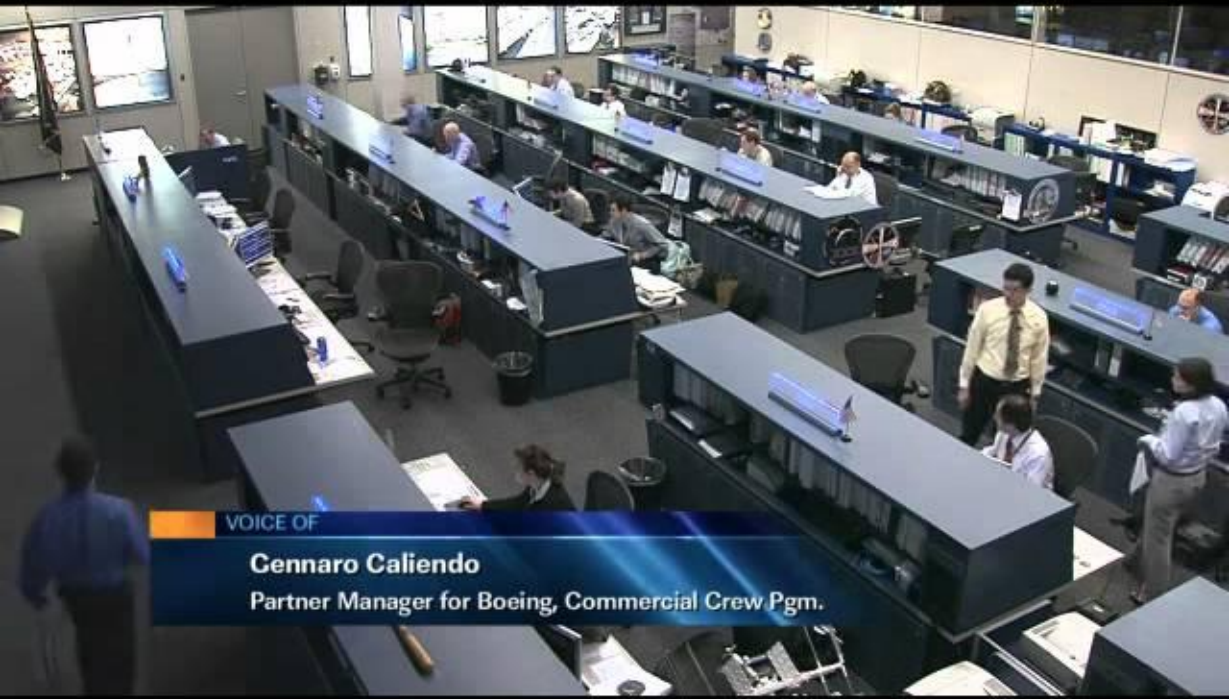
VOICE OF
Cennaro Caliendo
Partner Manager for Boeing, Commercial Crew Pgm.

1
00:00:00,956 --> 00:00:06,136
[Kyle Herring] We'll continue on
talking with the experts associated

2
00:00:06,136 --> 00:00:08,646
with NASA's Commercial Crew Program.

3
00:00:09,326 --> 00:00:11,356
Joining us now is Gennaro Caliendo.

4
00:00:11,356 --> 00:00:15,426
He also is based at the Kennedy
Space Center in Florida.

5
00:00:15,766 --> 00:00:20,346
He is the Partner Manager
for Boeing which is also one

6
00:00:20,346 --> 00:00:23,816
of the partners in the Commercial Crew Program.

7
00:00:23,816 --> 00:00:26,346
Gennaro, thanks a lot for
joining us, appreciate it.

8
00:00:26,936 --> 00:00:28,316
[Gennaro Caliendo] Thank you for having me Kyle.

9
00:00:30,586 --> 00:00:29,886
Good morning.

10
00:00:30,586 --> 00:00:35,476
I talked to John Cowart just a few
minutes ago and Sarah Waechter yesterday.

