



1

00:00:05,006 --> 00:00:08,866

Okay, so, for you, Scott, ultimately you wound up with an interest

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00:00:08,866 --> 00:00:11,516

in electrical engineering and ultimately aviation.

3

00:00:12,156 --> 00:00:17,316

Mark, what peaked your interest in maritime engineering and transportation?

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00:00:18,016 --> 00:00:21,236

MARK - Well, we spent a lot of time on the New Jersey shore.

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00:00:21,326 --> 00:00:24,576

My parents always had a boat from the time we were very little.

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00:00:25,116 --> 00:00:28,836

We'd go out fishing, well, we'd go down there for, usually for the summer...

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00:00:28,896 --> 00:00:30,516

SCOTT - Not like the TV Jersey Shore.

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00:00:30,516 --> 00:00:31,146

MARK - Yah.

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00:00:31,396 --> 00:00:35,676

So we'd go down there for the summer and spent a lot of time on the water.

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00:00:36,106 --> 00:00:40,606

Later, when we were teenagers, we were able to stay down there in the summer by ourselves

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00:00:41,126 --> 00:00:46,126

on our parents boat, you know, not a big boat, like in the thirty-five foot range

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00:00:46,126 --> 00:00:51,236

but big enough for the two of us to live on so I was very interested in, you know,

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00:00:51,236 --> 00:00:54,616

seamanship and maritime related stuff.

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00:00:54,656 --> 00:01:00,056

So probably when I was thirteen or fourteen I started looking at either going

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00:01:00,056 --> 00:01:03,176

to the Merchant Marine Academy or the Naval Academy, the Coast Guard Academy.

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00:01:03,776 --> 00:01:06,676

But the Merchant Marine Academy really got my interest.

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00:01:07,706 --> 00:01:08,316

And for you, Scott?

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00:01:08,316 --> 00:01:10,606

SCOTT - Well, plus our, you know, our grandfather was a,

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00:01:10,656 --> 00:01:15,066

an officer in the U.S. Merchant Marine and a fire boat captain in New York City

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00:01:15,066 --> 00:01:20,836

so that was a, I think, also a, you know, a, played a small part in the interest and,

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00:01:21,946 --> 00:01:25,476

you know, having a Third Mate's license which I actually still have.

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00:01:25,716 --> 00:01:33,216

I kind of kept it current all these years
and never actually thinking I would sail

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00:01:33,216 --> 00:01:37,506

on the license but the reason I went to the,
the school that I did was because it was a,

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00:01:37,506 --> 00:01:43,516

you know, they had Navy ROTC there and they
also it was a regimental type of environment.

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00:01:43,516 --> 00:01:47,936

I thought it'd be better for me, give
me more time to focus on schoolwork

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00:01:47,936 --> 00:01:50,536

and I was, I was obviously right.

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00:01:51,896 --> 00:01:54,126

Which one of you decided
to become a pilot first?

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00:01:54,906 --> 00:02:00,426

SCOTT - My recollection, it was me, but
because he was a year ahead of me in college,

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00:02:00,426 --> 00:02:05,676

he actually was in the Navy first and flew
first but that's just my recollection.

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00:02:05,736 --> 00:02:06,466

MARK - Yah, I'm not sure.

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00:02:06,946 --> 00:02:11,946

And did that influence you to
follow in his footsteps basically?

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00:02:12,416 --> 00:02:16,596

SCOTT - You know, I was pretty committed to the Navy before he was because I was

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00:02:16,596 --> 00:02:18,486

on a Navy scholarship in college.

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00:02:18,486 --> 00:02:19,336

MARK - Yah, that's true.

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00:02:19,336 --> 00:02:24,166

I mean, I actually looked at even going, hate to say this but for a while I looked at going

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00:02:24,166 --> 00:02:31,146

into the Air Force and actually considered it, took the test and they offered me an option

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00:02:31,146 --> 00:02:32,526

of going to Air Force Flight School.

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00:02:33,226 --> 00:02:39,806

But certainly, I'm pretty convinced I took the right path there.

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00:02:41,056 --> 00:02:43,086

Nothing against the Air Force people out there, but...

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00:02:44,396 --> 00:02:46,996

You were both five years old when Neil Armstrong

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00:02:46,996 --> 00:02:49,616

and Buzz Aldrin set foot on the moon on Apollo 11.

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00:02:49,966 --> 00:02:57,746

What recollection might you have of that, at that age, and ultimately was

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00:02:57,746 --> 00:03:02,886

that a big influence on your
developing an interest ultimately

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00:03:02,886 --> 00:03:05,676

in aerospace or space, space flight itself?

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00:03:06,016 --> 00:03:09,246

MARK - I don't think I have any
recollection of Apollo 11 at all.

