1
00:00:05,749 --> 00:00:03,990
as mentioned before it's been an

2
00:00:07,590 --> 00:00:05,759
extremely busy week

3
00:00:10,629 --> 00:00:07,600
for the crew on board the international

4
00:00:13,430 --> 00:00:10,639
space station the expedition 30 through

5
00:00:16,150 --> 00:00:13,440
the the expedition 33 crew began its

6
00:00:18,390 --> 00:00:16,160
work week on monday with some cleanup

7
00:00:21,349 --> 00:00:18,400
activities associated with uh the

8
00:00:23,990 --> 00:00:21,359
september 28 undocking and departure of

9
00:00:26,550 --> 00:00:24,000
the european space agency's eduardo

10
00:00:28,710 --> 00:00:26,560
amaldi automated transfer vehicle

11
00:00:32,069 --> 00:00:28,720
that uh cargo ship that delivered some

12
00:00:33,670 --> 00:00:32,079
seven tons of uh supplies uh and fuel

13
00:00:36,549 --> 00:00:33,680

and experiments to the international

14
00:00:39,590 --> 00:00:36,559
space station uh left uh the complex on

15
00:00:42,869 --> 00:00:39,600
the afternoon of uh september 28th uh

16
00:00:44,470 --> 00:00:42,879
backed away to a distance of some 4 500

17
00:00:46,950 --> 00:00:44,480
statute miles in front of the

18
00:00:49,110 --> 00:00:46,960
international space station on monday

19
00:00:52,709 --> 00:00:49,120
the crew was busy cleaning up

20
00:00:55,029 --> 00:00:52,719
all of the russian segment

21
00:00:57,350 --> 00:00:55,039
areas that the eduardo amaldi had been

22
00:00:59,590 --> 00:00:57,360
attached to for the period of six months

23
00:01:02,310 --> 00:00:59,600
since it arrived at the space station

24
00:01:04,390 --> 00:01:02,320
back on march 28th

25
00:01:06,789 --> 00:01:04,400
on tuesday sunny williams and aki

26
00:01:08,870 --> 00:01:06,799
hoshide were busy with some

27
00:01:11,190 --> 00:01:08,880
replacement activities and some

28
00:01:13,590 --> 00:01:11,200
in-flight maintenance work associated

29
00:01:16,310 --> 00:01:13,600
with the replacement of a faulty a

30
00:01:17,910 --> 00:01:16,320
pretreat tank for the waste and hygiene

31
00:01:20,310 --> 00:01:17,920
compartment that is located in the

32
00:01:22,789 --> 00:01:20,320
destiny laboratory of the international

33
00:01:24,950 --> 00:01:22,799
space station you can see from this

34
00:01:27,590 --> 00:01:24,960
video williams wearing a mask a

35
00:01:30,230 --> 00:01:27,600
protective mask as she worked

36
00:01:32,630 --> 00:01:30,240
not only on monday but for part of the

37
00:01:34,310 --> 00:01:32,640
day on tuesday to bring the waste and

38
00:01:35,910 --> 00:01:34,320

hygiene compartment back into an

39
00:01:37,910 --> 00:01:35,920
operational state

40
00:01:39,910 --> 00:01:37,920
one of the problems had occurred with

41
00:01:42,870 --> 00:01:39,920
what is called a dose pump that

42
00:01:44,469 --> 00:01:42,880
essentially pumps a pre-treat liquid

43
00:01:46,950 --> 00:01:44,479
into the waste and hygiene compartment

44
00:01:48,870 --> 00:01:46,960
to keep it as sanitary as possible for

45
00:01:50,389 --> 00:01:48,880
the crew to use uh

46
00:01:53,190 --> 00:01:50,399
each and every day

47
00:01:56,550 --> 00:01:53,200
that activity was not successful

48
00:01:59,190 --> 00:01:56,560
on monday a couple of spare pre-ta

49
00:02:00,789 --> 00:01:59,200
pre-treat tanks that were loaded uh and

50
00:02:03,749 --> 00:02:00,799
installed in the waste and hygiene

51
00:02:06,789 --> 00:02:03,759
compartment were not activated properly

52
00:02:08,469 --> 00:02:06,799
and so a new dose pump one of the many

53
00:02:10,949 --> 00:02:08,479
spares that exist on the international

54
00:02:13,830 --> 00:02:10,959
space station was installed

55
00:02:16,630 --> 00:02:13,840
and on tuesday williams and hoshide were

56
00:02:18,470 --> 00:02:16,640
able to successfully

57
00:02:20,869 --> 00:02:18,480
restart the waste and hygiene

58
00:02:23,750 --> 00:02:20,879
compartments pre-treat tank it checked

59
00:02:26,309 --> 00:02:23,760
out fine and the whc as it is known

60
00:02:29,589 --> 00:02:26,319
basically uh the one of the ship's

61
00:02:31,910 --> 00:02:29,599
commodes was back in action uh ready to

62
