



1
00:00:06,006 --> 00:00:08,842
>> NASA's Mars 2020
Perseverance Rover

2
00:00:08,842 --> 00:00:10,877
is getting the lay of the land

3
00:00:10,877 --> 00:00:13,913
after landing on the Red
Planet a few weeks ago.

4
00:00:13,913 --> 00:00:17,183
I'm Marina Jurica with NASA's
Jet Propulsion Laboratory

5
00:00:17,183 --> 00:00:18,818
in Southern California.

6
00:00:18,818 --> 00:00:21,287
I am joined by Perseverance
Integration Lead

7
00:00:21,287 --> 00:00:23,556
for the helicopter,
Farah Alibay.

8
00:00:23,556 --> 00:00:25,125
She coordinates the activities

9
00:00:25,125 --> 00:00:27,293
between the helicopter
and the rover.

10
00:00:27,293 --> 00:00:30,296
And Ingenuity Operations
Lead Tim Canham.

11
00:00:30,296 --> 00:00:32,399
His job is to operate

the helicopter

12

00:00:32,399 --> 00:00:34,734

once it's on the
surface of Mars.

13

00:00:34,734 --> 00:00:35,869

Welcome you guys.

14

00:00:36,836 --> 00:00:38,371

>> Hi Marina.

>> Thank you.

15

00:00:38,371 --> 00:00:42,075

>> Now Farah, what are the
next steps for Perseverance?

16

00:00:42,075 --> 00:00:43,810

>> We are just
about getting ready

17

00:00:43,810 --> 00:00:45,879

for the helicopter mission here.

18

00:00:45,879 --> 00:00:47,547

We've passed all latest reviews

19

00:00:47,547 --> 00:00:49,282

and we're just
finishing the checkouts

20

00:00:49,282 --> 00:00:52,085

of the mobility system
and the arm on Mars

21

00:00:52,085 --> 00:00:54,054

ready to support Ingenuity.

22

00:00:54,054 --> 00:00:56,122

>> And Tim, you must
be getting so excited

23

00:00:56,122 --> 00:01:00,160

for Ingenuity to stand on its
own on the surface of Mars.

24

00:01:00,160 --> 00:01:03,897

What steps need to happen before
that for you and your team?

25

00:01:03,897 --> 00:01:05,532

>> Yes, we are
definitely very excited.

26

00:01:05,532 --> 00:01:08,334

Right now, the helicopter is
still attached to the rover,

27

00:01:08,334 --> 00:01:09,969

so we're keeping
it warm and fed,

28

00:01:09,969 --> 00:01:11,571

we're charging the batteries.

29

00:01:11,571 --> 00:01:13,406

And we're also working
with Farah's team

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00:01:13,406 --> 00:01:17,010

to identify a final
site for the helicopter.

31

00:01:17,010 --> 00:01:19,712

>> Now, for both of you, there
seems to be a lot of steps

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00:01:19,712 --> 00:01:22,715

and preparations that go

into the helicopter phase.

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00:01:22,715 --> 00:01:25,218

Can you tell me a
little bit about that?

34

00:01:25,218 --> 00:01:26,453

>> Yeah, for sure.

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00:01:26,453 --> 00:01:27,787

Once we start the
helicopter mission,

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00:01:27,787 --> 00:01:29,055

the first thing
that we have to do

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00:01:29,055 --> 00:01:30,557

is drop the debris shield.

38

00:01:30,557 --> 00:01:32,425

That was the shield
that protected us

39

00:01:32,425 --> 00:01:34,394

doing entry,
descent, and landing.

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00:01:34,394 --> 00:01:36,496

Then we're going to
travel several days

41

00:01:36,496 --> 00:01:39,399

to the helicopter
drop-off location.

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00:01:39,399 --> 00:01:41,501

Once we get there, it's
actually gonna take us

43

00:01:41,501 --> 00:01:43,870

about a week to
deploy the helicopter.

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00:01:43,870 --> 00:01:45,405

It's currently horizontal,

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00:01:45,405 --> 00:01:47,240

and we have to go
through several steps,

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00:01:47,240 --> 00:01:49,409

and each one of
which we wanna image

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00:01:49,409 --> 00:01:50,743

and have ground in the loop

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00:01:50,743 --> 00:01:53,413

before we get to
that very last step

49

00:01:53,413 --> 00:01:56,015

where we do that last separation

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00:01:56,015 --> 00:01:57,650

between the rover
and the helicopter

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00:01:57,650 --> 00:01:59,252

and then drive away from it.

52

00:01:59,252 --> 00:02:01,454

>> Yes, and our team is
working very closely with Farah

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00:02:01,454 --> 00:02:03,389

to make sure our
plans are in place

54

00:02:03,389 --> 00:02:05,225
and all our commands are ready.

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00:02:05,225 --> 00:02:07,193
And we've additionally been
working with the rover team

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00:02:07,193 --> 00:02:09,329
to identify the perfect
site for the helicopter

57

00:02:09,329 --> 00:02:12,232
that should be flat with not
too many big rocks on it,

58

00:02:12,232 --> 00:02:14,667
but also good texture so
our navigation cameras

59

00:02:14,667 --> 00:02:16,970
can find their way
across the surface.

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00:02:16,970 --> 00:02:18,638
>> A lot of things
to look forward to.

61

00:02:18,638 --> 00:02:20,340
So to get the latest updates,

62

00:02:20,340 --> 00:02:23,610
follow @NASAPersevere
on Twitter and Facebook.

63

00:02:23,610 --> 00:02:25,745
Take a deeper dive on
the missions website,

64

00:02:25,745 --> 00:02:28,948
mars.nasa.gov/perseverance,

65

00:02:28,948 --> 00:02:31,251
where you can also
find all the raw images

66

00:02:31,251 --> 00:02:33,119
being sent back by the rover.

67

00:02:33,119 --> 00:02:34,387
And for the helicopter,

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00:02:34,387 --> 00:02:39,325
visit
mars.nasa.gov/technology/helico.

69

00:02:39,325 --> 00:02:40,827
Thanks so much for watching