



1
00:00:59,020 --> 00:00:57,130

my

2
00:01:03,540 --> 00:00:59,030

the way

3
00:01:08,410 --> 00:01:06,520

good morning endeavor hope you're ready

4
00:01:15,490 --> 00:01:08,420

for another day of hard work in the

5
00:01:18,220 --> 00:01:15,500

Milky Way good morning can't certainly

6
00:01:21,220 --> 00:01:18,230

are and we had a few last night to boot

7
00:01:23,140 --> 00:01:21,230

Roger that things are going well and we

8
00:01:25,600 --> 00:01:23,150

will have the uplink mail for you here

9
00:01:28,780 --> 00:01:25,610

real soon I'd like to pass along to john

10
00:01:30,520 --> 00:01:28,790

that that wakeup music is a special

11
00:01:34,540 --> 00:01:30,530

greeting from a vice principal of a

12
00:01:53,790 --> 00:01:34,550

school very close to home ok kids thanks

13
00:02:06,960 --> 00:01:56,640

Deborah Houston Andy and Mark were with

14

00:02:11,949 --> 00:02:09,130
good day from the space shuttle

15

00:02:14,290 --> 00:02:11,959
endeavour and shuttle mission st s77 i

16

00:02:16,780 --> 00:02:14,300
will shuttle pilot curt brown from

17

00:02:18,820 --> 00:02:16,790
elizabethtown North Carolina and at this

18

00:02:20,170 --> 00:02:18,830
moment my crewmates and I orbiting Earth

19

00:02:22,720 --> 00:02:20,180
at an altitude of approximately a

20

00:02:24,940 --> 00:02:22,730
hundred and eighty miles we'd like to

21

00:02:27,190 --> 00:02:24,950
take a moment to wish a happy memorial

22

00:02:30,190 --> 00:02:27,200
day through all the NASCAR racing fans

23

00:02:33,010 --> 00:02:30,200
attending to Charlotte 600 NASA and the

24

00:02:36,699 --> 00:02:33,020
entire crew but wish you all a very safe

25

00:02:43,510 --> 00:02:36,709
race and with that it's down race time

26
00:02:44,949 --> 00:02:43,520
so gentlemen start your engines and ever

27
00:02:51,220 --> 00:02:44,959
this is Houston are you ready for the

28
00:02:53,070 --> 00:02:51,230
event and everybody CNN this is Houston

29
00:02:56,890 --> 00:02:53,080
please call a dever for voice check

30
00:03:01,740 --> 00:02:56,900
endeavors CNN good mornin I'm you ready

31
00:03:04,540 --> 00:03:01,750
to go come on econ we're ready to go

32
00:03:06,370 --> 00:03:04,550
yeah I want to talk about the the

33
00:03:08,410 --> 00:03:06,380
inflatable antenna experiment with you

34
00:03:09,790 --> 00:03:08,420
because you were in position to watch it

35
00:03:11,500 --> 00:03:09,800
pretty carefully as it came out it was

36
00:03:14,259 --> 00:03:11,510
of course spectacular here on earth

37
00:03:16,900 --> 00:03:14,269
probably even more so up there but the

38
00:03:18,819 --> 00:03:16,910

ground-based side has said to us it you

39

00:03:21,250 --> 00:03:18,829

saw the rippling across the surface of

40

00:03:23,199 --> 00:03:21,260

the antenna at one point and said might

41

00:03:25,810 --> 00:03:23,209

omit it wasn't fully inflated give us

42

00:03:30,930 --> 00:03:25,820

your take on how well it worked and what

43

00:03:33,460 --> 00:03:30,940

those ripples might have been well the

44

00:03:36,220 --> 00:03:33,470

rippling males may have taken place

45

00:03:38,710 --> 00:03:36,230

seriously I think we'll have to wait

46

00:03:40,960 --> 00:03:38,720

till we get the data back on the ground

47

00:03:43,000 --> 00:03:40,970

and take a look at it inside the

48

00:03:47,140 --> 00:03:43,010

satellite there was attached to the

49

00:03:50,800 --> 00:03:47,150

antenna was a device video devices to

50

00:03:53,259 --> 00:03:50,810

measure the accuracy of that surface and

51
00:03:56,289 --> 00:03:53,269
so will had to take a look at that data

52
00:03:58,449 --> 00:03:56,299
and he was watching us from the space

53
00:04:03,640 --> 00:03:58,459
helmet when he meant let him comment on

54
00:04:06,310 --> 00:04:03,650
this a little bit okay Andy Thomas yeah

55
00:04:08,949 --> 00:04:06,320
i was watching had there were a few