11
00:00:35,476 --> 00:00:38,106
But, and I kind of ask all of you the same thing

12

00:00:38,106 --> 00:00:43,466
so that everybody listening can
get an idea of how you got here.

13
00:00:43,466 --> 00:00:46,106
And can you talk a little bit
about yourself where you came

14
00:00:46,106 --> 00:00:48,266
from and how you ended up at NASA?

15
00:00:49,156 --> 00:00:49,846
[Gennaro] Let's see Kyle.

16
00:00:49,906 --> 00:00:52,866
I grew up in New York on Long Island.

17
00:00:52,866 --> 00:00:54,746
That's where I actually went to school.

18
00:00:54,746 --> 00:01:03,176
But I've always had an interest in space
and science and aerospace specifically.

19
00:01:03,266 --> 00:01:07,406
And that's what drove me to go into
school and study mechanical engineering.

20
00:01:08,536 --> 00:01:13,666
I guess from school I kind of looked around,

21
00:01:13,666 --> 00:01:19,206
I couldn't find any work cause most
graduating college students run into these days

22
00:01:19,206 --> 00:01:21,506
and it wasn't different 25 years ago.

23
00:01:21,706 --> 00:01:26,346

So I actually went to work in the construction
business for a little while till a friend

24
00:01:26,346 --> 00:01:31,116
of mine who was working at the Kennedy Space
Center asked me if I was interested in coming

25
00:01:31,116 --> 00:01:32,676
down and I jumped at the opportunity.

26
00:01:33,566 --> 00:01:38,476
I was in 1987 and I've been
basically a KSC employee ever since.

27
00:01:38,626 --> 00:01:44,076
Spent about nine years working on the Shuttle
Program as a structures engineer and then moved

28
00:01:44,076 --> 00:01:48,826
on into the International Space Station Program
as they were ramping up their manufacturing

29
00:01:49,556 --> 00:01:55,606
of the different piece parts back in the
mid-nineties and tried to lend a hand

30
00:01:55,606 --> 00:01:59,866
from our experience in assembly
and operations and went

31
00:01:59,866 --> 00:02:02,336
out to the factories and
kind of picked up the parts.

32
00:02:02,966 --> 00:02:05,856
Brought them back to the center for
their final check out and assembly.

33
00:02:07,056 --> 00:02:12,326
[Kyle] Well, so, you're obviously no stranger

to not only Shuttle but obviously Space Station

34
00:02:12,326 --> 00:02:16,756
and neither is the partner that
you're working with and that's Boeing.

35
00:02:16,756 --> 00:02:20,456
Can you talk a little bit about
your role as a Partner Manager

36
00:02:20,456 --> 00:02:23,876
for Boeing's contribution to
the Commercial Crew Program?

37
00:02:24,346 --> 00:02:25,236
[Gennaro] Sure, sure.

38
00:02:25,236 --> 00:02:28,666
As everybody knows, Boeing has been in
this business for a long time as well

39
00:02:28,666 --> 00:02:35,826
and they've been building spacecraft going
back to the early days of space travel and,

40
00:02:35,826 --> 00:02:38,196
of course with Space Shuttle here most recently.

41
00:02:38,976 --> 00:02:43,166
And they are actually in the process of
developing what's called the CST-100.

42
00:02:43,166 --> 00:02:44,386
It's a space capsule.

43
00:02:45,266 --> 00:02:51,886
They have recently here talked about
our signed partnership with ULA

44

00:02:51,886 --> 00:02:53,806
to provide the launch vehicle for them.

45
00:02:54,846 --> 00:02:59,516
In my role basically as a partner
manager is to try and bring our team

46
00:02:59,946 --> 00:03:02,876
to their factory environment,
or their design environment,

47
00:03:02,876 --> 00:03:08,046
and to give them some insight using
our experience that we've gained

48
00:03:08,046 --> 00:03:14,356
over the past half-century of spaceflight to
help them as they design their spacecraft.

49
00:03:14,906 --> 00:03:15,886
It's pretty simple.

