



1
00:00:00,506 --> 00:00:10,046
[Music]

2
00:00:10,546 --> 00:00:13,856
>> Okay, close two-one, two-two,
and two-three valves on the box.

3
00:00:16,306 --> 00:00:19,996
Okay, let's perform a
walk-around of the test setup.

4
00:00:19,996 --> 00:00:22,336
I work in the Structural
Dynamics Group.

5
00:00:24,026 --> 00:00:25,586
We're a little bit
catawampus again.

6
00:00:26,436 --> 00:00:27,506
Yeah, can we verify this?

7
00:00:27,566 --> 00:00:28,586
This should be about
three-eighths.

8
00:00:29,146 --> 00:00:33,056
And, what I do is a variety of
things, such as ground testing

9
00:00:33,156 --> 00:00:38,016
and analyses to support aircraft
that want to fly, and really,

10
00:00:38,016 --> 00:00:41,406
it's in terms of evaluating
the structure of the airplane

11
00:00:41,816 --> 00:00:44,296

for how it wants to
vibrate in flight.

12

00:00:44,996 --> 00:00:47,196

And, we look at all of that
in the ground before we go

13

00:00:47,196 --> 00:00:50,336

into flight, so we kind of
have an idea what to expect,

14

00:00:50,336 --> 00:00:52,216

and make sure that
everybody's safe,

15

00:00:52,216 --> 00:00:54,716

that we can execute
the project safely.

16

00:00:57,286 --> 00:00:58,856

Okay, gap size on
this side, Ted?

17

00:00:59,256 --> 00:01:00,186

I'm Claudia Herrera.

18

00:01:00,316 --> 00:01:03,026

I'm an aerospace engineer
in the Aerostructures Branch

19

00:01:03,026 --> 00:01:04,886

at NASA Armstrong
Flight Research Center.

20

00:01:05,396 --> 00:01:05,976

Okay, you ready?

21

00:01:06,846 --> 00:01:09,146

Extending to quarter inch.

22

00:01:09,146 --> 00:01:12,626

Education was taught to
me to be very important,

23

00:01:13,086 --> 00:01:14,286

from a very young age.

24

00:01:15,066 --> 00:01:20,136

My mother was from
Mexico, and she only went

25

00:01:20,316 --> 00:01:23,446

to elementary level
of schooling,

26

00:01:24,226 --> 00:01:29,906

but she always taught me to
want more, and to pursue more,

27

00:01:30,656 --> 00:01:32,666

and to keep chasing
after something better.

28

00:01:33,066 --> 00:01:34,056

Bottom valve is closed.

29

00:01:34,696 --> 00:01:37,956

I grew up in a lot of
poverty, and I learned

30

00:01:38,086 --> 00:01:43,026

that education was pretty
much the ticket out of it.

31

00:01:43,026 --> 00:01:46,716

I was blessed to be born in this
country, where I had access.

32

00:01:47,076 --> 00:01:48,036

Okay, I'm ready when you are.

33

00:01:49,086 --> 00:01:50,536

Part of what I love about my job

34

00:01:50,646 --> 00:01:54,746

in the Flight Loads Lab

is the variety of vehicles

35

00:01:54,746 --> 00:01:56,476

that I get to work with.

36

00:01:56,826 --> 00:01:59,206

As an example, being

37

00:01:59,356 --> 00:02:03,976

on the Adaptive Compliant

Trailing Edge project, ACTE.

38

00:02:09,336 --> 00:02:12,256

>> That was one of my

favorite projects in the sense

39

00:02:12,296 --> 00:02:15,556

that I've gotten to

see the most of it,

40

00:02:15,626 --> 00:02:18,536

from its formulation

stages to all the way

41

00:02:19,086 --> 00:02:21,326

through flight testing.

42

00:02:21,326 --> 00:02:25,446

And, what excites me about

that particular project is the

43

00:02:25,776 --> 00:02:28,106

technology of creating

44

00:02:28,146 --> 00:02:33,456
and designing compliant lifting
surfaces and wing surfaces

45

00:02:33,936 --> 00:02:36,886
that will then be used in
future designs of aircraft,

46

00:02:37,546 --> 00:02:40,266
to make airplanes
more efficient,

47

00:02:40,916 --> 00:02:45,726
which directly impacts any of
us that ever get on an airplane.

48

00:02:45,896 --> 00:02:50,616
Stop! Another part to what I
do is a lot of ground testing.

49

00:02:50,736 --> 00:02:52,996
That's a big part of what I
do in the Flight Loads Lab.

50

00:02:53,876 --> 00:02:55,476
We do ground vibration tests.

51

00:02:56,006 --> 00:03:00,486
We do mass properties
tests, and some examples

52

00:03:00,786 --> 00:03:04,166
of that are the Orion
crew module,

53

00:03:04,166 --> 00:03:08,146
where we did a pretty extensive
series of ground testing.

54

00:03:08,556 --> 00:03:10,216

And, in that particular project,

55

00:03:10,216 --> 00:03:14,086

my role was to oversee the
execution of those tests,

56

00:03:14,926 --> 00:03:17,206

beginning with the
planning, the coordination

57

00:03:17,206 --> 00:03:20,106

of all the different people,
and all the different teams

58

00:03:20,106 --> 00:03:23,546

that are involved, and all
of that, which I also enjoy.

59

00:03:23,546 --> 00:03:27,806

It's a very fun thing
when you sit at your desk,

60

00:03:27,806 --> 00:03:29,326

and you plan what a
test should look like,

61

00:03:29,736 --> 00:03:32,106

and then you see all the
pieces of it come together,

62

00:03:32,106 --> 00:03:34,286

because of all the
people that come together.

63

00:03:34,286 --> 00:03:39,306

And, in my free time, I'm a
big fan of just running and,

64

00:03:39,306 --> 00:03:40,606

in particular, distance running.

65

00:03:41,006 --> 00:03:42,786

It's a good way to stay healthy,

66

00:03:42,886 --> 00:03:45,696

which I've learned

it's important to be,

67

00:03:45,696 --> 00:03:49,246

to have a good balance, and

to take care of our bodies.

68

00:03:49,966 --> 00:03:53,356

About six years ago, I ran

a 5K, and then I got the bug

69

00:03:53,356 --> 00:03:55,976

for a half-marathon, which

I never thought I could do,

70

00:03:56,706 --> 00:03:59,966

and I did that, and then I got

the bug for the full marathon.

71

00:04:00,186 --> 00:04:02,866

To be able to set that goal,

to be able to set a plan,

72

00:04:02,936 --> 00:04:05,316

to be able to execute it

and accomplish that goal,

73

00:04:05,896 --> 00:04:08,066

was pretty rewarding for me.

74

00:04:08,966 --> 00:04:14,546

And, just on a daily basis, just

to have that place where, just,

75

00:04:15,156 --> 00:04:19,906
whatever I need to just rehash,
visit, or get rid of in my head,

76

00:04:20,376 --> 00:04:22,636
just to have that
moment, to be able to do

77

00:04:22,636 --> 00:04:26,316
that has been a source
of balance.

78

00:04:27,396 --> 00:04:32,136
I do get the sense that my work
is a part of a bigger picture.

79

00:04:32,726 --> 00:04:36,906
It's very rewarding, and it's
very much the reason why I went

80

00:04:37,226 --> 00:04:40,546
into engineering is, how can
we make this world better?