



1
00:00:00,700 --> 00:00:08,474
[Music]

2
00:00:08,474 --> 00:00:09,943
>> For the past seven years,

3
00:00:09,943 --> 00:00:13,012
Shedrick Bessent has been
an instrumentation engineer

4
00:00:13,012 --> 00:00:15,581
at NASA's Dryden
Flight Research Center.

5
00:00:15,581 --> 00:00:18,717
He currently works on design,
development, installation,

6
00:00:18,717 --> 00:00:20,853
and testing of research
instrumentation

7
00:00:20,853 --> 00:00:24,991
for three modified
aircraft, a Gulfstream III,

8
00:00:24,991 --> 00:00:26,725
SOFIA Flying Observatory,

9
00:00:26,725 --> 00:00:30,296
and the Ikhana Predator
B unmanned aircraft.

10
00:00:30,296 --> 00:00:32,565
He's helped develop and
test instrumentation

11
00:00:32,565 --> 00:00:35,935
for a wide variety of highly

technical aerospace research

12

00:00:35,935 --> 00:00:38,471

projects at Dryden
during his career.

13

00:00:38,471 --> 00:00:41,841

Bessent holds an undergraduate
degree in Electrical Engineering

14

00:00:41,841 --> 00:00:45,711

from North Carolina Agricultural
and Technical State University

15

00:00:45,711 --> 00:00:48,548

and a Master's in Electrical
and Computer Engineering

16

00:00:48,548 --> 00:00:51,051

from Purdue University.

17

00:00:52,318 --> 00:00:54,921

>> Well right now I'm working
on the new G III project.

18

00:00:54,921 --> 00:00:58,657

This is a brand new
aircraft to Dryden.

19

00:00:58,657 --> 00:01:01,928

It hasn't been flight
tested at all

20

00:01:01,928 --> 00:01:03,997

so it just right
off the factory lot.

21

00:01:03,997 --> 00:01:07,600

So it's a lot of fun, lot
of work but we get to do it

22

00:01:07,600 --> 00:01:10,103
from the ground floor up and
there's going to be a lot

23

00:01:10,103 --> 00:01:11,704
of learning that's
going to take place.

24

00:01:11,704 --> 00:01:14,741
It started at a young age, my
mom noticed, she's an educator,

25

00:01:14,741 --> 00:01:20,112
she noticed that when I had a
little turbo hoppers or RC cars,

26

00:01:20,112 --> 00:01:21,480
I wouldn't just play with them.

27

00:01:21,480 --> 00:01:23,850
I would actually take them apart

28

00:01:23,850 --> 00:01:25,952
and have the electrical
components flying all

29

00:01:25,952 --> 00:01:27,353
over the place.

30

00:01:27,353 --> 00:01:29,756
I wasn't too good at the time
at putting it all back together

31

00:01:29,756 --> 00:01:33,526
but I was really interested
in how things work.

32

00:01:33,526 --> 00:01:35,794

At that point, she knew
exactly I was an engineer,

33

00:01:35,794 --> 00:01:39,165
didn't know if I was mechanical
or electrical but from

34

00:01:39,165 --> 00:01:41,167
that point on it
was a done deal.

35

00:01:41,167 --> 00:01:45,704
I'm actually a product of
NASA's great recruiting program

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00:01:45,704 --> 00:01:49,676
and at the National Society of
Black Engineers' Conference;

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00:01:49,676 --> 00:01:51,510
I came by the NASA booth.

38

00:01:51,510 --> 00:01:54,380
I knew an engineer at the
time who I graduated with,

39

00:01:54,380 --> 00:01:55,948
he was working behind
the scenes.

40

00:01:55,948 --> 00:02:00,954
He asked myself and my future
wife at the time if we'd

41

00:02:00,954 --> 00:02:03,356
like to drop off our
résumés, sure did,

42

00:02:03,356 --> 00:02:07,960
we came as a package deal,

and the rest is history.

43

00:02:07,960 --> 00:02:11,230

One of my biggest challenges
was just trying to learn how

44

00:02:11,230 --> 00:02:13,632

to do my job the best I could.

45

00:02:13,632 --> 00:02:16,002

Like I said, I had
no aero background

46

00:02:16,002 --> 00:02:19,204

and I was a rookie coming out
as an electrical engineer,

47

00:02:19,204 --> 00:02:20,706

which is you have book smarts

48

00:02:20,706 --> 00:02:26,345

but you don't have the real
live on-the-job training smarts.

49

00:02:26,345 --> 00:02:30,349

It's really a great place
to work, open door policy;

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00:02:30,349 --> 00:02:34,020

everyone's willing
and able to help you.

51

00:02:34,020 --> 00:02:36,789

So it took me about three
or five years but after

52

00:02:36,789 --> 00:02:39,325

that point I really kind
of understood the NASA way

53

00:02:39,325 --> 00:02:41,761
of business and now I
really feel comfortable

54

00:02:41,761 --> 00:02:44,897
in what I'm doing now.

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00:02:44,897 --> 00:02:51,971
Finally, most about working
here at NASA is the flexibility

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00:02:51,971 --> 00:02:59,011
to take a design and build
and test and see a product

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00:02:59,011 --> 00:03:02,715
from its baby state all the
way to its final growth state.

58

00:03:02,715 --> 00:03:07,019
I worked at other places
before and you always just kind

59

00:03:07,019 --> 00:03:08,521
of work a piece of the puzzle

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00:03:08,521 --> 00:03:12,925
but you don't really understand
the full pie, if you will.

61

00:03:12,925 --> 00:03:18,430
But here, you're designing,
you're purchasing, you're coming

62

00:03:18,430 --> 00:03:19,932
up with things from scratch,

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00:03:19,932 --> 00:03:22,235
and then seeing it

all the way through.

64

00:03:22,235 --> 00:03:25,237

So by the time it gets to the
plane, I can tell you exactly

65

00:03:25,237 --> 00:03:27,973

where that wire was, what
company I bought it with,

66

00:03:27,973 --> 00:03:30,109

and why we put it in
there in the first place.

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00:03:30,109 --> 00:03:35,081

In my short career here, I've
gotten to work on a UAV, 747,

68

00:03:35,081 --> 00:03:39,085

a G III, F-15, each plane
is totally different.

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00:03:39,085 --> 00:03:42,254

I grew up with my
mom, my grandmother,

70

00:03:42,254 --> 00:03:44,056

my great-grandmother,
all educators,

71

00:03:44,056 --> 00:03:49,461

so education was very
important to my life

72

00:03:49,461 --> 00:03:51,664

and I'm living the
fruits of it now.

73

00:03:51,664 --> 00:03:56,769

Only 30-years-old, I could

never see myself here before

74

00:03:56,769 --> 00:04:00,607

and I really have
a solid career.

75

00:04:00,607 --> 00:04:03,776

Key is also to try to
find what you are good at,

76

00:04:03,776 --> 00:04:06,913

what you like to do because
the most important thing is