



Astronaut

at a Glance

1
00:00:10,110 --> 00:00:12,779
Reasons that people
kind of put out there.

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00:00:12,779 --> 00:00:14,981
I view exploration
as a challenge.

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00:00:14,981 --> 00:00:18,818
And so trying to continue to
feed that challenge means doing

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00:00:18,818 --> 00:00:22,122
new and exciting things, whether
it's climbing Kilimanjaro, it's

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00:00:22,122 --> 00:00:25,191
something you
haven't done before.

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00:00:25,191 --> 00:00:29,129
Whether it's any manner of kind
of expedition that you may go

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00:00:29,129 --> 00:00:33,533
on, if it's a new experience
for you, it's exploring.

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00:00:33,533 --> 00:00:36,870
As astronauts and we kind of
face a different role where

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00:00:36,870 --> 00:00:40,039
we're exploring for everybody
else because we're not in a

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00:00:40,039 --> 00:00:43,143
situation -- at least right now;
hopefully we will be someday --

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00:00:43,143 --> 00:00:47,080
where everybody can participate
as fully in that exploration

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00:00:47,080 --> 00:00:48,081
dream.

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00:00:48,081 --> 00:00:51,284
After finishing high school, I
attended Washington University

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00:00:51,284 --> 00:00:54,287
in St. Louis, where I studied
both mechanical engineering and

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00:00:54,287 --> 00:00:55,288
physics.

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00:00:55,288 --> 00:00:58,158
I had an ROTC scholarship
from the Air Force.

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00:00:58,158 --> 00:01:01,194
After completing at Washington
University, it was a kind of a

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00:01:01,194 --> 00:01:03,196
drawdown period in the military.

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00:01:03,196 --> 00:01:06,299
And so they didn't need me to
come on active duty right away

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00:01:06,299 --> 00:01:07,567
in the Air Force.

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00:01:07,567 --> 00:01:10,603
I applied for several schools
when I considered where I would

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00:01:10,603 --> 00:01:11,604
go to graduate school.

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00:01:11,604 --> 00:01:14,474
First thing, you know, I needed
to have an option to actually go

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00:01:14,474 --> 00:01:15,475
to graduate school.

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00:01:15,475 --> 00:01:18,311
And the Air Force gave me that
opportunity, at least from a

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00:01:18,311 --> 00:01:19,312
time perspective.

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00:01:19,312 --> 00:01:21,514
I ended up choosing Southern
California primarily because the

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00:01:21,514 --> 00:01:24,717
advisor there contacted me and
said, "Hey, I'm a new faculty

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00:01:24,717 --> 00:01:25,718
member.

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00:01:25,718 --> 00:01:28,488
I'd like to bring you into my
research group, and I've got

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00:01:28,488 --> 00:01:31,424
these projects for you." And
he had some really hands-on

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00:01:31,424 --> 00:01:33,159
projects to start me off on.

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00:01:33,159 --> 00:01:36,930

So he wanted me to build lab equipment kind of right out of

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00:01:36,930 --> 00:01:39,866

the chute, and that was something I was interested in.

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00:01:39,866 --> 00:01:43,736

After finishing my time at Caltech, I needed to come on

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00:01:43,736 --> 00:01:44,737

active duty.

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00:01:44,737 --> 00:01:47,640

Was assigned to Eglin Air Force Base and worked in the research

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00:01:47,640 --> 00:01:48,641

lab.

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00:01:48,641 --> 00:01:51,177

I got to do a little bit of flight tests and a little bit of

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00:01:51,177 --> 00:01:54,547

kind of engineering project management -- program management

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00:01:54,547 --> 00:01:55,548

if you will.

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00:01:55,548 --> 00:01:58,117

So the Air Force Test Pilot School actually has both

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00:01:58,117 --> 00:02:00,386

engineers and test pilots
that go through it.

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00:02:00,386 --> 00:02:02,388

And I went through the
engineers' curriculum.

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00:02:02,388 --> 00:02:05,091

So I'm not a pilot; I'm
a flight test engineer.