50
00:03:17,146 --> 00:03:23,896
Basically, we partner up and we get together
and we listen to their design and we read

51
00:03:23,896 --> 00:03:26,246
about their design and then
we provide the experts

52
00:03:26,246 --> 00:03:28,936
where they need it and where
we think they need it.

53
00:03:29,516 --> 00:03:35,166
[Kyle] Well, you know, Boeing is
obviously one of the companies

54
00:03:35,166 --> 00:03:40,856
that obviously understand the contract world

cause they've been in it for so long, and so,

55
00:03:41,446 --> 00:03:45,816
of course you are too and now we're
working under the Space Act Agreement

56
00:03:45,816 --> 00:03:49,486
which is kind of milestone driven.

57
00:03:49,486 --> 00:03:54,736
So, how is that being received, when,
on both sides, when you both have worked

58
00:03:54,736 --> 00:03:58,856
under contract arrangements before but now
it's kind of a little bit different structure?

59
00:03:59,226 --> 00:03:59,346
[Gennaro] Yeah.

60
00:03:59,646 --> 00:04:00,836
It's a great question.

61
00:04:00,836 --> 00:04:04,896
You know even for a company like Boeing
who's used to doing a lot of these things,

62
00:04:04,896 --> 00:04:08,626
it's a new world for both them and us.

63
00:04:09,136 --> 00:04:15,506
A lot of times, they are so accustomed to
the standard NASA contractor relationship

64
00:04:15,546 --> 00:04:19,706
that they almost look to us
to kind of give them direction

65
00:04:19,706 --> 00:04:24,196

and that's not really the role
here in this relationship.

66
00:04:24,196 --> 00:04:27,806
We're here basically as a
partner to give them some insight.

67
00:04:27,806 --> 00:04:30,376
But it's strictly their vehicle to develop.

68
00:04:30,376 --> 00:04:32,036
And they've been doing a real good job.

69
00:04:32,036 --> 00:04:36,256
They've been kind of getting used to
the work and used to the environment,

70
00:04:36,286 --> 00:04:42,746
but you still have a lot of heritage people
and they still like the fact that were there

71
00:04:42,746 --> 00:04:49,026
with them and trying to get us to kind of give
them as much insight as possible and to how

72
00:04:49,026 --> 00:04:53,206
to develop the spacecraft and what exactly
NASA is looking for, for the future.

73
00:04:53,626 --> 00:04:57,656
Of course, that's not really what this
partnership currently is all about.

74
00:04:57,656 --> 00:05:01,196
We're trying to get them to design
a vehicle that perhaps we can go

75
00:05:01,196 --> 00:05:03,026
out and buy a ride on in the future.

76
00:05:03,646 --> 00:05:11,896
[Kyle] Part of that structure, obviously the
hope to get to that point is to put a vehicle

77
00:05:12,456 --> 00:05:19,326
in low Earth orbit to deliver crews to and
from the ISS of course and low Earth orbit.

78
00:05:19,376 --> 00:05:23,816
But the SAA structure is,
you know, milestone driven.

79
00:05:23,896 --> 00:05:32,456
What are some of the milestones that Boeing has
already met and kind of what's in front of them?

80
00:05:32,496 --> 00:05:38,116
[Gennaro] We originally had about 11 milestones
that were broken up over a 12 month period.

81
00:05:38,146 --> 00:05:43,716
We've added three more here to extend
some work into the summer that was part

82
00:05:44,066 --> 00:05:47,726
of the original plan that
wasn't funded early on.

83
00:05:48,136 --> 00:05:55,806
But so far they have done things like a systems
definition review, phase zero safety review.

84
00:05:55,806 --> 00:05:59,416
Of course, they just recently here
completed a preliminary design review

85
00:05:59,416 --> 00:06:01,116
of their CST-100 system.

86

00:06:01,116 --> 00:06:04,226
So they're pretty far along and here

87
00:06:04,286 --> 00:06:08,966
in the future we are going to
get into some engine firings.

88
00:06:08,966 --> 00:06:11,486
They tested a launch abort engine.

