1
00:00:05,290 --> 00:00:12,410
\h On a mission to bring the International Space Station to full power, space shuttle Discovery lifted off Ma

2
00:00:12,410 --> 00:00:17,780
\h NASA's Kennedy Space Center in Florida,
beginning the first shuttle mission of 2009.

3
00:00:17,780 --> 00:00:23,500
\h Once in space, Commander Lee Archambault, Pilot Tony Antonelli and the rest of the crew got to work a

4
00:00:23,500 --> 00:00:29,880
\h inspected Discovery using the robotic arm and the orbiter boom sensor system extension.

5
00:00:29,880 --> 00:00:35,090
\h During the second full day of the mission, the shuttle rendezvoused with the space station.

6
00:00:35,090 --> 00:00:40,850
\h As the hatch opened, the two crews greeted each other and delivered the newest
member to join the station crew,

7
00:00:40,850 --> 00:00:46,020
\h Japan Aerospace Exploration Agency
astronaut Koichi Wakata.

8
00:00:46,020 --> 00:00:50,690
\h Wakata's arrival signaled the end of station Flight Engineer Sandy Magnus'

9
00:00:50,690 --> 00:00:55,860
\h stay aboard the station as she prepared to
return to Earth aboard Discovery.

10
00:00:55,860 --> 00:01:03,640
\h The station's robotic arm maneuvered the 31,000-pound, 45-foot-long S6 truss segment to a position ov

11
00:01:03,640 --> 00:01:09,550
\h await the start of the first spacewalk by
Mission Specialists Steve Swanson and
Ricky Arnold.

12
00:01:09,550 --> 00:01:16,240
\h After spending the night in the station's Quest airlock, the spacewalkers got to work outside the station.

13
00:01:16,240 --> 00:01:23,230
\h Inside, shuttle Mission Specialist John Phillips and Expedition 18 Flight Engineer Koichi Wakata remotel

14
00:01:23,230 --> 00:01:29,350
\h controlled the station's robotic arm holding the S6 truss, placing it into position.

15
00:01:29,350 --> 00:01:35,190
\h Swanson and Arnold immediately went to work bolting the segment in place, connecting the power and

16
00:01:35,190 --> 00:01:41,130
\h cables, which allowed station flight controllers to remotely command the segment to life.

17
00:01:41,130 --> 00:01:47,570
\h The successful installation paved the way for extending the S6's two solar wings the
following day.

18
00:01:47,570 --> 00:01:52,520
\h The two-stage extension took less than an hour for each as the panels unfurled,

19
00:01:52,520 --> 00:01:57,550
\h extending the pair to their full combined
length of 240 feet.

20
00:01:57,550 --> 00:02:03,140
\h Work inside the station continued as the station's Expedition 18 Commander Mike Fincke and Mission

21
00:02:03,140 --> 00:02:09,090
\h Specialist Sandy Magnus turned their
attention to the replacement of a failed
distillation unit.

22
00:02:09,090 --> 00:02:12,880
\h The unit is part of the elaborate water purification and recycling system on

23
00:02:12,880 --> 00:02:19,680

\h the station that helps set the stage for
increasing the station's crew size from three
to six.

24
00:02:19,680 --> 00:02:24,380
\h The newly installed unit was successfully tested later in the mission.

25
00:02:24,380 --> 00:02:30,580
\h The mission's second spacewalk that teamed Swanson with Joe Acaba, and third by Acaba and Arnold,

26
00:02:30,580 --> 00:02:39,440
\h the station for future work, including shuttle
Endeavour's STS-127 mission. March 24
brought a call from the White House,

27
00:02:39,440 --> 00:02:44,340
\h as President Barack Obama spoke to the two crews about their mission.

28
00:02:44,340 --> 00:02:49,620
\h With all the work done, the crew members of both the station and shuttle prepared for undocking,

29
00:02:49,620 --> 00:02:54,190
\h which was followed by a final inspection of
Discovery's exterior.

30
00:02:54,190 --> 00:02:59,250
\h The shuttle was given the "go" to prepare for landing in Florida on March 28.

31
00:02:59,250 --> 00:03:04,340
\h Although weather caused mission managers to wave off the first landing attempt,