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00:02:05,091 --> 00:02:08,194

And so we always joke that the
pilots didn't really want to go

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00:02:08,194 --> 00:02:12,665

to all the meetings and do all
the paperwork associated with a

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00:02:12,665 --> 00:02:14,033

flight test.

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00:02:14,033 --> 00:02:16,402

Interestingly enough, in the Air
Force, there's actually a duty

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00:02:16,402 --> 00:02:17,904

code for astronaut.

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00:02:17,904 --> 00:02:21,541

And I put, you know, the duty
identifier for astronaut right

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00:02:21,541 --> 00:02:22,542

on there.

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00:02:22,542 --> 00:02:24,544

And they said, "You
know, that's not allowed.

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00:02:24,544 --> 00:02:27,080

You can't just write 'astronaut'
as the first job that you want

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00:02:27,080 --> 00:02:30,950

in the Air Force; you got to
build up to that sort of a

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00:02:30,950 --> 00:02:33,720

thing."But I was exposed in
graduate school to some other

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00:02:33,720 --> 00:02:36,189

folks that were actually
applying to be astronauts as

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00:02:36,189 --> 00:02:38,391

graduate students, which
was a surprise to me.

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00:02:38,391 --> 00:02:42,262

All of my Air Force peers --
you know, I had been told, "You

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00:02:42,262 --> 00:02:46,099

can't put down that a duty code
on your application to come into

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00:02:46,099 --> 00:02:49,869

active duty; you have to wait
until your opportunity comes to

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00:02:49,869 --> 00:02:52,772

be an astronaut." But my
classmates in graduate school

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00:02:52,772 --> 00:02:55,575

were applying to go straight
from graduate school off to be

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00:02:55,575 --> 00:02:56,576
astronauts.

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00:02:56,576 --> 00:02:59,345
And interestingly enough, one
of them was actually selected in

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00:02:59,345 --> 00:03:03,917
the 98 class -- Garrett Reisman
-- he and I went to graduate

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00:03:03,917 --> 00:03:04,918
school together.

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00:03:04,918 --> 00:03:08,354
So then I knew as soon as I
got in the Air Force I was

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00:03:08,354 --> 00:03:10,924
definitely going to apply
because Garrett had gotten

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00:03:10,924 --> 00:03:13,660
selected as a graduate student
after those few folks had told

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00:03:13,660 --> 00:03:16,596
me I couldn't do that
as an Air Force guy.

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00:03:16,596 --> 00:03:21,234
And so I followed that dream
right after coming on active

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00:03:21,234 --> 00:03:22,468
duty and started applying.

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00:03:22,468 --> 00:03:25,104
And with the rest of my test

pilot school classmates, we all

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00:03:25,104 --> 00:03:28,308
applied to be astronauts
the next time around.

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00:03:28,308 --> 00:03:32,111
And luckily enough,
I was selected.

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00:03:32,111 --> 00:03:35,615
We repeatedly have opportunity
to kind of participate in the

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00:03:35,615 --> 00:03:37,584
development and design
of the new vehicles.

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00:03:37,584 --> 00:03:40,920
And this was true even we were
still flying the space shuttle.

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00:03:40,920 --> 00:03:44,357
Every mission had aspects that
still had some flexibility from

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00:03:44,357 --> 00:03:45,358
a crew perspective.

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00:03:45,358 --> 00:03:47,527
And we would make
inputs and make changes.

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00:03:47,527 --> 00:03:50,930
Both of my missions, as you
pointed out, were on Endeavor.

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00:03:50,930 --> 00:03:54,167
So that's the ship that
I did take into space.

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00:03:54,167 --> 00:03:58,037

But as a Cape crusader, of those
guys who worked in Florida.

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00:03:58,037 --> 00:04:01,908

I was in all of the space
shuttles -- Columbia, all the

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00:04:01,908 --> 00:04:03,209

operational ones after that.

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00:04:03,209 --> 00:04:05,812

So I was exposed to all of them.

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00:04:05,812 --> 00:04:07,780

And they absolutely
were different.

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00:04:07,780 --> 00:04:11,117

The workforce down at KSC really
had an appreciation for every

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00:04:11,117 --> 00:04:13,753

vehicle was unique, every
vehicle was special.