



1
00:00:35,110 --> 00:00:31,589
good evening we begin nasa television

2
00:00:37,830 --> 00:00:35,120
coverage of mission sts 79 here at the

3
00:00:40,709 --> 00:00:37,840
john f kennedy space center in florida

4
00:00:43,110 --> 00:00:40,719
we're just hours away from nasa's 79th

5
00:00:45,110 --> 00:00:43,120
space shuttle launch and the 17th flight

6
00:00:46,950 --> 00:00:45,120
of the orbiter atlantis with a crew of

7
00:00:50,069 --> 00:00:46,960
six astronauts

8
00:00:51,670 --> 00:00:50,079
liftoff is planned at 4 54 a.m eastern

9
00:00:55,350 --> 00:00:51,680
daylight time

10
00:00:57,029 --> 00:00:55,360
the window extends until 501 a.m today

11
00:01:00,150 --> 00:00:57,039
the weather conditions are holding

12
00:01:02,150 --> 00:01:00,160
steady looks like we've got a 70 percent

13
00:01:04,310 --> 00:01:02,160

chance of having acceptable conditions

14

00:01:07,830 --> 00:01:04,320

for launch time

15

00:01:10,310 --> 00:01:07,840

launch pad 39a is the stage for the

16

00:01:12,710 --> 00:01:10,320

79th shuttle launch

17

00:01:14,550 --> 00:01:12,720

all countdown events are on schedule

18

00:01:16,870 --> 00:01:14,560

and the launch team here in firing room

19

00:01:17,990 --> 00:01:16,880

one is not tracking any technical issues

20

00:01:20,469 --> 00:01:18,000

that would

21

00:01:22,070 --> 00:01:20,479

preclude an on-time liftoff

22

00:01:23,670 --> 00:01:22,080

countdown clock is at t-minus three

23

00:01:26,789 --> 00:01:23,680

hours and holding we're in a standard

24

00:01:32,230 --> 00:01:26,799

built-in hold at this point

25

00:01:36,950 --> 00:01:34,550

at this time the ice inspects the final

26
00:01:38,550 --> 00:01:36,960
inspection team is surveying for any ice

27
00:01:41,190 --> 00:01:38,560
that may have formed on the vehicle

28
00:01:44,789 --> 00:01:41,200
measuring uh various

29
00:01:47,429 --> 00:01:44,799
elements of the sts-79 vehicle stack

30
00:01:49,190 --> 00:01:47,439
we've now got the sts-79

31
00:01:51,350 --> 00:01:49,200
astronauts

32
00:01:53,830 --> 00:01:51,360
having their lunch at the

33
00:02:01,030 --> 00:01:53,840
crew quarters

34
00:02:04,870 --> 00:02:02,630
light crew is in their suits they've

35
00:02:08,869 --> 00:02:04,880
been up since about six pm

36
00:02:12,550 --> 00:02:08,879
we've got pilot terry will cut

37
00:02:12,560 --> 00:02:15,750
crew looks wide awake

38
00:02:15,760 --> 00:02:21,990

mission specialist tom akers

39

00:02:22,000 --> 00:02:27,830

mission specialist carl walls

40

00:02:35,990 --> 00:02:31,110

and mission specialist john blaha got a

41

00:02:40,309 --> 00:02:38,070

john getting ready to uh

42

00:02:41,670 --> 00:02:40,319

start his uh four-month stay on the mir

43

00:02:43,830 --> 00:02:41,680

space station

44

00:02:46,070 --> 00:02:43,840

as is through tradition we've got the

45

00:03:10,229 --> 00:02:46,080

cake at the table with the

46

00:03:14,790 --> 00:03:11,990

we do have the flight crew members for

47

00:03:16,790 --> 00:03:14,800

sts-79 getting strapped in

48

00:03:19,509 --> 00:03:16,800

actually getting their

49

00:03:21,430 --> 00:03:19,519

suits on

50

00:03:23,430 --> 00:03:21,440

got commander bill reedy

51
00:03:25,190 --> 00:03:23,440
he's making his third flight today he

52
00:03:27,110 --> 00:03:25,200
has overall responsibility for

53
00:03:28,229 --> 00:03:27,120
commanding the flight

54
