
ANTARES
PAO

1
00:00:00,071 --> 00:00:02,071
[Silence]

2
00:00:02,136 --> 00:00:03,556
>> Amiko Kauderer: Hi, welcome

3
00:00:03,556 --> 00:00:05,776
to the International Space
Station Flight Control Room.

4
00:00:05,776 --> 00:00:08,486
It's been quite a
day, yesterday, --

5
00:00:08,486 --> 00:00:10,106
and it continues
to be quite a day.

6
00:00:10,106 --> 00:00:11,316
We've been talking
about some activities

7
00:00:11,316 --> 00:00:14,016
that are taking place now aboard
the International Space Station.

8
00:00:14,016 --> 00:00:17,006
Meanwhile, back on Earth here --
yesterday, there was an attempt

9
00:00:17,396 --> 00:00:22,186
to launch a test flight, out
at the Wallops Facility --

10
00:00:23,186 --> 00:00:26,156
Flight Facility -- and so, here
with me today, I have a guest,

11
00:00:26,676 --> 00:00:29,076

John Steinmeyer, of
Orbital Sciences.

12
00:00:29,076 --> 00:00:30,466
John, thank you for
coming out today.

13
00:00:30,886 --> 00:00:31,666
>> John Steinmeyer:
Thanks, Amiko,

14
00:00:31,666 --> 00:00:32,866
thanks for having me on today.

15
00:00:33,256 --> 00:00:33,866
>> Amiko Kauderer: Real quick,

16
00:00:33,866 --> 00:00:35,716
if you wouldn't mind
just letting me know,

17
00:00:35,856 --> 00:00:38,596
what is your title, and your
role there at Orbital Sciences?

18
00:00:38,666 --> 00:00:39,036
>> John Steinmeyer: Sure.

19
00:00:39,036 --> 00:00:42,456
I'm a Senior Project Manager, in
Orbital's Launch Systems Group,

20
00:00:43,126 --> 00:00:45,736
and I mainly support
business development

21
00:00:45,736 --> 00:00:48,256
and strategic planning, for
our launch systems group.

22
00:00:48,626 --> 00:00:48,856
>> Amiko Kauderer: Okay,

23
00:00:49,106 --> 00:00:52,256
and so you are actually
stationed in California.

24
00:00:52,396 --> 00:00:53,416
>> John Steinmeyer:
I am, actually.

25
00:00:53,416 --> 00:00:54,296
>> Amiko Kauderer:
But then you're here,

26
00:00:54,296 --> 00:00:56,736
in support of this launch
that did not take place.

27
00:00:56,916 --> 00:00:57,076
>> John Steinmeyer: Yes,

28
00:00:57,076 --> 00:00:59,646
I'm here to support the
broadcast activities.

29
00:00:59,646 --> 00:01:00,486
>> Amiko Kauderer: Okay,
great, well thank you,

30
00:01:00,486 --> 00:01:01,926
we really appreciate
you being out here.

31
00:01:01,926 --> 00:01:04,696
So, first of all, let's
just explain for --

32
00:01:04,696 --> 00:01:06,406

to me, and also to our viewers,

33
00:01:06,736 --> 00:01:09,346
a little about what Antares
is -- what is Antares?

34
00:01:09,346 --> 00:01:09,676
>> John Steinmeyer: Sure.

35
00:01:10,166 --> 00:01:13,836
Antares is a new launch vehicle
that Orbital is developing

36
00:01:13,836 --> 00:01:16,926
in partnership with
NASA, as an element

37
00:01:16,926 --> 00:01:20,276
of their Commercial Orbital
Transportation Services Program

38
00:01:20,726 --> 00:01:21,506
or COTS.

39
00:01:22,406 --> 00:01:22,916
>> Amiko Kauderer: Okay.

40
00:01:23,076 --> 00:01:25,766
>> John Steinmeyer: It's a
two-stage launch vehicle,

41
00:01:26,046 --> 00:01:28,416
with a liquid oxygen
kerosene booster,

42
00:01:28,936 --> 00:01:30,956
and a solid upper stage.

43
00:01:31,476 --> 00:01:35,216

The vehicle is designed
initially to launch

44
00:01:35,216 --> 00:01:40,206
about 5,000 kilograms of payload
into low Earth orbit, and then,

45
00:01:40,206 --> 00:01:43,226
with subsequent variance,
we'll improve that performance

46
00:01:43,226 --> 00:01:45,846
to about 6,500 kilograms.

