:59 AM	10:59 AM	14:59
169	DISCOVERY UNDOCKS FROM ISS		10/	15:28	02:27 PM	03:27 PM	19:27
168	DISCOVERY FLYAROUND OF ISS BEGINS		10/	15:53	02:52 PM	03:52 PM	19:52
169	FINAL SEPARATION FROM ISS		10/	17:11	04:10 PM	05:10 PM	21:10
170	RMS / OBSS LATE INSPECTION OF DISCOVERY'S TPS BEGINS		10/	19:00	05:59 PM	06:59 PM	22:59
172	MISSION STATUS BRIEFING	JSC	10/	21:01	08:00 PM	09:00 PM	01:00
173	OBSS BERTH		10/	23:15	10:14 PM	11:14 PM	03:14
175	SHUTTLE VTR PLAYBACK OF UNDOCKING		11/	00:30	11:29 PM	12:29 AM	04:29
<b>WEDNESDAY, SEPTEMBER 9</b>							
<b>FD 12 / FD 13</b>							
176	DISCOVERY CREW SLEEP BEGINS		11/	03:00	01:59 AM	02:59 AM	06:59
177	FLIGHT DAY 12 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	11/	03:01	02:00 AM	03:00 AM	07:00
179	HIGH DEFINITION FLIGHT DAY 12 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC	11/	08:01	07:00 AM	08:00 AM	12:00
180	VIDEO FILE	HQ	11/	09:01	08:00 AM	09:00 AM	13:00

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
182	DISCOVERY CREW WAKE UP (begins FD 13)		11/ 11:00	09:59 AM	10:59 AM	14:59
182	* HUBBLE SPACE TELESCOPE EARLY RELEASE OBSERVATION NEWS CONFERENCE (NASA-TV Public Channel #101 only)	HQ	11/ 11:01	10:00 AM	11:00 AM	15:00
182	* STS-125 CREW NEWS CONFERENCE (NASA-TV Public Channel #101 only)	HQ	11/ 12:01	11:00 AM	12:00 PM	16:00
183	CABIN STOWAGE BEGINS		11/ 14:05	01:04 PM	02:04 PM	18:04
184	FCS CHECKOUT		11/ 15:10	02:09 PM	03:09 PM	19:09
185	RCS HOT-FIRE TEST		11/ 16:20	03:19 PM	04:19 PM	20:19
185	CBS NEWS / ABC NEWS / CNN LIVE INTERVIEWS	TDRE	11/ 17:35	04:34 PM	05:34 PM	21:34
185	POST MISSION MANAGEMENT TEAM BRIEFING	JSC	11/ 18:16	05:15 PM	06:15 PM	22:15
186	BOUNDARY LAYER TRANSITION / HYTHIRM BRIEFING	JSC	11/ 20:01	07:00 PM	08:00 PM	00:00
188	MISSION STATUS BRIEFING	JSC	11/ 21:01	08:00 PM	09:00 PM	01:00
188	KOPRA'S RECUMBENT SEAT SET UP		11/ 22:10	09:09 PM	10:09 PM	02:09
189	KU-BAND ANTENNA STOWAGE		11/ 23:35	10:34 PM	11:34 PM	03:34
<b>THURSDAY, SEPTEMBER 10</b>						
<b>FD 13 / FD 14</b>						
192	DISCOVERY CREW SLEEP BEGINS		12/ 03:00	01:59 AM	02:59 AM	06:59
192	FLIGHT DAY 13 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	12/ 03:01	02:00 AM	03:00 AM	07:00
195	HIGH DEFINITION FLIGHT DAY 13 CREW HIGHLIGHTS (if available; on the NASA-TV HDTV Channel; replays at 9:00am CT and 10:00am CT)	JSC	12/ 08:01	07:00 AM	08:00 AM	12:00
197	DISCOVERY CREW WAKE UP (begins FD 14)		12/ 11:00	09:59 AM	10:59 AM	14:59