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00:03:09,476 --> 00:03:12,826

I think at that age, I don't
know what the situation was there

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00:03:13,406 --> 00:03:18,966

but I don't remember the significance and I
don't remember, you know, man first walking,

48

00:03:19,266 --> 00:03:20,366

taking the first steps on the moon.

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00:03:20,626 --> 00:03:25,326

I do remember what I'm pretty
sure was either Apollo 16 or 17,

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00:03:25,326 --> 00:03:32,276

one of the later flights a couple
years later and I was interested in it.

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00:03:32,466 --> 00:03:35,796

You know, it's one of those things when you're
that age you can be interested in something

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00:03:36,656 --> 00:03:41,926

but it just seems like it's so
far off and so difficult to do

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00:03:41,926 --> 00:03:45,096

that you don't really take a lot of time to consider it.

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00:03:45,956 --> 00:03:48,426

SCOTT - And I do have a recollection of it.

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00:03:48,426 --> 00:03:55,046

I can remember being in our living room and our parents, you know, sitting us in front

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00:03:55,046 --> 00:04:02,606

of the television and having us watch it and, but as far as did that influence me?

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00:04:03,586 --> 00:04:09,506

You know, certainly being an astronaut was something that, like many kids,

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00:04:09,506 --> 00:04:14,746

I was interested in but, you know, I really never thought it would be a possibility.

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00:04:16,686 --> 00:04:22,296

So with that in mind, give us a little background on how you were both selected

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00:04:22,296 --> 00:04:26,626

to join the Astronaut Corps at the same time which is unique in and of itself

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00:04:26,936 --> 00:04:29,446

which parallels many other events in your lives together.

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00:04:30,046 --> 00:04:33,276

MARK - Well, we both wound up in the same Test Pilot School class.

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00:04:33,426 --> 00:04:34,796

We didn't apply at the same time.

64
00:04:35,086 --> 00:04:42,276
I was in graduate school in Monterey on
this combined program which includes going

65
00:04:42,276 --> 00:04:44,896
to the Naval Test Pilot School, and
then Scott applied to Test Pilot School.

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00:04:44,896 --> 00:04:46,466
We actually wound up in the same class.

67
00:04:46,986 --> 00:04:52,506
The school didn't even realize it until a
week before we showed up and Dick Clark,

68
00:04:52,506 --> 00:04:55,086
who now works here at NASA,
was looking through the roster.

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00:04:55,086 --> 00:04:59,366
He was the Chief Flight Instructor
at the time and he noticed two guys

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00:04:59,366 --> 00:05:02,686
with the same last name which, you
know, that's kind of common, right?

71
00:05:03,126 --> 00:05:05,036
But then he noticed the social security numbers

72
00:05:05,296 --> 00:05:09,406
and our social security numbers are three
digits apart and he was like, "Okay, well,

73
00:05:09,406 --> 00:05:11,436
these guys must be related or..."

74
00:05:11,436 --> 00:05:13,696

actually he realized we must be twin brothers.

75
00:05:14,286 --> 00:05:21,116
So after Test Pilot School, say most test pilots
apply at some point to the astronaut program

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00:05:21,116 --> 00:05:26,796
and we both did and were fortunate enough
to be selected to the same class in 1996.

77
00:05:28,936 --> 00:05:33,206
So, Scott, it took you only three years
after your selection before you flew in space

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00:05:33,206 --> 00:05:38,846
for the first time as the pilot on STS-103,
Hubble Space Telescope Servicing Mission, and,

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00:05:38,846 --> 00:05:42,816
Mark, you didn't fly until a couple years
later on your first flight which went

80
00:05:42,816 --> 00:05:44,216
to the International Space Station.

81
00:05:45,096 --> 00:05:48,546
Was it frustrating for you, Mark,
to see your bother fly first?

82
00:05:48,546 --> 00:05:51,056
Were those competitive juices
flowing at the time?

83
00:05:51,056 --> 00:05:55,286
M - Not at all, you know, he was the first
American in our class to fly of thirty-five

84
00:05:55,466 --> 00:05:59,606
so it was great that, you know, if
it wasn't going to be me it was great

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00:05:59,606 --> 00:06:04,996

that it was Scott flying for the first time and then, I think it was probably two

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00:06:04,996 --> 00:06:09,266

or three years later that I had the opportunity to fly on STS-108 so...

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00:06:10,966 --> 00:06:17,116

What were your first impressions of space once you got on orbit, each one of you?

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00:06:17,856 --> 00:06:22,806

SCOTT - Well certainly when the solid rocket motors light, you know,

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00:06:22,806 --> 00:06:24,636

for the first time that gets your attention.

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00:06:24,636 --> 00:06:30,146

I mean, there's nothing that prepares you for the amount of energy that's involved

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00:06:30,746 --> 00:06:32,726

with getting the space shuttle into space.

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00:06:32,726 --> 00:06:37,736

It's, you know, seven and a half million pounds of thrust all in an instant.