47
00:01:45,846 --> 00:01:50,356
>> Amiko Kauderer: Okay, great
-- so, real quick, obviously,

48
00:01:50,356 --> 00:01:53,826
we weren't able to take off
yesterday, as we were hoping

49
00:01:53,826 --> 00:01:55,176
to -- can you explain
what happened?

50
00:01:55,666 --> 00:01:56,966
Why we scrubbed that launch?

51
00:01:57,326 --> 00:01:57,756
>> John Steinmeyer: Sure.

52
00:01:58,686 --> 00:02:02,186
As we progressed through the
count, very late in the count,

53
00:02:02,256 --> 00:02:08,416
the team noted that a data relay
cable umbilical had prematurely

54
00:02:08,446 --> 00:02:12,236
disconnected from the second
stage of the launch vehicle,

55
00:02:12,756 --> 00:02:17,046
and so, at the next pull
opportunity, the team elected

56
00:02:17,096 --> 00:02:22,266
to abort the launch
at that time.

57
00:02:22,266 --> 00:02:24,016
>> Amiko Kauderer: Okay,
so real quick also,

58
00:02:24,016 --> 00:02:27,346
when is the next launch attempt?

59
00:02:27,346 --> 00:02:29,576
I mean, we didn't -- I
understand it's going to be

60
00:02:29,576 --> 00:02:31,286
on Friday, but do
we have a time?

61
00:02:31,286 --> 00:02:32,546
Is it set already?

62
00:02:32,546 --> 00:02:33,986
>> John Steinmeyer: It
will be the same time

63
00:02:34,026 --> 00:02:36,166
as the launch attempt yesterday.

64
00:02:36,216 --> 00:02:36,406
>> Amiko Kauderer: Okay.

65
00:02:36,626 --> 00:02:39,486
>> John Steinmeyer: The launch
window opens at 5:00 p.m.,

66
00:02:39,486 --> 00:02:44,206
Eastern Time -- the team has
worked overnight to de-tank

67
00:02:44,206 --> 00:02:47,636
and safe the vehicle,
and return the vehicle

68
00:02:47,636 --> 00:02:51,656
to its initial state -- and
then, we will start fresh,

69
00:02:52,226 --> 00:02:54,826
if you will, tomorrow
with the count on stations

70
00:02:54,826 --> 00:02:56,376
about eight hours before launch.

71
00:02:56,886 --> 00:02:58,666
Unfortunately, the
weather predictions

72
00:02:58,666 --> 00:03:00,686
for tomorrow are not favorable.

73
00:03:00,856 --> 00:03:00,956
>> Amiko Kauderer: Okay.

74
00:03:01,266 --> 00:03:02,846
>> John Steinmeyer: So,
we'll proceed with the count,

75
00:03:02,846 --> 00:03:04,486

and we'll get as far as we can,

76
00:03:04,546 --> 00:03:07,516
and hopefully, things
will improve.

77
00:03:08,116 --> 00:03:08,466
>> Amiko Kauderer: Right.

78
00:03:08,466 --> 00:03:08,996
>> John Steinmeyer: If not,

79
00:03:08,996 --> 00:03:10,456
we'll make another
attempt the following day.

80
00:03:10,456 --> 00:03:11,536
>> Amiko Kauderer: I
understand, it's all part

81
00:03:11,536 --> 00:03:12,266
of the rocket business.

82
00:03:12,376 --> 00:03:13,306
>> John Steinmeyer:
It is [laughter].

83
00:03:13,306 --> 00:03:13,816
>> Amiko Kauderer: So, you know,

84
00:03:13,816 --> 00:03:15,626
a lot of things have
to be on line for it.

85
00:03:15,626 --> 00:03:16,466
>> John Steinmeyer:
There's a lot of things

86
00:03:16,466 --> 00:03:17,416

that have to come together.

87
00:03:17,416 --> 00:03:20,016
>> Amiko Kauderer: Real quick,
because we were kind of watching

88
00:03:20,016 --> 00:03:21,536
that -- and then of course,
the scrub happened --

89
00:03:21,996 --> 00:03:25,086
explain to me what the
countdown entails --

90
00:03:25,376 --> 00:03:28,156
so how do we get to lift-off?