00:03:29,830 --> 00:03:28,239
he will become the fourth shuttle

55
00:03:31,030 --> 00:03:29,840
commander to dock with the russian space

56
00:03:33,430 --> 00:03:31,040
station

57
00:03:35,830 --> 00:03:33,440
pilot terry will cut

58
00:03:38,149 --> 00:03:35,840
he's will assist reading at the flight

59
00:03:40,630 --> 00:03:38,159
controls he's making his second flight

60
00:03:44,949 --> 00:03:42,630
he will assist in transferring logistics

61
00:03:47,030 --> 00:03:44,959
to and from the mir station

62
00:03:49,030 --> 00:03:47,040
he will also assist commander reedy in

63
00:03:50,949 --> 00:03:49,040

the fly around of the station

64

00:03:53,990 --> 00:03:50,959

after the undocking

65

00:03:55,670 --> 00:03:54,000

we've got dr jay att ready to go today

66

00:03:57,589 --> 00:03:55,680

he's

67

00:03:58,869 --> 00:03:57,599

mission specialist one making his fourth

68

00:04:00,789 --> 00:03:58,879

flight

69

00:04:02,229 --> 00:04:00,799

you'll be involved in

70

00:04:06,470 --> 00:04:02,239

activities and experiments aboard the

71

00:04:11,030 --> 00:04:09,190

mission specialist tom akers who is also

72

00:04:12,550 --> 00:04:11,040

the flight engineer

73

00:04:14,470 --> 00:04:12,560

he will assist the commander and pilot

74

00:04:16,789 --> 00:04:14,480

with the ascent re-entry checklist and

75

00:04:21,430 --> 00:04:16,799

monitoring all the vehicle systems he's

76
00:04:27,110 --> 00:04:23,670
and here we have mission specialist john

77
00:04:29,189 --> 00:04:27,120
blaha getting his flight to tested he's

78
00:04:30,790 --> 00:04:29,199
making his fifth flight today

79
00:04:32,790 --> 00:04:30,800
getting ready to embark on his

80
00:04:34,390 --> 00:04:32,800
four-month stay aboard the mirror space

81
00:04:37,189 --> 00:04:34,400
station where he will be

82
00:04:39,670 --> 00:04:37,199
involved in scientific investigations

83
00:04:41,590 --> 00:04:39,680
and we've got uh mission specialist

84
00:04:43,430 --> 00:04:41,600
carl walls getting

85
00:04:44,790 --> 00:04:43,440
ready he's

86
00:04:48,629 --> 00:04:44,800
waving

87
00:04:48,639 --> 00:05:04,550
he is making his third flight today

88
00:05:08,790 --> 00:05:07,270

this is shuttle launch control we've got

89

00:05:10,310 --> 00:05:08,800

pictures now the flight crew walking

90

00:05:12,790 --> 00:05:10,320

down the hall toward the elevator at

91

00:05:15,590 --> 00:05:12,800

their crew quarters

92

00:07:23,909 --> 00:05:15,600

jay eppt carl walls tom akers cannon

93

00:07:27,870 --> 00:07:25,670

good morning jen we read you loud and

94

00:07:32,870 --> 00:07:31,029

homie oh

95

00:07:34,629 --> 00:07:32,880

hope you have a great stay up there and

96

00:07:36,790 --> 00:07:34,639

please tell shannon hi when you see her

97

00:07:51,830 --> 00:07:36,800

for me

98

00:07:56,230 --> 00:07:54,390

and atlantis looks like we've got

99

00:07:58,390 --> 00:07:56,240

everything coming together here bill so

100

00:08:04,550 --> 00:07:58,400

you guys have a great trip and we'll see

101
00:08:08,390 --> 00:08:06,230
a profile test of the orbiter's aero

102
00:08:09,990 --> 00:08:08,400
services has started

103
00:08:12,390 --> 00:08:10,000
the flight control surfaces are being

104
00:08:24,869 --> 00:08:12,400
moved through a pre-programmed pattern

105
00:08:28,150 --> 00:08:26,469
the nozzles on the three main engines

106
00:08:46,470 --> 00:08:28,160