56
00:04:10,599 --> 00:04:08,959
ripples in its surface it's not

57
00:04:12,670 --> 00:04:10,609
surprising that as it deploys and

58
00:04:15,449 --> 00:04:12,680
inflates that it might pick up a few

59
00:04:17,979 --> 00:04:15,459
vibrations and those of his be

60
00:04:19,629 --> 00:04:17,989
maintained in a surface pick given long

61
00:04:23,320 --> 00:04:19,639
enough they would probably all set

62
00:04:25,749 --> 00:04:23,330
stamp out but like John says says when

63
00:04:28,510 --> 00:04:25,759

he played we had the data back to see

64

00:04:30,999 --> 00:04:28,520

Jacomo in his plate how well a contour

65

00:04:33,670 --> 00:04:31,009

was maintained for my vantage point it

66

00:04:35,290 --> 00:04:33,680

looks fantastic it was a great site it

67

00:04:39,129 --> 00:04:35,300

was quite a show here on earth I'll tell

68

00:04:41,080 --> 00:04:39,139

you that tell me what the launch felt

69

00:04:43,029 --> 00:04:41,090

like for you what went through your mind

70

00:04:44,619 --> 00:04:43,039

what went through you emotionally and

71

00:04:46,239 --> 00:04:44,629

what went through your body during the

72

00:04:52,089 --> 00:04:46,249

first eight or nine minutes of this

73

00:04:53,559 --> 00:04:52,099

flight well obviously China was a pretty

74

00:04:56,399 --> 00:04:53,569

amazing experience sending one of the

75

00:05:00,279 --> 00:04:56,409

most amazing experiences that I've ever

76

00:05:02,740 --> 00:05:00,289

undergone I really enjoyed it though I

77

00:05:04,240 --> 00:05:02,750

must say I was on the flight deck and I

78

00:05:06,610 --> 00:05:04,250

had a mirror so that I could look out

79

00:05:09,159 --> 00:05:06,620

the overhead window during the climb out

80

00:05:11,769 --> 00:05:09,169

I heard the engine start I felt the

81

00:05:13,510 --> 00:05:11,779

vibration I saw in the mirror the

82

00:05:16,540 --> 00:05:13,520

exhaust coming out the base of the

83

00:05:18,760 --> 00:05:16,550

vehicle I saw a bright flash of light as

84

00:05:21,070 --> 00:05:18,770

the solid Rockets ignited then I felt a

85

00:05:24,309 --> 00:05:21,080

jolt and I saw the launch tower parts

86

00:05:26,829 --> 00:05:24,319

away and I knew we're on our way I as we

87

00:05:28,929 --> 00:05:26,839

went up I was still looking out the

88

00:05:32,350 --> 00:05:28,939

window I saw the earth roll away under

89

00:05:34,510 --> 00:05:32,360

the cards recede and as we got hired

90

00:05:36,429 --> 00:05:34,520

higher and faster and faster i could see

91

00:05:38,529 --> 00:05:36,439

shockwaves forming around the vehicle

92

00:05:40,480 --> 00:05:38,539

and a red glow out the afte the end of

93

00:05:42,779 --> 00:05:40,490

the vehicle it was truly a great

94

00:05:45,100 --> 00:05:42,789

experience one that I'll never forget

95

00:05:51,329 --> 00:05:45,110

any what's been the biggest surprise of

96

00:06:00,010 --> 00:05:54,249

learning to function in weightlessness

97

00:06:01,899 --> 00:06:00,020

is a big challenge you'd be amazed at

98

00:06:04,209 --> 00:06:01,909

how easily you can lose things when

99

00:06:05,439 --> 00:06:04,219

you're weightless on the ground if you

100

00:06:07,420 --> 00:06:05,449

lose something it just falls to the

101
00:06:10,510 --> 00:06:07,430
floor but up here it can go anywhere you

102
00:06:12,100 --> 00:06:10,520
can lose things so easily and I've spent

103
00:06:14,110 --> 00:06:12,110
some time looking around for things that

104
00:06:17,230 --> 00:06:14,120
I've lost 50 kind of way how quickly you

105
00:06:21,969 --> 00:06:17,240
can lose things CBC this is Houston

106
00:06:23,559 --> 00:06:21,979
please call endeavor for moisture good

107
00:06:26,879 --> 00:06:23,569
morning marc garneau are you able to

108
00:06:33,659 --> 00:06:29,429
Sam Dartmouth this is a pleasure thanks

109
00:06:36,570 --> 00:06:33,669