91
00:03:28,156 --> 00:03:30,366
>> John Steinmeyer: Sure,
like any launch system,

92
00:03:31,176 --> 00:03:36,046
there's a number of
checkouts and systems tests

93
00:03:36,076 --> 00:03:40,956
that happen before the launch --
and then, the next major phase

94
00:03:40,956 --> 00:03:43,616
of the count is actually
preparing,

95
00:03:43,676 --> 00:03:46,176
and then actually
fueling the rocket --

96
00:03:46,276 --> 00:03:50,016
in this case, our first stage
booster, with liquid oxygen

97
00:03:50,016 --> 00:03:53,746
and liquid kerosene -- and
then, some final checkouts --

98
00:03:53,996 --> 00:03:57,396
safe and arming, turning,
putting the vehicle

99
00:03:57,396 --> 00:03:59,286
on internal power,
its own power --

100
00:03:59,816 --> 00:04:02,546
and then, the final
preparations for launch.

101
00:04:02,616 --> 00:04:03,316
>> Amiko Kauderer: Okay, great.

102
00:04:03,556 --> 00:04:07,286
Well, so we brought a prop
here [laughter] here's the --

103
00:04:07,286 --> 00:04:08,406
what the Antares Rocket.

104
00:04:08,406 --> 00:04:08,546
>> John Steinmeyer: Yes.

105
00:04:08,546 --> 00:04:10,116
>> Amiko Kauderer:
So, actually, what --

106
00:04:10,186 --> 00:04:13,336
explain to me what the
significance of just being able

107
00:04:13,336 --> 00:04:17,096

to successfully launch this test
vehicle -- what does that mean?

108
00:04:17,406 --> 00:04:19,016
>> John Steinmeyer: Sure,
and that's exactly right,

109
00:04:19,246 --> 00:04:20,996
this is a test launch for us.

110
00:04:21,396 --> 00:04:25,586
It's really the culmination of
a very extensive series of tests

111
00:04:25,926 --> 00:04:29,006
that we've conducted on all the
systems of the launch vehicle --

112
00:04:29,556 --> 00:04:32,246
so this is the final
systems validation check.

113
00:04:32,766 --> 00:04:33,076
>> Amiko Kauderer: Okay.

114
00:04:33,076 --> 00:04:33,756
>> John Steinmeyer: To verify

115
00:04:33,756 --> 00:04:36,436
that everything works
as it should.

116
00:04:37,116 --> 00:04:41,466
The next launch will be the
COT's Demonstration Mission,

117
00:04:41,986 --> 00:04:45,476
where we'll actually use our
Cygnus Cargo Transfer Vehicle,

118
00:04:46,116 --> 00:04:48,256
along with the Antares
launch vehicle,

119
00:04:48,786 --> 00:04:52,486
to demonstrate the ability to
deliver cargo to Space Station.

120
00:04:52,826 --> 00:04:53,036
>> Amiko Kauderer: Great.

121
00:04:53,366 --> 00:04:55,396
Very exciting when it happens.

122
00:04:55,396 --> 00:04:55,576
>> John Steinmeyer: Yes.

123
00:04:55,636 --> 00:04:58,626
>> Amiko Kauderer: When
-- so, also, can you --

124
00:04:58,806 --> 00:05:00,126
you talked about that --

125
00:05:00,346 --> 00:05:02,886
said the next one would be the
demo flight, with the Cygnus.

126
00:05:02,886 --> 00:05:03,266
>> John Steinmeyer:
Yes, that's true.

127
00:05:03,266 --> 00:05:04,916
>> Amiko Kauderer: Can you tell
me more about what's ahead?

128
00:05:05,006 --> 00:05:06,716
>> John Steinmeyer: Sure,
yes, actually the --

129
00:05:06,716 --> 00:05:11,496
you see the cargo transfer
vehicle on the screen now.

130
00:05:11,496 --> 00:05:15,176
That cargo transfer vehicle,
along with the Antares vehicle

131
00:05:15,176 --> 00:05:18,926
for that mission, are actually
at the Wallops' launch site now,

132
00:05:18,926 --> 00:05:20,886
undergoing preparations
for launch --

133
00:05:21,296 --> 00:05:24,226
the Cygnus cargo transfer
vehicle is actually being fueled

134
00:05:25,606 --> 00:05:26,386
during this week.