are being gimbaled

107
00:08:49,430 --> 00:08:48,470
eleven t-minus ten

108
00:08:50,310 --> 00:08:49,440
nine

109
00:08:58,470 --> 00:08:50,320
eight

110
00:09:02,949 --> 00:09:01,110
ignition and liftoff of atlantis on the

111
00:09:05,190 --> 00:09:02,959
fourth flight to dock with the russian

112
00:09:18,310 --> 00:09:05,200
space station

113
00:09:22,949 --> 00:09:21,190

you start letting us complete

114

00:09:26,389 --> 00:09:22,959

roger roll atlantis

115

00:09:30,870 --> 00:09:26,399

and your mps h2 out message is a deucer

116

00:09:34,310 --> 00:09:32,710

the role maneuver is complete aboard

117

00:09:37,190 --> 00:09:34,320

atlantis the vehicle is now in a heads

118

00:09:42,230 --> 00:09:37,200

down position on course for a 51.6

119

00:09:46,389 --> 00:09:44,710

atlantis velocity is approaching 900

120

00:09:48,310 --> 00:09:46,399

miles per hour the vehicle is already

121

00:10:02,790 --> 00:09:48,320

two and a half miles downrange from the

122

00:10:02,800 --> 00:10:09,750

atlantis houston go at throttle up

123

00:10:13,750 --> 00:10:11,990

one minute 25 seconds into the flight

124

00:10:17,509 --> 00:10:13,760

the three liquid fueled engines are now

125

00:10:22,710 --> 00:10:20,790

about 35 seconds away now from burnout

126

00:10:25,030 --> 00:10:22,720

and separation of the twin solid rocket

127

00:10:26,949 --> 00:10:25,040

boosters aboard the orbiter atlantis is

128

00:10:29,509 --> 00:10:26,959

12 and a half miles downrange from the

129

00:10:40,870 --> 00:10:29,519

launch site current altitude 18 miles

130

00:10:45,829 --> 00:10:43,430

the hydraulic systems all three of those

131

00:10:47,829 --> 00:10:45,839

apu's auxiliary power units are in good

132

00:10:50,470 --> 00:10:47,839

shape as are the electricity producing

133

00:10:59,590 --> 00:10:50,480

fuel cells standing by for srb

134

00:11:08,069 --> 00:11:02,069

srb separation is confirmed two minutes

135

00:11:11,269 --> 00:11:09,750

atlantis houston reads you have a

136

00:11:20,470 --> 00:11:11,279

nominal miko

137

00:11:25,350 --> 00:11:20,480

required and you can pass along to the

138

00:11:34,949 --> 00:11:27,670

atlantis houston reads i've got a big

139

00:11:34,959 --> 00:11:37,350

go ahead

140

00:11:40,550 --> 00:11:38,710

okay reads

141

00:11:43,190 --> 00:11:40,560

since you guys took some soup up there

142

00:11:45,509 --> 00:11:43,200

with you obviously you've got us working

143

00:11:48,069 --> 00:11:45,519

down here a bit

144

00:11:50,790 --> 00:11:48,079

we have ap number two

145

00:11:53,509 --> 00:11:50,800

as an unexplained shutdown

146

00:11:56,310 --> 00:11:53,519

we're looking into the data on it and

147

00:11:57,910 --> 00:11:56,320

we're also looking at ap1 and ap3

148

00:12:00,550 --> 00:11:57,920

capabilities

149

00:12:03,110 --> 00:12:00,560

and their impact on mission duration

150

00:12:06,150 --> 00:12:03,120

we are currently evaluating both a

151
00:12:07,910 --> 00:12:06,160
flight day 3 and a flight day 4

152
00:12:13,110 --> 00:12:07,920
rendezvous

153
00:12:14,790 --> 00:12:13,120
the approximate time will be 2 hours and

154
00:12:17,190 --> 00:12:14,800
56 minutes

155
00:12:20,470 --> 00:12:17,200
if we do a flight day 4 rendezvous the

156
00:12:22,710 --> 00:12:20,480
approximate time will be 3 hours and 40

157
00:12:29,590 --> 00:12:22,720
minutes we're working both right now and

