
Oscar Murillo, PhD
Aerospace Engineer

1
00:00:00,506 --> 00:00:12,546
[Music]

2
00:00:13,046 --> 00:00:14,466
>> Oscar Murillo: So we need
to get the weight and balance

3
00:00:14,466 --> 00:00:16,536
as accurate as possible
for the next phase

4
00:00:16,536 --> 00:00:17,926
of the [inaudible] vehicle.

5
00:00:18,076 --> 00:00:22,006
I have always wanted to work for
NASA since I was a little kid.

6
00:00:22,066 --> 00:00:24,566
So in high school
I knew I wanted

7
00:00:24,566 --> 00:00:25,906
to be an aerospace engineer.

8
00:00:26,146 --> 00:00:30,546
So just because we
already made these.

9
00:00:30,656 --> 00:00:34,466
And I set my goals up to work
for NASA from an early age.

10
00:00:34,876 --> 00:00:37,446
One of the things I knew
I had to do was go to one

11
00:00:37,486 --> 00:00:39,206
of the top schools

the nation for me

12
00:00:39,456 --> 00:00:40,756
to try to achieve that goal.

13
00:00:41,186 --> 00:00:44,796
And so I started looking at
all the school options I had.

14
00:00:45,306 --> 00:00:45,776
Your side.

15
00:00:46,796 --> 00:00:49,336
I found out that MIT was the
number one engineering school

16
00:00:49,336 --> 00:00:55,366
in the country, and so I set
my goals into going to MIT.

17
00:00:55,426 --> 00:00:58,266
Going to work [inaudible].

18
00:00:58,776 --> 00:01:01,706
My name's Oscar Murillo, and
I'm an aerospace engineer

19
00:01:01,706 --> 00:01:03,386
at NASA Armstrong
Flight Research Center.

20
00:01:04,076 --> 00:01:09,136
I also manage the
MIRO project, M-I-R-O.

21
00:01:09,756 --> 00:01:11,846
It stands for the
MUREP Institutional

22

00:01:11,846 --> 00:01:12,926
Research Opportunity.

23
00:01:13,296 --> 00:01:16,736
So I manage several different
cooperative agreements

24
00:01:16,876 --> 00:01:18,996
at several different
universities.

25
00:01:19,396 --> 00:01:22,506
And they're doing
research for NASA.

26
00:01:22,506 --> 00:01:23,676
I have an inverter.

27
00:01:24,176 --> 00:01:24,746
>> Oh, you have an inverter?

28
00:01:24,746 --> 00:01:26,586
>> Oscar Murillo: I work with
a lot of undergraduate students

29
00:01:26,586 --> 00:01:29,546
and some graduate students when
they come out here and work

30
00:01:29,546 --> 00:01:32,356
for NASA, working on
the Prandtl Project.

31
00:01:32,796 --> 00:01:33,646
Those are good.

32
00:01:33,976 --> 00:01:37,476
Prandtl is an investigation
of a new wing design.

33
00:01:37,666 --> 00:01:40,796
We're looking at the
benefit of a putting twist

34
00:01:40,846 --> 00:01:45,476
into a wing structure that
modifies the aerodynamic load

35
00:01:45,476 --> 00:01:47,966
that is experienced
by the vehicle.

36
00:01:47,966 --> 00:01:49,856
I work with my colleague
Al Bowers --

37
00:01:49,986 --> 00:01:50,276
>> Clear.

38
00:01:50,566 --> 00:01:52,336
>> Oscar Murillo: -- who's
the chief scientist here

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00:01:52,336 --> 00:01:53,446
at NASA Armstrong.

40
00:01:53,916 --> 00:01:58,776
And normally our philosophy
is just allow the research

41
00:01:58,846 --> 00:02:00,726
to be conducted by the students.

42
00:02:01,246 --> 00:02:01,646
>> We're ready?

43
00:02:02,526 --> 00:02:06,286
Three, two, one, release.

44
00:02:08,236 --> 00:02:10,096
>> Oscar Murillo: This is
definitely a groundbreaking

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00:02:10,236 --> 00:02:13,736
program; however, we
want the students to be

46
00:02:13,736 --> 00:02:17,146
at the forefront
of the research.

47
00:02:17,506 --> 00:02:21,286
They're involved from the very
beginning of the flight test,

48
00:02:21,286 --> 00:02:23,016
all the way to the
flight -- the very end.

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00:02:23,306 --> 00:02:26,296
And so they get to experience
in a very short amount

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00:02:26,296 --> 00:02:31,316
of time the full process
that we experience

51
00:02:31,316 --> 00:02:33,496
as aerospace engineers
here at Armstrong.

52
00:02:33,946 --> 00:02:36,796
You know, at the end of the
day, they're truly excited

53
00:02:36,836 --> 00:02:42,106
to be an aerospace engineer,
and I'm excited that they wanted

54
00:02:42,186 --> 00:02:45,826
to work for NASA and that
they've really had the passion

55
00:02:45,826 --> 00:02:48,926
to move this organization
forward.

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00:02:50,256 --> 00:02:54,336
These students are the future of
NASA and that we will leave them

57
00:02:54,336 --> 00:02:56,706
in good hands when they
start working for the agency.

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00:02:58,516 --> 00:03:03,046
[Pause]

59
00:03:03,546 --> 00:03:06,566
>> Oscar Murillo: I'm really
encouraged by what I see

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00:03:06,606 --> 00:03:07,556
when I work with the interns.

61
00:03:08,936 --> 00:03:12,486
My free time I spend a lot
with my -- with my daughter.

62
00:03:12,486 --> 00:03:13,646
I'm a new dad.

63
00:03:14,016 --> 00:03:15,186
She's two years old.

64
00:03:15,596 --> 00:03:19,666
And me, my wife, and her just
like to spend time hanging out.

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00:03:19,666 --> 00:03:23,106
It's really exciting to allow
her to experience things

66
00:03:23,106 --> 00:03:24,316
for the very first time.

67
00:03:24,966 --> 00:03:27,726
My dad was born in Mexico and
my mom was born in Arizona.

68
00:03:27,866 --> 00:03:29,656
Both of them are
Mexican-American.

69
00:03:30,126 --> 00:03:31,916
So I draw a lot of
strength from my culture.

70
00:03:32,186 --> 00:03:33,156
I really want to make sure

71
00:03:33,156 --> 00:03:36,026
that my daughter understands
her culture, background.

72
00:03:36,056 --> 00:03:38,896
And one of those
things is family values.

73
00:03:39,326 --> 00:03:41,626
And so we want to make sure
that as much as we can,

74
00:03:41,626 --> 00:03:44,016
we surround her with her
grandparents, with her aunts

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00:03:44,016 --> 00:03:47,426
and her uncles, and just
have that foundation so that

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00:03:47,426 --> 00:03:49,936
when she grows up, she
makes family a priority

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00:03:49,986 --> 00:03:51,086
for her as well.

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00:03:51,996 --> 00:03:54,156
Gives me perspective on why
I want to be an engineer

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00:03:54,496 --> 00:03:56,506
and why I do the
things that I do.

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00:03:56,876 --> 00:03:59,876
I think that working for
NASA is truly giving back

81
00:04:00,086 --> 00:04:04,936
to the community and
giving back to the country.