

\*\*\*\*\*  
 NASA TELEVISION SCHEDULE  
 STS-133  
 ISS UTILIZATION LOGISTICS FLIGHT 5 / PERMANENT MULTI-PURPOSE MODULE (PMM)  
 REV E  
 3/1/11  
 \*\*\*\*\*

NASA TV (Public, Education, Media Channels and HD programming) Digital Satellite C-Band Downlink coordinates for continental North America, Alaska and Hawaii: Satellite = AMC 3 / Transponder = 15C / 87 Degrees West / DVB-S, 4:2:0 / Downlink Frequency = 4000 Mhz / Downlink Polarity = Horizontal / FEC = 3/4 / Data Rate = 38.860 MHz / Symbol Rate = 28.1115. Clients actively participating in Standard-Definition on-orbit interviews, interactive press briefings and satellite interviews must use the LIMO Channel: Satellite = AMC 3 / Transponder = 9C / 87 degrees West / DVB-S, 4:2:0 / Downlink Frequency = 3865.5 Mhz / Downlink Polarity = Horizontal / FEC = 3/4 / Data Rate = 6.0 Mbps / Symbol rate = 4.3404 Msps. A Digital Video Broadcast compliant Integrated Receiver Decoder is required for reception. Mission Audio is available at: <http://www.nasa.gov/ntv>.

**ALL TIMES SUBJECT TO CHANGE**

This TV schedule is available via the Internet. The address is: <http://www.nasa.gov/shuttle/tv>  
 Launch occurred at 3:53pm CT (4:53pm ET) on Thursday, February 24th, 2011.  
 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>CST</u>	<u>EST</u>	<u>GMT</u>
<b>TUESDAY, MARCH 1</b>						
<b>FD 5 / FD 6</b>						
73	DISCOVERY / ISS CREW WAKE UP (begins FD 6)		04/ 13:00	04:53 AM	05:53 AM	10:53
74	SSRMS GRAPPLE OF PMM		04/ 15:15	07:08 AM	08:08 AM	13:08
75	PMM UNBERTH		04/ 15:50	07:43 AM	08:43 AM	13:43
75	* DISCOVERY / ISS TRANSFERS RESUME		04/ 16:15	08:08 AM	09:08 AM	14:08
75	PMM INSTALLATION BEGINS ON UNITY NADIR PORT		04/ 16:55	08:48 AM	09:48 AM	14:48
76	PMM INSTALLATION COMPLETE		04/ 17:45	09:38 AM	10:38 AM	15:38
76	MISSION STATUS BRIEFING	JSC	04/ 18:37	10:30 AM	11:30 AM	16:30
77	VIDEO FILE	HQ	04/ 19:37	11:30 AM	12:30 PM	17:30
77	PMM VESTIBULE PRESSURIZATION BEGINS		04/ 19:45	11:38 AM	12:38 PM	17:38
80	KING-TV / KTRK-TV / KOMO-TV LIVE INTERVIEWS	ISS Ku	04/ 23:30	03:23 PM	04:23 PM	21:23
80	EVA # 2 PROCEDURE REVIEW		05/ 00:25	04:18 PM	05:18 PM	22:18

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
81	PMM INGRESS		05/ 02:05	05:58 PM	06:58 PM	23:58
82	EVA # 2 CAMPOUT BEGINS (Bowen and Drew)		05/ 02:55	06:48 PM	07:48 PM	00:48
83	ISS CREW SLEEP BEGINS		05/ 04:00	07:53 PM	08:53 PM	01:53
83	DISCOVERY CREW SLEEP BEGINS		05/ 04:30	08:23 PM	09:23 PM	02:23
83	FLIGHT DAY 6 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	05/ 05:07	09:00 PM	10:00 PM	03:00
<b>WEDNESDAY, MARCH 2</b>						
<b>FD 6 / FD 7</b>						
87	ISS FLIGHT DIRECTOR UPDATE	JSC	05/ 10:47	02:40 AM	03:40 AM	08:40
88	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	05/ 11:52	03:45 AM	04:45 AM	09:45
88	DISCOVERY / ISS CREW WAKE UP (begins FD 7)		05/ 12:30	04:23 AM	05:23 AM	10:23
89	EVA # 2 PREPARATIONS RESUME		05/ 14:20	06:13 AM	07:13 AM	12:13
91	EVA # 2 BEGINS (Bowen and Drew)		05/ 17:25	09:18 AM	10:18 AM	15:18
92	LWAPA RETRIEVAL AND REPLACEMENT		05/ 18:55	10:48 AM	11:48 AM	16:48
92	ELC-4 THERMAL INSULATION REMOVAL		05/ 18:55	10:48 AM	11:48 AM	16:48
93	P3 CETA LIGHT INSTALLATION		05/ 19:45	11:38 AM	12:38 PM	17:38
93	DEXTRE CAMERA LIGHT PAN AND TILT ASSEMBLY INSTALLATION		05/ 19:55	11:48 AM	12:48 PM	17:48
94	P1 RADIATOR TROUBLESHOOTING		05/ 21:05	12:58 PM	01:58 PM	18:58
95	TRANQUILITY THERMAL INSULATION REMOVAL		05/ 22:15	02:08 PM	03:08 PM	20:08
95	DEXTRE CAMERA COVER INSTALLATION		05/ 22:50	02:43 PM	03:43 PM	20:43
96	EVA# 2 ENDS		05/ 23:55	03:48 PM	04:48 PM	21:48
97	MISSION STATUS BRIEFING	JSC	06/ 02:07	06:00 PM	07:00 PM	00:00