for joining us who's with you today my

110
00:06:38,010 --> 00:06:36,580
fellow crew member Danvers okay thank

111
00:06:40,649 --> 00:06:38,020
you both know mark you were lucky enough

112
00:06:46,379 --> 00:06:40,659
to earn a second ride aboard the shuttle

113
00:06:47,999 --> 00:06:46,389

how did you win that honor well I guess

114

00:06:50,580 --> 00:06:48,009

I just have to be in the right place at

115

00:06:52,769 --> 00:06:50,590

the right time in 1992 Canada was

116

00:06:56,309 --> 00:06:52,779

invited to send to mission specialist

117

00:06:59,519 --> 00:06:56,319

down to Houston to train in preparation

118

00:07:02,550 --> 00:06:59,529

for the space station program if sent me

119

00:07:05,600 --> 00:07:02,560

there also to Europeans and one japanese

120

00:07:07,679 --> 00:07:05,610

astronaut that the came to work at NASA

121

00:07:10,830 --> 00:07:07,689

because of the International Space

122

00:07:13,140 --> 00:07:10,840

Station that and my mom asked me if I

123

00:07:18,119 --> 00:07:13,150

was available and I said yes so here I

124

00:07:20,040 --> 00:07:18,129

am I nope in 1984 you brought up some

125

00:07:24,029 --> 00:07:20,050

classical music to listen to during the

126

00:07:25,829 --> 00:07:24,039

mission what went with you this time so

127

00:07:28,649 --> 00:07:25,839

I still have a lot of plastic oh yes but

128

00:07:32,279 --> 00:07:28,659

I also have some more modern stuff

129

00:07:37,619 --> 00:07:32,289

yesterday i was listening to some fan

130

00:07:40,260 --> 00:07:37,629

for a system crash test dummies dire

131

00:07:41,670 --> 00:07:40,270

straits these are some of my favorite

132

00:07:44,820 --> 00:07:41,680

groups and then I've got some other

133

00:07:46,200 --> 00:07:44,830

stuff too that's the guy hope you enjoy

134

00:07:47,730 --> 00:07:46,210

the rest of your mission and i know will

135

00:07:49,379 --> 00:07:47,740

be talking to you next week in a news

136

00:07:50,820 --> 00:07:49,389

conference from space and we'll be

137

00:07:52,589 --> 00:07:50,830

asking you about some of the canadian

138

00:07:59,129 --> 00:07:52,599

experiments that you will be working on

139

00:08:02,879 --> 00:07:59,139

thank you very much I sure Norman better

140

00:08:16,670 --> 00:08:02,889

prepare you have a picture curity Mario

141

00:08:20,480 --> 00:08:18,499

this is Mission Control Houston this

142

00:08:23,330 --> 00:08:20,490

television up from endeavor is a

143

00:08:25,790 --> 00:08:23,340

playback are showing operations earlier

144

00:08:30,460 --> 00:08:25,800

with the vented tank resupply experiment

145

00:08:33,920 --> 00:08:30,470

this experiment studying methods of a

146

00:08:35,480 --> 00:08:33,930

venting tanks in weightlessness venting

147

00:08:37,149 --> 00:08:35,490

tanks is that not easily done in

148

00:08:40,100 --> 00:08:37,159

weightlessness says air doesn't

149

00:08:41,630 --> 00:08:40,110

accumulate in a single position as is

150

00:08:46,490 --> 00:08:41,640

the case on earth and under the

151

00:08:51,380 --> 00:08:46,500

influence of gravity this experiment

152

00:08:53,210 --> 00:08:51,390

explores a new methods of having air

153

00:08:54,920 --> 00:08:53,220

accumulator in a position where it can

154

00:09:08,750 --> 00:08:54,930

be vented that from a tank such as a a

155

00:09:15,830 --> 00:09:13,480

view now is the Northern California

156

00:09:43,350 --> 00:09:15,840

looking up the coast toward the

157

00:09:43,360 --> 00:10:39,260

I got a picture and we do Mary oh thanks

158

00:10:49,940 --> 00:10:46,250

base at Park have ever received via go

159

00:10:51,080 --> 00:10:49,950

ahead mark this clay before you go over

160

00:10:53,600 --> 00:10:51,090

the hill I just want to let you know

161

00:10:56,480 --> 00:10:53,610

that hampi go change out is complete the