00:02:36,470 --> 00:02:31,920
support the three crew members on board

63
00:02:41,750 --> 00:02:39,110

also on tuesday uh williams and hoshide

64
00:02:45,110 --> 00:02:41,760
uh had an onboard training exercise to

65
00:02:48,470 --> 00:02:45,120
brush up on uh procedures uh with the

66
00:02:51,589 --> 00:02:48,480
robotics workstation uh in the cupola uh

67
00:02:54,150 --> 00:02:51,599
for the upcoming arrival of the spacex

68
00:02:55,830 --> 00:02:54,160
dragon commercial cargo craft that is

69
00:02:58,550 --> 00:02:55,840
scheduled to launch from the cape

70
00:03:00,149 --> 00:02:58,560
canaveral air force station on sunday

71
00:03:02,710 --> 00:03:00,159
evening and arrive at the international

72
00:03:05,990 --> 00:03:02,720
space station on october 10th

73
00:03:08,309 --> 00:03:06,000
that robotics uh training session uh led

74
00:03:10,790 --> 00:03:08,319
to a debrief session that williams and

75
00:03:12,869 --> 00:03:10,800
hoshide entered into with the robotics

76
00:03:13,670 --> 00:03:12,879
officers here in mission control and

77
00:03:17,190 --> 00:03:13,680
that

78
00:03:19,430 --> 00:03:17,200
was declared good and the crew

79
00:03:21,589 --> 00:03:19,440
was declared proficient uh with its

80
00:03:23,190 --> 00:03:21,599
refresher training to support all of the

81
00:03:25,509 --> 00:03:23,200
robotics activities that will be

82
00:03:27,910 --> 00:03:25,519
associated with the arrival of dragon

83
00:03:29,350 --> 00:03:27,920
for its birthing on the earth-facing

84
00:03:31,430 --> 00:03:29,360
port of the harmony module of the

85
00:03:32,710 --> 00:03:31,440
international space station following

86
00:03:34,550 --> 00:03:32,720
its launch

87
00:03:36,869 --> 00:03:34,560
on tuesday evening that automated

88
00:03:38,710 --> 00:03:36,879

transfer vehicle the eduardo amaldi that

89
00:03:40,309 --> 00:03:38,720
we mentioned a moment ago

90
00:03:42,390 --> 00:03:40,319
was commanded by

91
00:03:43,589 --> 00:03:42,400
flight controllers at the european space

92
00:03:46,470 --> 00:03:43,599
agency's

93
00:03:48,869 --> 00:03:46,480
atv control center in toulouse france

94
00:03:51,990 --> 00:03:48,879
to deorbit from the orbit that it had

95
00:03:54,070 --> 00:03:52,000
been in for the past six months and uh

96
00:03:57,030 --> 00:03:54,080
that uh series of deorbit burns that

97
00:03:59,350 --> 00:03:57,040
were commanded for the atv resulted in

98
00:04:00,869 --> 00:03:59,360
its uh breakup and reentry into the

99
00:04:03,589 --> 00:04:00,879
earth's atmosphere

100
00:04:06,149 --> 00:04:03,599
and its demise over the pacific ocean

101
00:04:08,869 --> 00:04:06,159
where it now resides in a watery grave

102
00:04:10,390 --> 00:04:08,879
for it that spacecraft its work having

103
00:04:12,390 --> 00:04:10,400
been completed

104
00:04:14,949 --> 00:04:12,400
for the mission in which it again

105
00:04:18,629 --> 00:04:14,959
delivered some seven tons of supplies uh

106
00:04:20,789 --> 00:04:18,639
to the international space station

107
00:04:23,270 --> 00:04:20,799
the next automated transfer vehicle uh

108
00:04:25,270 --> 00:04:23,280
the albert einstein is scheduled to

109
00:04:27,350 --> 00:04:25,280
launch from kuru french guiana for the

110
00:04:31,270 --> 00:04:27,360
europe from the european space agency

111
00:04:33,270 --> 00:04:31,280
arianespas launch site next april

112
00:04:35,590 --> 00:04:33,280
thursday saw a unique

113
00:04:38,150 --> 00:04:35,600

activity aboard the international space

114
00:04:41,430 --> 00:04:38,160
station that being the deployment of

115
00:04:43,749 --> 00:04:41,440
five satellites in two sets from a

116
00:04:47,510 --> 00:04:43,759
deploy mechanism attached to the small

117
00:04:49,830 --> 00:04:47,520
fine arm of the japanese robotic arm

118
00:04:52,230 --> 00:04:49,840
these satellites as you can see in this

119
00:04:55,590 --> 00:04:52,240
series of deployments

120
00:04:57,350 --> 00:04:55,600
were used and developed by a series of

121
00:04:58,469 --> 00:04:57,360
not only japanese but

122
00:05:00,629 --> 00:04:58,479
american

123
00:05:03,350 --> 00:05:00,639