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
98	VIDEO FILE	HQ	06/ 03:07	07:00 PM	08:00 PM	01:00
98	ISS CREW SLEEP BEGINS		06/ 03:30	07:23 PM	08:23 PM	01:23
98	DISCOVERY CREW SLEEP BEGINS		06/ 04:00	07:53 PM	08:53 PM	01:53
99	FLIGHT DAY 7 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	06/ 04:07	08:00 PM	09:00 PM	02:00
<b>THURSDAY, MARCH 3</b>						
<b>FD 7 / FD 8</b>						
102	ISS FLIGHT DIRECTOR UPDATE	JSC	06/ 09:52	01:45 AM	02:45 AM	07:45
103	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	06/ 10:52	02:45 AM	03:45 AM	08:45
104	DISCOVERY / ISS CREW WAKE UP (begins FD 8)		06/ 12:00	03:53 AM	04:53 AM	09:53
106	CNN / WTTG-TV / WTSP-TV / WBZ-TV LIVE INTERVIEWS	ISS Ku	06/ 15:20	07:13 AM	08:13 AM	13:13
106	DISCOVERY / ISS TRANSFERS RESUME		06/ 15:45	07:38 AM	08:38 AM	13:38
107	MSNBC / WXIA-TV / FOX NEWS RADIO LIVE INTERVIEWS	ISS Ku	06/ 17:40	09:33 AM	10:33 AM	15:33
108	VIDEO FILE	HQ	06/ 19:07	11:00 AM	12:00 PM	17:00
109	DISCOVERY CREW OFF DUTY PERIOD		06/ 19:30	11:23 AM	12:23 PM	17:23
112	MISSION STATUS BRIEFING	JSC	07/ 01:07	05:00 PM	06:00 PM	23:00
114	ISS CREW SLEEP BEGINS		07/ 03:00	06:53 PM	07:53 PM	00:53
114	DISCOVERY CREW SLEEP BEGINS		07/ 03:30	07:23 PM	08:23 PM	01:23
114	FLIGHT DAY 8 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	07/ 04:07	08:00 PM	09:00 PM	02:00

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
<b>FRIDAY, MARCH 4</b>						
<b>FD 8 / FD 9</b>						
117	ISS FLIGHT DIRECTOR UPDATE	JSC	07/ 08:52	12:45 AM	01:45 AM	06:45
119	ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	07/ 10:52	02:45 AM	03:45 AM	08:45
119	DISCOVERY / ISS CREW WAKE UP (begins FD 9)		07/ 11:30	03:23 AM	04:23 AM	09:23
121	* U.S. PAO EDUCATIONAL EVENT	ISS Ku	07/ 14:15	06:08 AM	07:08 AM	12:08
121	* PMM OUTFITTING BEGINS		07/ 14:40	06:33 AM	07:33 AM	12:33
123	* JOINT CREW NEWS CONFERENCE	ISS Ku	07/ 17:55	09:48 AM	10:48 AM	15:48
124	* PMM OUTFITTING CONTINUES		07/ 19:00	10:53 AM	11:53 AM	16:53
124	* INTERPRETED REPLAY OF JOINT CREW NEWS CONFERENCE	JSC	07/ 19:07	11:00 AM	12:00 PM	17:00
125	* VIDEO FILE	HQ	07/ 20:07	12:00 PM	01:00 PM	18:00
125	MISSION STATUS BRIEFING	JSC	07/ 20:37	12:30 PM	01:30 PM	18:30
129	* ISS CREW SLEEP BEGINS		08/ 02:00	05:53 PM	06:53 PM	23:53
129	* DISCOVERY CREW SLEEP BEGINS		08/ 02:30	06:23 PM	07:23 PM	00:23
129	FLIGHT DAY 9 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	08/ 03:07	07:00 PM	08:00 PM	01:00
<b>SATURDAY, MARCH 5</b>						
<b>FD 10</b>						
133	* ISS FLIGHT DIRECTOR UPDATE	JSC	08/ 08:52	12:45 AM	01:45 AM	06:45
132	* ISS FLIGHT DIRECTOR UPDATE REPLAY	JSC	08/ 10:07	02:00 AM	03:00 AM	08:00
135	* DISCOVERY / ISS CREW WAKE UP (begins FD 10)		08/ 10:30	02:23 AM	03:23 AM	08:23
137	* DISCOVERY / ISS TRANSFERS RESUME		08/ 14:05	05:58 AM	06:58 AM	11:58