89
00:06:11,486 --> 00:06:14,556
They are going to use a pusher
system on this particular vehicle.

90
00:06:15,316 --> 00:06:19,886
And they were very successful in firing their
engine here recently and then they're going

91
00:06:19,886 --> 00:06:25,876
to go do some more launch abort type and
maneuvering engine system firings in the summer.

92
00:06:27,036 --> 00:06:31,726
And basically they are doing all
these piece parts in an effort

93
00:06:31,726 --> 00:06:38,356
to get there complete system designed and ready
to go so they can step into the next phase

94
00:06:38,556 --> 00:06:44,696
of SAAs with us with a fairly mature
vehicle in terms of its design and in terms

95
00:06:44,936 --> 00:06:48,686
of the work that's going behind
it to test out those designs.

96
00:06:49,556 --> 00:06:53,836
[Kyle] Well, I asked John this a moment ago.

97
00:06:53,966 --> 00:06:56,596
I like to ask all of you
this, because it's still kind

98
00:06:56,596 --> 00:07:01,566
of a new environment even though its old
hat to Boeing and yourself obviously.

99
00:07:01,566 --> 00:07:07,306
But you're in kind of a new job working
in this environment with Commercial Crew.

100
00:07:07,306 --> 00:07:13,486
But so how do you describe your new role to your
family and friends since they know what you did

101
00:07:13,996 --> 00:07:18,056
with Shuttle and with Station prior to this.

102
00:07:18,056 --> 00:07:18,416
[Gennaro] Yeah.

103
00:07:18,416 --> 00:07:20,236
It's interesting for us.

104
00:07:20,236 --> 00:07:25,746
What I normally tell people and my family is
that really what we are here to do is to try

105
00:07:25,746 --> 00:07:29,476
and help NASA and the U.S. government try

106
00:07:29,476 --> 00:07:31,916
and enable a new industry
of taking humans into space.

107
00:07:31,956 --> 00:07:32,826
It's pretty simple.

108
00:07:33,506 --> 00:07:39,616
We have a goal of trying to figure out a way
to get our astronauts to the ISS of course.

109
00:07:39,616 --> 00:07:44,556
But at the same time we're here as
representatives of the government to produce,

110
00:07:44,556 --> 00:07:48,506
to help these industry people produce a
vehicle that perhaps somebody like you

111
00:07:48,506 --> 00:07:50,436
or me can take a ride on in the future.

112
00:07:51,196 --> 00:07:54,686
Whether it's to go to a destination
like the International Space Station

113
00:07:54,686 --> 00:08:00,956
or other space complexes that may be
built sometime in the future for humans

114
00:08:00,956 --> 00:08:03,436
and perhaps our children and grandchildren.

115
00:08:04,036 --> 00:08:06,446
[Kyle] Well, obviously that's the goal

116
00:08:06,566 --> 00:08:10,446
and you're certainly a big part
of trying to make that happen.

117
00:08:10,446 --> 00:08:14,796
So obviously were in the International
Space Station flight control room right now

118
00:08:15,446 --> 00:08:16,966

with ongoing operations.

119
00:08:16,966 --> 00:08:21,336
And it's a perfect environment
for you to join us on the phone

120
00:08:21,426 --> 00:08:23,876
and tell us about what Boeing's doing.

121
00:08:23,876 --> 00:08:25,306
What you're doing in support of that.

122
00:08:25,306 --> 00:08:30,786
So Gennaro we really appreciate you
stopping by and talking with us this morning.

123
00:08:30,786 --> 00:08:31,476
Thanks a lot.

124
00:08:31,726 --> 00:08:33,196
[Gennaro] Well, thank you
for having me again Kyle

125
00:08:33,526 --> 00:08:35,226
and hopefully we'll talk again in the future.

126
00:08:35,386 --> 00:08:36,036
[Kyle] Hope so.

127
00:08:36,036 --> 00:08:37,346
I'll look forward to it.

128
00:08:37,346 --> 00:08:39,086
That's Gennaro Caliendo.