MISSION OVERVIEW

1
00:00:05,590 --> 00:00:02,470
[Music]

2
00:00:08,629 --> 00:00:05,600
my name is megan macarthur i'm the pilot

3
00:00:10,950 --> 00:00:08,639
hi my name is aki hoshide a mission

4
00:00:13,110 --> 00:00:10,960
specialist my name is toma pesque and

5
00:00:15,430 --> 00:00:13,120
i'm a mission specialist

6
00:00:17,510 --> 00:00:15,440
my name is shane kimbrough commander of

7
00:00:26,460 --> 00:00:17,520
nasa's spacex crew 2 mission to the

8
00:00:39,910 --> 00:00:36,700
[Music]

9
00:00:41,430 --> 00:00:39,920
so crew 2 mission is a is a mission to

10
00:00:44,470 --> 00:00:41,440
the international space station we're

11
00:00:46,709 --> 00:00:44,480
going to launch from florida on a u.s

12
00:00:48,229 --> 00:00:46,719
developed spacecraft that's called crew

13
00:00:50,709 --> 00:00:48,239

dragon and it's going to take us to the

14
00:00:52,389 --> 00:00:50,719
space station for six months of research

15
00:00:54,470 --> 00:00:52,399
of experiments scientific experiments

16
00:00:56,229 --> 00:00:54,480
and then we'll come back to earth

17
00:00:58,709 --> 00:00:56,239
i love this capsule we're riding on it

18
00:01:00,549 --> 00:00:58,719
was named endeavor on the demo 2 flights

19
00:01:01,910 --> 00:01:00,559
it had special meaning for me i flew on

20
00:01:03,110 --> 00:01:01,920
the space shuttle endeavour so i'm

21
00:01:05,030 --> 00:01:03,120
really excited to fly on another

22
00:01:07,429 --> 00:01:05,040
spacecraft called endeavor it's even

23
00:01:09,190 --> 00:01:07,439
more significant i think for megan

24
00:01:11,270 --> 00:01:09,200
because she's going to fly in the same

25
00:01:13,830 --> 00:01:11,280
seat that her husband bob flew in on the

26
00:01:15,590 --> 00:01:13,840
same spacecraft so that's pretty neat

27
00:01:18,070 --> 00:01:15,600
it's amazing to think that i will be

28
00:01:19,910 --> 00:01:18,080
sitting in the same seat that that bob

29
00:01:21,749 --> 00:01:19,920
was sitting in when he certified that

30
00:01:24,550 --> 00:01:21,759
vehicle the very first time that it

31
00:01:26,310 --> 00:01:24,560
launched i don't think i realized that

32
00:01:28,070 --> 00:01:26,320
when i found out that i was going to be

33
00:01:29,429 --> 00:01:28,080
assigned to the crew 2 mission i didn't

34
00:01:31,429 --> 00:01:29,439
realize it was going to be the same

35
00:01:33,670 --> 00:01:31,439
vehicle but that certainly adds a little

36
00:01:35,670 --> 00:01:33,680
something special to the to the mission

37
00:01:37,190 --> 00:01:35,680
so comparing the crew dragon with the

38
00:01:38,950 --> 00:01:37,200

space shuttle training obviously the

39
00:01:40,390 --> 00:01:38,960
vehicles have a lot of differences even

40
00:01:42,870 --> 00:01:40,400
though their goal is the same to get

41
00:01:45,429 --> 00:01:42,880
people into low earth orbit and so with

42
00:01:47,830 --> 00:01:45,439
the space shuttles built in the 1970s

43
00:01:50,069 --> 00:01:47,840
really we had a lot of switches like

44
00:01:52,149 --> 00:01:50,079
panels and panels of switches

45
00:01:53,910 --> 00:01:52,159
with crew dragon of course we don't have

46
00:01:56,789 --> 00:01:53,920
those panels and panels of switches we

47
00:01:58,870 --> 00:01:56,799
have a very clean wall environment and

48
00:02:00,789 --> 00:01:58,880
some large touch screens where we can

49
00:02:02,630 --> 00:02:00,799
switch between monitoring different

50
00:02:04,149 --> 00:02:02,640
systems we don't have the same

51
00:02:06,469 --> 00:02:04,159
interaction with the vehicle we can't

52
00:02:08,150 --> 00:02:06,479
send as many commands to the crew dragon

53
00:02:10,309 --> 00:02:08,160
as we could to space shuttle but we have

54
00:02:12,470 --> 00:02:10,319
a team of ground controllers that send a

55
00:02:14,070 --> 00:02:12,480