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
139	* DISCOVERY CREW OFF-DUTY PERIOD		08/ 17:50	09:43 AM	10:43 AM	15:43
141	* RENDEZVOUS TOOL CHECKOUT		08/ 20:35	12:28 PM	01:28 PM	18:28
142	MISSION STATUS BRIEFING	JSC	08/ 20:37	12:30 PM	01:30 PM	18:30
142	* DISCOVERY / ISS FAREWELL AND HATCH CLOSURE		08/ 22:05	01:58 PM	02:58 PM	19:58
142	* CENTERLINE CAMERA INSTALLATION		08/ 23:05	02:58 PM	03:58 PM	20:58
144	* ISS CREW SLEEP BEGINS		09/ 01:30	05:23 PM	06:23 PM	23:23
144	* DISCOVERY CREW SLEEP BEGINS		09/ 02:00	05:53 PM	06:53 PM	23:53
145	* FLIGHT DAY 10 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	09/ 02:07	06:00 PM	07:00 PM	00:00
<b>SUNDAY, MARCH 6</b>						
<b>FD 11</b>						
150	* DISCOVERY / ISS CREW WAKE UP (begins FD 11)		09/ 10:00	01:53 AM	02:53 AM	07:53
152	* DISCOVERY UNDOCKS FROM ISS		09/ 13:45	05:38 AM	06:38 AM	11:38
152	* DISCOVERY FLYAROUND OF ISS BEGINS		09/ 14:15	06:08 AM	07:08 AM	12:08
153	* DISCOVERY FINAL SEPARATION FROM ISS		09/ 15:28	07:21 AM	08:21 AM	13:21
154	* SHUTTLE VTR PLAYBACK OF UNDOCKING		09/ 17:05	08:58 AM	09:58 AM	14:58
155	* RMS/OBSS LATE INSPECTION OF DISCOVERY'S TPS		09/ 18:00	09:53 AM	10:53 AM	15:53
157	* MISSION STATUS BRIEFING	JSC	09/ 21:07	01:00 PM	02:00 PM	19:00
158	* OBSS BERTH		09/ 22:20	02:13 PM	03:13 PM	20:13
158	* MMT BRIEFING	JSC	09/ 23:07	03:00 PM	04:00 PM	21:00
160	* DISCOVERY CREW SLEEP BEGINS		10/ 02:00	05:53 PM	06:53 PM	23:53
160	* FLIGHT DAY 11 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	10/ 02:07	06:00 PM	07:00 PM	00:00