158
00:12:35,590 --> 00:12:32,069
okay bill we copied it all and

159
00:12:41,430 --> 00:12:38,790
we'll switch now to uh mission control

160
00:12:45,190 --> 00:12:41,440
uh coral yacht outside of moscow for an

161
00:12:50,230 --> 00:12:45,200
update on activities uh in moscow since

162
00:12:55,990 --> 00:12:52,550
this is mission control corelog

163
00:12:58,710 --> 00:12:56,000

at about 3 pm moscow time

164

00:13:01,670 --> 00:12:58,720

roughly a few minutes after the launch

165

00:13:04,069 --> 00:13:01,680

of atlantis today at about 1 20 p.m

166

00:13:05,990 --> 00:13:04,079

moscow time the mission control center

167

00:13:08,790 --> 00:13:06,000

here conducted another communication

168

00:13:10,470 --> 00:13:08,800

session with the crew on board may be the

169

00:13:13,269 --> 00:13:10,480

first order of business for that

170

00:13:15,350 --> 00:13:13,279

communications session for nasa's mir

171

00:13:30,790 --> 00:13:15,360

operations lead bill gerstenmaier was to

172

00:13:34,389 --> 00:13:32,550

wow that's great we had a really good

173

00:13:36,230 --> 00:13:34,399

launch everything looks clean normal

174

00:13:37,990 --> 00:13:36,240

performance through miko they're working

175

00:13:39,110 --> 00:13:38,000

a fuel cell 2 problem but that's all

176

00:13:40,389 --> 00:13:39,120

everything else looks clean on the

177

00:13:43,110 --> 00:13:40,399

vehicle

178

00:13:46,389 --> 00:13:43,120

oh that sounds great well just keep us

179

00:13:49,030 --> 00:13:46,399

informed because you know

180

00:13:50,470 --> 00:13:49,040

it's not here and there's no opening

181

00:13:51,990 --> 00:13:50,480

hatch

182

00:13:53,350 --> 00:13:52,000

we understand and the only thing we're

183

00:13:54,389 --> 00:13:53,360

working now is a fuel cell two problem

184

00:13:55,990 --> 00:13:54,399

but everything else looks clean and

185

00:13:58,150 --> 00:13:56,000

we'll keep you informed

186

00:14:04,870 --> 00:13:58,160

okay i mean it's just one small step

187

00:14:09,110 --> 00:14:06,870

at launch time mir was moving toward

188

00:14:11,269 --> 00:14:09,120

central america on the ascending note of

189

00:14:13,269 --> 00:14:11,279

sixth orbit of the day

190

00:14:15,189 --> 00:14:13,279

coordination activities between the

191

00:14:16,870 --> 00:14:15,199

control center here in the control

192

00:14:19,110 --> 00:14:16,880

center in houston will move into high

193

00:14:21,030 --> 00:14:19,120

gear over the next few days as both the

194

00:14:22,710 --> 00:14:21,040

u.s and russian teams prepare for the

195

00:14:24,389 --> 00:14:22,720

docking later this week

196

00:14:27,110 --> 00:14:24,399

besides the science team a small

197

00:14:28,230 --> 00:14:27,120

consulting team is here from houston for

198

00:14:30,550 --> 00:14:28,240

the mission

199

00:14:33,110 --> 00:14:30,560

this team consists of both orbiter and

200

00:14:36,069 --> 00:14:33,120

systems orbiter systems and timelining

201

00:14:37,590 --> 00:14:36,079

experts their job is to facilitate in

202

00:14:39,110 --> 00:14:37,600

the flow of communications between

203

00:14:41,350 --> 00:14:39,120

russia and the us

204

00:14:43,350 --> 00:14:41,360

and until docking updates regarding

205

00:14:44,870 --> 00:14:43,360

atlantis progress will continue to be

206

00:14:45,750 --> 00:14:44,880

passed up to the crew waiting on a