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
198	HTV LAUNCH COVERAGE BEGINS (launch scheduled at 12:01pm CT)	JSC / TAN	12/ 12:46	11:45 AM	12:45 PM	16:45
198	* BACK TO SCHOOL, BACK TO SCIENCE WEBCAST (NASA-TV Education Channel #102 only)	GSFC	12/ 13:01	12:00 PM	01:00 PM	17:00
199	DEORBIT PREPARATIONS BEGIN		12/ 14:05	01:04 PM	02:04 PM	18:04
200	* PAYLOAD BAY DOOR CLOSING		12/ 15:23	02:22 PM	03:22 PM	19:22
201	* DEORBIT BURN		12/ 18:03	05:02 PM	06:02 PM	22:02
202	* MILA C-BAND RADAR ACQUISITION OF DISCOVERY		12/ 18:53	05:52 PM	06:52 PM	22:52
202	* KSC LANDING	KSC	12/ 19:06	06:05 PM	07:05 PM	23:05
	POST-LANDING NEWS CONFERENCE	KSC		NET L+2 HRS.		
	ENTRY FLIGHT CONTROL TEAM VIDEO REPLAY (replayed after Post-Landing News Conference)	JSC		~ L+3 HRS.		
	STS-128 MISSION HIGHLIGHTS VIDEO REPLAY (replayed after Entry Flight Control Team Video)	JSC		~ L+3.5 HRS.		

\*\*\*\*\*  
**DEFINITION OF TERMS**  
\*\*\*\*\*

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
AMC:	Americom Satellite					
ARS:	Air Revitalization System					
ATA:	Ammonia Tank Assembly					
CBM:	Common Berthing Mechanism					
CST:	Central Standard Time					
CHECS:	Crew Health Care System					
C.O.L.B.E.R.T.:	Combined Operational Load Bearing External Resistance Treadmill					
Destiny:	U.S. Laboratory on ISS					
EMU:	Extravehicular Mobility Unit					
EST:	Eastern Standard Time					
EUTEF:	European Technology Exposure Facility					
EVA:	Extravehicular Activity					
FCS:	Flight Control System					
FD:	Flight Day					
FIR:	Fluids Integration Rack					
GMT:	Greenwich Mean Time					
GSFC:	Goddard Space Flight Center					
HARMONY:	Node 2					
HD:	High Definition Television					
HQ:	NASA Headquarters					
HTV:	Japanese H-II Transfer Vehicle					
HYTHIRM:	Hypersonic Thermodynamic Infrared Measurements					
ISS:	International Space Station					
JSC:	Johnson Space Center					
KSC:	Kennedy Space Center					
L:	Launch or Landing time					
LIMO:	Live Interview Media Outlet channel					
LMC:	Lightweight Mission Peculiar Equipment Support Structure Carrier					
MECO:	Main Engine Cut-Off					
MELFI:	Minus Eighty-Degree Laboratory Freezer for ISS					
MET:	Mission Elapsed Time, which begins at the moment of launch and is read: DAYS/HOURS:MINUTES. LAUNCH=00/00:00					
MILA	Merritt Island, Florida Tracking Station					
MISSE:	Materials International Space Station Experiment					
MMT:	Mission Management Team					
MPLM	Multi-Purpose Logistics Module					
MS:	Mission Specialist					
MSRR:	Materials Science Research Rack					
NET:	No Earlier Than					
OBSS:	Orbiter Boom Sensor System					
ODS:	Orbiter Docking System					
OMS:	Orbital Maneuvering System					
PAO:	Public Affairs office					
PAS:	Payload Attachment System					
RCS:	Reaction Control System					



<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CDT</u>	<u>EDT</u>	<u>GMT</u>
RGA:	Rate Gyro Assembly on ISS					
RMS:	Remote Manipulator System on Discovery					
RPCM:	Remote Power Control Module					
RPM:	Rendezvous Pitch Maneuver					
S0:	Starboard Zero Truss Segment					
S1:	Starboard One Truss Segment					
S3:	Starboard Three Truss Segment					
SSRMS:	Space Station Remote Manipulator System (Canadarm2 ISS Robotic Arm)					
STS:	Space Transportation System					
TAN:	Tanegashima Space Center, Japan					
TI:	Terminal Initiation Rendezvous Maneuver					
TDRE, W:	Tracking and Data Relay Satellite, East and West Longitudes					
TPS:	Thermal Protection System					
TRANQUILITY:	Future Node 3 on ISS					
Unity:	Connecting Node 1 on International Space Station					
VIP:	Very Important Person					
VTR:	Videotape Recorder					
WLE:	Wing Leading Edge					