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00:06:38,566 --> 00:06:41,146

You know, you get the impression you're going somewhere.

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00:06:41,676 --> 00:06:44,496

You're really not sure where but you're going there in a hurry

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00:06:44,496 --> 00:06:45,806
and you're not coming back to Florida.

96
00:06:45,916 --> 00:06:50,356
I mean, it just, kind of looks slow
when you're watching it as a spectator

97
00:06:50,356 --> 00:06:52,456
but when you're inside there's
nothing slow about it.

98
00:06:52,456 --> 00:06:55,006
I mean, it just really takes off.

99
00:06:56,436 --> 00:07:04,416
That certainly makes a significant impact,
significant impression and also, you know,

100
00:07:04,416 --> 00:07:06,036
just seeing the earth for the first time.

101
00:07:06,036 --> 00:07:11,066
It's incredibly blue, you know, brilliant
color blue and incredibly beautiful.

102
00:07:11,066 --> 00:07:17,186
MARK - I have this very vivid recollection
of about Mach 15 on my first flight,

103
00:07:17,826 --> 00:07:23,076
looking over my right shoulder out the
window and seeing this blue planet behind me

104
00:07:23,816 --> 00:07:28,646
and it's a view I've never had before, you know,
it was the first time seeing something like that

105
00:07:28,646 --> 00:07:30,396
and it was really, really impressive.

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00:07:31,126 --> 00:07:34,376

I even said something to, to
Dom at the time, Dom Gorie, my,

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00:07:34,756 --> 00:07:37,346

the Shuttle Commander, that,
you know, it's like, "Wow!

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00:07:37,346 --> 00:07:38,566

That is really amazing."

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00:07:38,776 --> 00:07:44,706

SCOTT - I, obviously we've had similar, like
we've discussed, you know, similar backgrounds

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00:07:44,706 --> 00:07:48,126

and experiences, you know,
similar training as astronauts

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00:07:48,126 --> 00:07:54,306

and between the time I flew my first flight
and when Mark flew his, I tried to explain

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00:07:54,306 --> 00:07:59,496

to him what that first eight and a half minutes
was going to be like and after his flight,

113

00:07:59,496 --> 00:08:05,206

when he landed I was there in the crew transport
vehicle when the hatch opened and the crew came

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00:08:05,206 --> 00:08:08,946

out and the first thing he said to
me when he came out of the shuttle

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00:08:08,946 --> 00:08:14,096

after his first flight was, he said, "___, I had
no idea what that ascent was going to be like."

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00:08:14,096 --> 00:08:16,056

MARK - That's true, you know.

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00:08:16,056 --> 00:08:20,486

You just try to describe it to other people that are getting ready to do this and, you know,

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00:08:20,486 --> 00:08:25,356

I remember after the solids lit and the main engines looked okay and I had a few seconds,

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00:08:25,356 --> 00:08:28,596

I looked over, you know, I started thinking, "Well, this just doesn't feel

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00:08:29,216 --> 00:08:31,286

like I expected it to feel, you know."

121

00:08:31,286 --> 00:08:34,586

It's not as smooth as you expect, kind of feels like you're

122

00:08:34,586 --> 00:08:37,126

on a runaway train going a thousand miles an hour.

123

00:08:37,626 --> 00:08:40,576

I remember looking over at Dom because I thought, "Well, this wasn't,

124

00:08:40,756 --> 00:08:45,536

this isn't quite right" and he, you know, he was okay with it, so like, "Well,

125

00:08:45,756 --> 00:08:46,996

must be what it's supposed to feel like."

126

00:08:48,626 --> 00:08:52,146

Was, how much of a 'wow moment' was it for you, Scott, when you first pulled

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00:08:52,146 --> 00:08:58,406

up alongside the Hubble Space Telescope knowing
this icon of astronomy you were about it,

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00:08:58,586 --> 00:09:02,256

you and your crew were about to go
service it, upgrade it and for you, Mark,

129

00:09:02,406 --> 00:09:06,476

to see the International Space Station
at that time in its fledgling state

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00:09:06,546 --> 00:09:08,346

but nonetheless pretty impressive.

131

00:09:08,346 --> 00:09:09,156

What were your thoughts?

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00:09:09,596 --> 00:09:14,146

SCOTT - Well, you know, just knowing what
we've learned from Hubble and how far back

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00:09:14,146 --> 00:09:21,236

in time it can see, it's
impressive for those reasons.

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00:09:21,236 --> 00:09:26,356

It's about the size of a school bus so
as far as telescopes go it's pretty big

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00:09:26,356 --> 00:09:31,096

but just understanding, you know, the impact
it's made on our understanding of the origins

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00:09:31,096 --> 00:09:34,996

of the universe makes it
a very impressive sight.

137

00:09:35,156 --> 00:09:41,156

Now, compared to the space station,
especially the last time I, well when I saw it