135
00:05:27,746 --> 00:05:30,266
We'll use the cargo
transfer vehicle

136
00:05:31,376 --> 00:05:32,686
to demonstrate our ability

137
00:05:32,686 --> 00:05:36,456
to actually deliver cargo
to the Space Station.

138
00:05:37,046 --> 00:05:39,506
Actually, cargo has been loaded

139
00:05:39,796 --> 00:05:42,876

into the cargo transfer vehicle
already, a certain amount,

140
00:05:42,966 --> 00:05:47,316
and some additional cargo will
be loaded shortly before launch

141
00:05:47,896 --> 00:05:49,976
-- and we hope to
execute that launch

142
00:05:49,976 --> 00:05:52,146
in the late June timeframe.

143
00:05:52,846 --> 00:05:55,676
I believe the window
of opportunity

144
00:05:55,676 --> 00:05:58,266
at the Space Station -- as
you're well aware, there's a lot

145
00:05:58,266 --> 00:06:00,036
of activity at the Space
Station [laughter].

146
00:06:00,036 --> 00:06:00,746
>> Amiko Kauderer:
Oh, yes -- everyday.

147
00:06:00,746 --> 00:06:01,546
All day, everyday.

148
00:06:01,626 --> 00:06:02,626
>> John Steinmeyer: But
I believe our window

149
00:06:02,626 --> 00:06:05,006
of opportunity extends
through about mid-July.

150
00:06:05,006 --> 00:06:08,296
So, we're targeting the end
of June for that launch.

151
00:06:08,296 --> 00:06:09,466
>> Amiko Kauderer: Yes, so
getting this little bugger

152
00:06:09,466 --> 00:06:11,236
up [laughter] is
very, very important.

153
00:06:11,576 --> 00:06:11,916
>> John Steinmeyer: Yes, it is.

154
00:06:11,916 --> 00:06:12,526
>> Amiko Kauderer:
And so, hopefully,

155
00:06:12,526 --> 00:06:14,016
we'll be successful tomorrow --

156
00:06:14,086 --> 00:06:15,816
hopefully, the weather
will cooperate with us.

157
00:06:15,816 --> 00:06:17,016
>> John Steinmeyer: We
always plan for success.

158
00:06:17,016 --> 00:06:19,066
>> Amiko Kauderer: And there is
no other issues that come up,

159
00:06:19,106 --> 00:06:21,116
but if they do, that's
what we do.

160

00:06:21,246 --> 00:06:22,016
>> John Steinmeyer: It's
part of the business.

161
00:06:22,016 --> 00:06:22,686
>> Amiko Kauderer: And
it's part of learning.

162
00:06:22,746 --> 00:06:25,126
>> John Steinmeyer: It's part
of this particular mission --

163
00:06:25,126 --> 00:06:27,806
once again, checking
out all the systems,

164
00:06:28,256 --> 00:06:30,846
make sure they work as designed.

165
00:06:30,976 --> 00:06:32,066
>> Amiko Kauderer:
And I think it's part

166
00:06:32,476 --> 00:06:34,966
of what makes us
successful at doing anything,

167
00:06:35,056 --> 00:06:37,506
is try and try again, and
we'll get it right -- right?.

168
00:06:37,616 --> 00:06:38,506
>> John Steinmeyer:
Yes, that's our plan.

169
00:06:38,506 --> 00:06:39,836
>> Amiko Kauderer: Well,
thanks again for coming out

170
00:06:39,836 --> 00:06:41,336

and giving us an update.

171
00:06:41,336 --> 00:06:42,366
>> John Steinmeyer: Thank you.

172
00:06:42,416 --> 00:06:44,646
>> Amiko Kauderer: Folks who are
out there want to follow along,

173
00:06:44,646 --> 00:06:46,216
there's a conversation
taking place now,

174
00:06:46,216 --> 00:06:49,576
you can follow the hashtag
on Antares, on Twitter,

175
00:06:49,576 --> 00:06:53,506
and the Social Media, and
Orbital Sciences' Facebook page,

176
00:06:53,556 --> 00:06:57,936
and always, at
www.nasa.gov/orbital,

177
00:06:58,576 --> 00:06:59,826
get your latest updates.

178
00:06:59,826 --> 00:07:01,626
Again, thanks so much,
and best of luck to you.

179
00:07:01,626 --> 00:07:02,606
>> John Steinmeyer: Well,
thank you, thank you.