



SPACE
STATION
STORIES

1
00:00:05,990 --> 00:00:03,590
mars is our goal

2
00:00:08,070 --> 00:00:06,000
there are so many scientific questions

3
00:00:10,230 --> 00:00:08,080
we want to answer there we might even

4
00:00:11,589 --> 00:00:10,240
find the first evidence of life beyond

5
00:00:13,430 --> 00:00:11,599
earth

6
00:00:14,950 --> 00:00:13,440
we've already proven we can send a rover

7
00:00:16,230 --> 00:00:14,960
to mars

8
00:00:17,750 --> 00:00:16,240
but now we need to learn how to send

9
00:00:21,029 --> 00:00:17,760
people

10
00:00:25,589 --> 00:00:23,349
a human mission to mars and back could

11
00:00:27,029 --> 00:00:25,599
take two and a half years

12
00:00:29,029 --> 00:00:27,039
and we don't know for sure how people

13
00:00:31,669 --> 00:00:29,039

will hold up in weightlessness for that

14

00:00:33,270 --> 00:00:31,679

long we need the people we send to mars

15

00:00:34,310 --> 00:00:33,280

to be healthy enough to do work once

16

00:00:36,310 --> 00:00:34,320

they get there

17

00:00:38,630 --> 00:00:36,320

and that's why the one year mission of

18

00:00:40,229 --> 00:00:38,640

scott kelly and michal kornyenko on the

19

00:00:41,510 --> 00:00:40,239

international space station was so

20

00:00:43,510 --> 00:00:41,520

important

21

00:00:45,350 --> 00:00:43,520

we started testing scott and misha a

22

00:00:47,110 --> 00:00:45,360

year before they launched and kept

23

00:00:49,110 --> 00:00:47,120

taking samples from them throughout on

24

00:00:51,350 --> 00:00:49,120

orbit to see how they reacted over time

25

00:00:52,869 --> 00:00:51,360

to being in weightlessness doctors check

26
00:00:54,470 --> 00:00:52,879
them out at the landing site right out

27
00:00:56,389 --> 00:00:54,480
of their soyuz spaceship and they'll

28
00:00:57,670 --> 00:00:56,399
undergo additional tests for many more

29
00:00:59,270 --> 00:00:57,680
months on the ground

30
00:01:01,110 --> 00:00:59,280
then we've got to dig through all that

31
00:01:03,189 --> 00:01:01,120
data gathered to learn more we're

32
00:01:05,109 --> 00:01:03,199
studying information about bone loss and

33
00:01:06,789 --> 00:01:05,119
muscle weakness and affects their fine

34
00:01:08,630 --> 00:01:06,799
motor skills we're studying the

35
00:01:11,030 --> 00:01:08,640
psychological effects of an extended

36
00:01:12,390 --> 00:01:11,040
space flight and how well they slept

37
00:01:14,710 --> 00:01:12,400
we're looking to see if there was an

38
00:01:16,469 --> 00:01:14,720

impact to their vision we're looking at

39

00:01:18,630 --> 00:01:16,479

everything to make sure the people we

40

00:01:20,310 --> 00:01:18,640

send to mars will make the trip safely

41

00:01:22,149 --> 00:01:20,320

on top of measuring the impacts of

42

00:01:23,910 --> 00:01:22,159

weightlessness to the human crew we're

43

00:01:25,910 --> 00:01:23,920

using these international space station

44

00:01:27,830 --> 00:01:25,920

missions to learn about the hardware and

45

00:01:29,270 --> 00:01:27,840

technology we need for the trip

46

00:01:30,630 --> 00:01:29,280

things like how to refine our life

47

00:01:32,710 --> 00:01:30,640

support systems to make them more

48

00:01:34,789 --> 00:01:32,720

reliable how to use robots to help

49

00:01:36,550 --> 00:01:34,799

humans do their work we're even figuring

50

00:01:38,789 --> 00:01:36,560

out how to communicate effectively over

51
00:01:41,429 --> 00:01:38,799
these huge distances and how to make the

52
00:01:43,270 --> 00:01:41,439
human crew members more self-sufficient

53
00:01:45,109 --> 00:01:43,280
the international space station is our

54
00:01:46,550 --> 00:01:45,119
test bed to work out the details of how

55
00:01:49,350 --> 00:01:46,560
to send people to these deep space

56
00:01:51,350 --> 00:01:49,360
destinations and bring them home safely

57
00:01:53,109 --> 00:01:51,360
in the process we're also promoting

58
00:01:55,429 --> 00:01:53,119
international cooperation

59
00:01:57,749 --> 00:01:55,439
and enabling commercial participation in

60
00:01:59,670 --> 00:01:57,759
space flight research all while we