



1
00:00:07,980 --> 00:00:05,870
my name is Jess Lewis I'm a

2
00:00:10,110 --> 00:00:07,990
electromechanical systems engineer here

3
00:00:11,579 --> 00:00:10,120
at NASA Goddard Space Flight Center I'm

4
00:00:14,419 --> 00:00:11,589
working on the same project and the

5
00:00:17,790 --> 00:00:14,429
solid sample Inlet tube which is the

6
00:00:20,340 --> 00:00:17,800
prime instrument in the Sam suite we

7
00:00:22,860 --> 00:00:20,350
make sure that the Mars soil gets to

8
00:00:25,440 --> 00:00:22,870
where it needs to be for sand to process

9
00:00:27,180 --> 00:00:25,450
and analyze it so we can see if there is

10
00:00:29,460 --> 00:00:27,190
life on Mars was assess the habitability

11
00:00:30,870 --> 00:00:29,470
of Mars when we started working on the

12
00:00:32,670 --> 00:00:30,880
part there was a lot that was already in

13
00:00:34,380 --> 00:00:32,680

place before we began actually

14

00:00:36,060 --> 00:00:34,390

conceptualizing what it would look like

15

00:00:37,590 --> 00:00:36,070

we really had to take a creative

16

00:00:40,169 --> 00:00:37,600

approach to come up with a with the

17

00:00:42,060 --> 00:00:40,179

geometry that we needed and try to meet

18

00:00:44,099 --> 00:00:42,070

all of our requirements for interfaces

19

00:00:45,450 --> 00:00:44,109

and scientific Wow all right when they

20

00:00:48,180 --> 00:00:45,460

start working on it they machine it out

21

00:00:50,849 --> 00:00:48,190

of a solid block of titanium and what

22

00:00:52,680 --> 00:00:50,859

they do is is they use a milling machine

23

00:00:54,750 --> 00:00:52,690

and actually mill away slight layers

24

00:00:57,029 --> 00:00:54,760

until they get the basic shape and then

25

00:00:59,399 --> 00:00:57,039

they use much smaller cuts and much

26

00:01:01,259 --> 00:00:59,409

smaller bits to actually machine the

27

00:01:03,360 --> 00:01:01,269

exact contour that we need around the

28

00:01:06,600 --> 00:01:03,370

phone and on the inside the same project

29

00:01:10,200 --> 00:01:06,610

is cool for me because I since I was a

30

00:01:12,270 --> 00:01:10,210

little kid I I loved science fiction and

31

00:01:13,920 --> 00:01:12,280

I always thought if there was any way

32

00:01:15,480 --> 00:01:13,930

that I could make a contribution to the

33

00:01:18,300 --> 00:01:15,490

space program or go into space that I

34

00:01:19,620 --> 00:01:18,310

would try to do so and working on the

35

00:01:22,109 --> 00:01:19,630

same project lets me express my