1
00:00:09,589 --> 00:00:07,510
nasa's mars 2020 perseverance rover and

2
00:00:11,749 --> 00:00:09,599
the ingenuity mars helicopter

3
00:00:13,830 --> 00:00:11,759
have been busy after landing on the red

4
00:00:15,910 --> 00:00:13,840
planet a few weeks ago

5
00:00:18,150 --> 00:00:15,920
today we are joined by perseverance

6
00:00:21,349 --> 00:00:18,160
project scientist ken farley

7
00:00:23,189 --> 00:00:21,359
and ingenuity chief engineer bob balaram

8
00:00:25,990 --> 00:00:23,199
to get an update on what's happening

9
00:00:28,830 --> 00:00:26,000
with the rover and the helicopter

10
00:00:30,630 --> 00:00:28,840
bob can you give us the latest update on

11
00:00:32,950 --> 00:00:30,640
ingenuity

12
00:00:34,630 --> 00:00:32,960
oh yes so we've been working on a fix to

13
00:00:36,549 --> 00:00:34,640

a problem that has prevented us from

14
00:00:38,229 --> 00:00:36,559
going into flight mode where we can spin

15
00:00:40,229 --> 00:00:38,239
the rotors up fast

16
00:00:41,990 --> 00:00:40,239
we have both a long-term fix that's

17
00:00:44,470 --> 00:00:42,000
making its way to the spacecraft

18
00:00:45,430 --> 00:00:44,480
as well as some workarounds that we sent

19
00:00:47,350 --> 00:00:45,440
on thursday

20
00:00:49,590 --> 00:00:47,360
and we just got the results on friday

21
00:00:51,910 --> 00:00:49,600
and we'll be analyzing those results

22
00:00:53,750 --> 00:00:51,920
to see you know what the high speeds

23
00:00:56,069 --> 00:00:53,760
spin look like

24
00:00:59,510 --> 00:00:56,079
and that should let us get back on track

25
00:01:03,270 --> 00:00:59,520
with our rest of our flight experiments

26
00:01:05,270 --> 00:01:03,280
and what does that mean for first flight

27
00:01:06,310 --> 00:01:05,280
i think it means that uh we'll be done

28
00:01:08,230 --> 00:01:06,320
with the commissioning if

29
00:01:09,830 --> 00:01:08,240
the results from this all look good and

30
00:01:11,510 --> 00:01:09,840
we'll then be really ready to

31
00:01:13,190 --> 00:01:11,520
take off on that first flight so it's

32
00:01:15,350 --> 00:01:13,200
good progress to have

33
00:01:17,270 --> 00:01:15,360
and we're looking forward to being in

34
00:01:19,190 --> 00:01:17,280
the flying phase as getting past the

35
00:01:21,910 --> 00:01:19,200
commissioning phase

36
00:01:24,230 --> 00:01:21,920
that's good to hear bob now can there's

37
00:01:25,749 --> 00:01:24,240
another technology demonstration gearing

38
00:01:27,990 --> 00:01:25,759

up on perseverance

39
00:01:30,069 --> 00:01:28,000
can you tell us about moxie and what it

40
00:01:33,270 --> 00:01:30,079
plans to do

41
00:01:35,670 --> 00:01:33,280
sure moxie is part of perseverance's

42
00:01:36,950 --> 00:01:35,680
technology demonstration payload as is

43
00:01:40,469 --> 00:01:36,960
the helicopter

44
00:01:41,270 --> 00:01:40,479
and moxie is a small device that will

45
00:01:42,710 --> 00:01:41,280
convert

46
00:01:44,870 --> 00:01:42,720
the carbon dioxide of the martian

47
00:01:47,510 --> 00:01:44,880
atmosphere into oxygen

48
00:01:48,789 --> 00:01:47,520
as a demonstration of this capability

49
00:01:50,310 --> 00:01:48,799
for for future

50
00:01:52,230 --> 00:01:50,320
missions that might bring astronauts to

51
00:01:53,910 --> 00:01:52,240
mars who would benefit

52
00:01:55,910 --> 00:01:53,920
greatly by not having to bring oxygen

53
00:01:57,990 --> 00:01:55,920
with them so moxie is a

54
00:01:59,030 --> 00:01:58,000
is a demonstration that this capability

55
00:02:01,510 --> 00:01:59,040
will actually work

56
00:02:03,190 --> 00:02:01,520
on mars and we're very excited as as

57
00:02:05,270 --> 00:02:03,200
part of the early parts of this mission

58
00:02:06,870 --> 00:02:05,280
to be testing out our new technologies

59
00:02:08,469 --> 00:02:06,880
and we expect that the

60
00:02:10,389 --> 00:02:08,479
first run of the of the moxie

61
00:02:12,710 --> 00:02:10,399
investigation will be within the next

62
00:02:15,910 --> 00:02:12,720
couple of weeks

63
00:02:20,070 --> 00:02:15,920

great and what science has perseverance

64
00:02:23,270 --> 00:02:20,080
been working on over the last week or so

65
00:02:25,430 --> 00:02:23,280
we have been studying rocks as we have

66
00:02:27,589 --> 00:02:25,440
have been investigating the area where

67
00:02:29,990 --> 00:02:27,599
the helicopter is going to fly

68
00:02:31,670 --> 00:02:30,000
and as we drove out to our observation

69
00:02:33,350 --> 00:02:31,680
point where we can watch the helicopter

70
00:02:34,470 --> 00:02:33,360
at a safe distance we've been exploring

71
00:02:36,229 --> 00:02:34,480
the rocks that are

72
00:02:38,869 --> 00:02:36,239
up close to the rover trying to

73
00:02:41,030 --> 00:02:38,879
understand whether they are

74
00:02:42,470 --> 00:02:41,040
volcanic rocks or sedimentary rocks were

75
00:02:46,150 --> 00:02:42,480
they produced by a volcano

76
00:02:48,229 --> 00:02:46,160
or were they deposited by water

77
00:02:49,270 --> 00:02:48,239
thank you thank you ken and thank you

78
00:02:52,630 --> 00:02:49,280
bob to

79
00:02:54,470 --> 00:02:52,640
get the latest follow at nasa jpl

80
00:02:55,990 --> 00:02:54,480
and at nasa persevere on social media

81
00:02:58,149 --> 00:02:56,000
for the latest updates

82
00:03:00,949 --> 00:02:58,159
take a deeper dive on the mission's

83
00:03:03,509 --> 00:03:00,959
website mars.nasa.gov

84
00:03:04,149 --> 00:03:03,519
perseverance where you can also find all

85
00:03:06,869 --> 00:03:04,159
the raw

86
00:03:08,110 --> 00:03:06,879
images being sent back by the rover and

87
00:03:10,550 --> 00:03:08,120
go to

88
00:03:13,750 --> 00:03:10,560

go.nasa.gov ingenuity