lot of those commands and our monitoring

56
00:02:15,830 --> 00:02:14,080
in a way that we couldn't do with space

57
00:02:17,430 --> 00:02:15,840
shuttles back in the day so it's very

58
00:02:18,710 --> 00:02:17,440
interesting to compare the two vehicles

59
00:02:20,630 --> 00:02:18,720
and the style of training that's

60
00:02:21,910 --> 00:02:20,640
required for the two vehicles

61
00:02:24,550 --> 00:02:21,920
so we're gonna launch from cape

62
00:02:26,790 --> 00:02:24,560
canaveral florida uh falcon 9 rockets

63
00:02:28,869 --> 00:02:26,800

crew dragon is our spacecraft on top and

64
00:02:32,229 --> 00:02:28,879
it's going to launch us into a roughly

65
00:02:33,589 --> 00:02:32,239
200 kilometers altitude orbit

66
00:02:34,869 --> 00:02:33,599
and then i'm going to catch up with the

67
00:02:37,030 --> 00:02:34,879
space station we're going to do a

68
00:02:39,830 --> 00:02:37,040
rendezvous which was gonna fly around

69
00:02:42,229 --> 00:02:39,840
the space station a line and then dock

70
00:02:43,750 --> 00:02:42,239
uh open the hatches and then we'll be on

71
00:02:45,910 --> 00:02:43,760
board and that's the main job of the

72
00:02:47,990 --> 00:02:45,920
crew dragon spacecraft is to take us

73
00:02:49,430 --> 00:02:48,000
from the insertion orbit all the way to

74
00:02:50,550 --> 00:02:49,440
the space station

75
00:02:53,030 --> 00:02:50,560
in safety

76
00:02:54,790 --> 00:02:53,040
so once we're on board the international

77
00:02:57,430 --> 00:02:54,800
space station there's a lot of things

78
00:03:01,190 --> 00:02:57,440
the main task is doing a lot of

79
00:03:03,910 --> 00:03:01,200
different science whether it's biology

80
00:03:05,190 --> 00:03:03,920
material science fluid mechanics we're

81
00:03:07,030 --> 00:03:05,200
just going to do a bunch of nice

82
00:03:08,790 --> 00:03:07,040
research and science

83
00:03:10,070 --> 00:03:08,800
that's going to benefit all of humanity

84
00:03:11,670 --> 00:03:10,080
or it's going to help us with future

85
00:03:14,149 --> 00:03:11,680
exploration so that's exciting to be

86
00:03:15,990 --> 00:03:14,159
part of something that's at grand

87
00:03:17,990 --> 00:03:16,000
we will have some spacewalks planned for

88
00:03:19,190 --> 00:03:18,000

our expedition while we're up there so

89
00:03:21,430 --> 00:03:19,200
that'll be

90
00:03:23,670 --> 00:03:21,440
some great days out there to go outside

91
00:03:26,550 --> 00:03:23,680
so on this flight we have

92
00:03:28,229 --> 00:03:26,560
american french and japanese astronauts

93
00:03:31,430 --> 00:03:28,239
on board it's the first time that you

94
00:03:33,589 --> 00:03:31,440
have three different nationalities on

95
00:03:35,990 --> 00:03:33,599
this crude dragon this international

96
00:03:37,750 --> 00:03:36,000
space station itself is a big

97
00:03:40,789 --> 00:03:37,760
collaboration between

98
00:03:43,030 --> 00:03:40,799
15 countries it is very important to do

99
00:03:44,710 --> 00:03:43,040
a lot of international cooperation you

100
00:03:46,949 --> 00:03:44,720
know no individual person gets

101
00:03:49,190 --> 00:03:46,959
themselves into space right it's a huge

102
00:03:51,509 --> 00:03:49,200
effort that that happens but it's also

103
00:03:54,070 --> 00:03:51,519
true on this global level that we have

104
00:03:56,630 --> 00:03:54,080
these big dreams where we look out you

105
00:03:58,789 --> 00:03:56,640
know to the horizon and this desire to

106
00:04:01,110 --> 00:03:58,799
explore the universe around us and we're

107
00:04:02,630 --> 00:04:01,120
always going to be more successful when

108
00:04:04,149 --> 00:04:02,640
we work together

109
00:04:06,370 --> 00:04:04,159
with our international partners to

110
00:04:18,629 --> 00:04:06,380
achieve these incredible dreams