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
<b>MONDAY, MARCH 7</b>						
<b>FD 12</b>						
165	* DISCOVERY CREW WAKE UP (begins FD 12) ("Theme from Star Trek" by Alexander Courage)		10/ 10:00	01:53 AM	02:53 AM	07:53
167	* FCS CHECKOUT		10/ 13:00	04:53 AM	05:53 AM	10:53
167	* CABIN STOWAGE BEGINS		10/ 13:05	04:58 AM	05:58 AM	10:58
168	* RCS HOT-FIRE TEST		10/ 14:10	06:03 AM	07:03 AM	12:03
171	* ABC NEWS / CBS NEWS / ASSOCIATED PRESS LIVE INTERVIEWS	TDRE	10/ 18:00	09:53 AM	10:53 AM	15:53
171	* DISCOVERY CREW TRIBUTE EVENT	TDRE	10/ 18:45	10:38 AM	11:38 AM	16:38
173	* MISSION STATUS BRIEFING	JSC	10/ 21:07	01:00 PM	02:00 PM	19:00
174	* KU-BAND ANTENNA STOWAGE		10/ 23:10	03:03 PM	04:03 PM	21:03
176	* DISCOVERY CREW SLEEP BEGINS		11/ 02:00	05:53 PM	06:53 PM	23:53
176	* FLIGHT DAY 12 HIGHLIGHTS (replayed on the hour during crew sleep)	JSC	11/ 02:07	06:00 PM	07:00 PM	00:00
<b>TUESDAY, MARCH 8</b>						
<b>FD 13</b>						
181	* DISCOVERY CREW WAKE UP (begins FD 13) ("Blue Sky" by Big Head Todd and the Monsters)		11/ 10:00	01:53 AM	02:53 AM	07:53
183	* DISCOVERY DEORBIT PREPARATIONS BEGIN		11/ 13:40	05:33 AM	06:33 AM	11:33
184	* PAYLOAD BAY DOOR CLOSING		11/ 15:00	06:53 AM	07:53 AM	12:53
186	DISCOVERY DEORBIT BURN		11/ 17:40	09:33 AM	10:33 AM	15:33
187	MILA C-BAND RADAR ACQUISITION OF DISCOVERY		11/ 18:30	10:23 AM	11:23 AM	16:23
187	* KSC LANDING	KSC	11/ 18:43	10:36 AM	11:36 AM	16:36
	POST-LANDING NEWS CONFERENCE	KSC		NET L+2 HRS.		

<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
	ENTRY FLIGHT CONTROL TEAM VIDEO REPLAY (replayed after Post-Landing News Conference)	JSC		~ L+3 HRS.		
	STS-133 MISSION HIGHLIGHTS VIDEO REPLAY (replayed after Entry Flight Control Team Video)	JSC		~ L+3.5 HRS.		
	STS-133 CREW NEWS CONFERENCE (may be postponed or cancelled)	KSC		NET L+4.5 HRS.		

ORBIT                                    SUBJECT                                    SITE                                    MET                                    CST                                    EST                                    GMT

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

AMC:            Americom Satellite  
CDT:            Central Daylight Time  
CETA:           Crew and Equipment Translation Aid  
CLPA:           Camera Light Pan Tilt Assembly  
Destiny:        U.S. Laboratory on ISS  
ELC-4:           Express Logistics Carrier #4  
EMU:            Extravehicular Mobility Unit  
EOTP            Enhanced ORU Temporary Platform  
EDT:            Eastern Daylight Time  
EVA:            Extravehicular Activity  
FCS:            Flight Control System  
FD:             Flight Day  
GMT:            Greenwich Mean Time  
Harmony:       Node 2  
HD:             High Definition Television  
HQ:             NASA Headquarters  
ISS:            International Space Station  
JAXA:           Japan Aerospace Exploration Agency  
JSC:            Johnson Space Center  
KSC:            Kennedy Space Center  
L:              Launch or Landing time  
LIMO:           Live Interview Media Outlet channel  
LWAPA:        Lightweight Adaptor Plate Assembly  
MECO:           Main Engine Cut-Off  
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  
MMT:            Mission Management Team  
MS:             Mission Specialist  
NET:            No Earlier Than  
OBSS:           Orbiter Boom Sensor System  
ODS:            Orbiter Docking System  
OMS:            Orbital Maneuvering System  
PAO:            Public Affairs office  
PMM:            Permanent Multipurpose Module  
RCS:            Reaction Control System  
R&R:            Return and Replace  
RPM:            Rendezvous Pitch Maneuver  
RSS:            Rotate Servicing Structure  
S1:             Starboard One truss segment on ISS  
SPDM:           Special Purpose Dexterous Manipulator  
SRMS:           Shuttle Remote Manipulator System on Discovery  
SSRMS:        Space Station Remote Manipulator System (Canadarm2 ISS Robotic Arm)



<u>ORBIT</u>	<u>SUBJECT</u>	<u>SITE</u>	<u>MET</u>	<u>CST</u>	<u>EST</u>	<u>GMT</u>
STBD:	Starboard					
STS:	Space Transportation System					
TI:	Terminal Initiation Rendezvous Maneuver					
TDRE, W:	Tracking and Data Relay Satellite, East and West Longitudes					
TPS:	Thermal Protection System					
Unity:	Connecting Node 1 on International Space Station					
VAFB:	Vandenberg Air Force Base					
VTR:	Videotape Recorder					