technological disciplines one of which

124
00:05:04,870 --> 00:05:03,360
was called tech ed sat from san jose

125
00:05:07,670 --> 00:05:04,880
state university

126
00:05:10,870 --> 00:05:07,680
the satellites were placed on a tilt on

127
00:05:14,310 --> 00:05:10,880
a slide table in the japanese kibo

128
00:05:17,189 --> 00:05:14,320
modules airlock and then slid out into

129
00:05:19,670 --> 00:05:17,199
the void of space and were grappled by

130
00:05:21,270 --> 00:05:19,680
this deploy mechanism at the end of the

131
00:05:23,029 --> 00:05:21,280
small fine arm

132
00:05:24,550 --> 00:05:23,039
which is attached to the japanese

133
00:05:27,430 --> 00:05:24,560
robotic arm

134
00:05:30,230 --> 00:05:27,440
it was uh then commanded in two sets of

135
00:05:32,790 --> 00:05:30,240
deployments by aki hoshide working from

136
00:05:35,270 --> 00:05:32,800
a control panel and a laptop computer in

137
00:05:37,110 --> 00:05:35,280
the kibo module those satellites will

138
00:05:39,670 --> 00:05:37,120

orbit the earth for a protracted period

139
00:05:42,150 --> 00:05:39,680
of time of up to a year or so collecting

140
00:05:44,230 --> 00:05:42,160
data for the various universities

141
00:05:47,350 --> 00:05:44,240
corporations and disciplines

142
00:05:49,830 --> 00:05:47,360
that developed those five satellites all

143
00:05:51,670 --> 00:05:49,840
of the deployments went by the book all

144
00:05:53,749 --> 00:05:51,680
the satellites reported to be in good

145
00:05:55,749 --> 00:05:53,759
working order

146
00:05:58,550 --> 00:05:55,759
it was ironic from an historic

147
00:06:01,029 --> 00:05:58,560
standpoint that the deployment occurred

148
00:06:03,950 --> 00:06:01,039
on the 55th anniversary of the russians

149
00:06:05,590 --> 00:06:03,960
launching of sputnik 1 on october 4th

150
00:06:09,029 --> 00:06:05,600
1957

151
00:06:11,510 --> 00:06:09,039
here you see the footage of the

152
00:06:13,990 --> 00:06:11,520
very very first launch of an artificial

153
00:06:17,110 --> 00:06:14,000
satellite that changed the way the earth

154
00:06:19,110 --> 00:06:17,120
views itself and inaugurated the space

155
00:06:21,830 --> 00:06:19,120
race between the united states and

156
00:06:24,070 --> 00:06:21,840
russia that has now culminated into the

157
00:06:26,390 --> 00:06:24,080
international cooperation

158
00:06:27,350 --> 00:06:26,400
for the international space station that

159
00:06:29,670 --> 00:06:27,360
we see

160
00:06:33,510 --> 00:06:29,680
today

161
00:06:37,749 --> 00:06:33,520
again that launch occurring 55 years ago

162
00:06:39,909 --> 00:06:37,759
on october 4th 1957.

163
00:06:43,430 --> 00:06:39,919

on friday

164
00:06:45,590 --> 00:06:43,440
earlier today the japanese experiment

165
00:06:47,909 --> 00:06:45,600
module or the kibos multipurpose

166
00:06:51,909 --> 00:06:47,919
experiment platform attachment to the

167
00:06:55,670 --> 00:06:51,919
small fine arm was slid back into the

168
00:06:57,909 --> 00:06:55,680
kibo airlock and the canadarm2 the big

169
00:06:58,790 --> 00:06:57,919
arm the robotic arm that is used for so

170
00:07:00,230 --> 00:06:58,800
much

171
00:07:01,909 --> 00:07:00,240
support activity on board the

172
00:07:04,309 --> 00:07:01,919
international space station was

173
00:07:06,309 --> 00:07:04,319
reconfigured back into its normal

174
00:07:08,469 --> 00:07:06,319
configuration

175
00:07:10,070 --> 00:07:08,479
its work having been completed in

176
00:07:12,870 --> 00:07:10,080
support of the japanese satellite

177
00:07:14,790 --> 00:07:12,880
deployments that occurred on thursday

178
00:07:17,589 --> 00:07:14,800
and as always

179
00:07:19,510 --> 00:07:17,599
a variety of experiments ongoing all

180
00:07:21,350 --> 00:07:19,520
throughout the week by suni williams and

181
00:07:23,830 --> 00:07:21,360
aki hoshide in the u.s segment of the

182
00:07:25,350 --> 00:07:23,840
international space station and by yuri

183
00:07:28,830 --> 00:07:25,360
malenchenko

184
00:07:31,270 --> 00:07:28,840
in the russian segment of the orbital

185
00:07:32,870 --> 00:07:31,280
laboratory and that's a look back at the