```
WEBVTT
1
00:00:00.300 --> 00:00:03.400
Casey Burt from the Boeing Company and Ashley April
00:00:04.200 --> 00:00:05.000
okay, and
3
00:00:06.200 --> 00:00:07.700
we look forward to your presentation.
00:00:14.900 --> 00:00:17.500
You know practice the laser before I start make
00:00:17.500 --> 00:00:20.900
sure it works. Well, first of all really pleased
00:00:20.900 --> 00:00:23.800
to be here today and as the day has gone on so excited
7
00:00:23.800 --> 00:00:26.000
because I've heard a lot of people bring up.
00:00:26.800 --> 00:00:30.300
We need more people to speak up. Right we need
00:00:29.300 --> 00:00:32.800
to look into the interpersonal relationships. And
10
00:00:32.800 --> 00:00:35.300
I really think that we're going to be able to touch upon a
11
00:00:35.300 --> 00:00:38.500
lot of that today. So today we're here to talk about psychological safety
12
00:00:38.500 --> 00:00:41.300
through the lens of flight test as introduced. My name
13
00:00:41.300 --> 00:00:44.800
is Casey Burt fellow presenters Ashley a Brill. We're both
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14
00:00:44.800 --> 00:00:48.400
blessed test engineers at the Boeing Company and fellow
00:00:47.400 --> 00:00:50.800
contributors are Chelsea Caton
16
00:00:50.800 --> 00:00:53.400
and random Mustafa also flight test engineers at
17
00:00:53.400 --> 00:00:54.000
the Boeing Company.
18
00:00:55.700 --> 00:00:58.800
Before we dive in we want to give you Boeing's overarching
19
00:00:58.800 --> 00:01:01.100
statement on safety and it's that we're going
20
00:01:01.100 --> 00:01:04.300
to provide a safe and healthy work environment free of Hazards
21
00:01:04.300 --> 00:01:07.500
for all of our flight testing at the end of the day. This means safety is
22
00:01:07.500 --> 00:01:10.300
our utmost priority and our primary objective will
23
00:01:10.300 --> 00:01:13.200
always be to ensure the product the safety of our personnel and our
24
00:01:13.200 --> 00:01:13.400
products.
25
00:01:16.500 --> 00:01:17.500
Let's start with the why.
26
00:01:18.600 --> 00:01:21.900
Why should we care about psychological safety this word
27
00:01:21.900 --> 00:01:24.500
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that you may not have heard of until this conference
28
00:01:24.500 --> 00:01:25.300
or maybe even today?
29
00:01:26.600 --> 00:01:29.100
Well, we'll let you know and we'll Define it in a few
30
00:01:29.100 --> 00:01:29.400
slides.
31
00:01:30.500 --> 00:01:33.500
The most basic answer is because humans are at
00:01:33.500 --> 00:01:36.600
the Central and the Heart of everything flight test.
33
00:01:37.400 --> 00:01:40.400
Whether you're on the airplane at the very back reviewing
34
00:01:40.400 --> 00:01:43.200
data and making knock it off calls, or if you're in the
35
00:01:43.200 --> 00:01:46.400
Telemetry room doing the same you could even be monitoring drone.
36
00:01:47.500 --> 00:01:47.900
regardless of where you are
37
00:01:49.200 --> 00:01:51.900
it's a human doing that activity. Not a robot.
38
00:01:52.600 --> 00:01:55.100
And because it's a human process safety needs to
39
00:01:55.100 --> 00:01:58.700
Encompass both physical safety and psychological safety.
40
00:02:00.300 --> 00:02:03.100
At the end of the day what we're talking about is a shifting culture.
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41
00:02:04.100 --> 00:02:07.500
And creating a psychologically safe environment. We'll take a
00:02:07.500 --> 00:02:08.900
lot of time and a lot of patients.
43
00:02:09.900 --> 00:02:12.300
And we're hoping that today can be the first step for all of
44
00:02:12.300 --> 00:02:14.000
us here in making that change.
45
00:02:15.700 --> 00:02:16.800
A little more on the why?
46
00:02:18.600 --> 00:02:21.600
Psychological safety will Encompass all parts of one's identity.
47
00:02:21.600 --> 00:02:22.300
So
48
00:02:23.200 --> 00:02:26.200
looking out at the audience. That means it encompasses all of you
00:02:26.200 --> 00:02:29.200
and with over 100 people here. I'm pretty
50
00:02:29.200 --> 00:02:31.900
confident. We have introverts and extroverts in the room.
51
00:02:32.700 --> 00:02:35.300
Men and women that we have a wide
52
00:02:35.300 --> 00:02:39.000
range of age inability different sexual orientations
00:02:38.200 --> 00:02:41.500
and races diversity of thought and
54
00:02:41.500 --> 00:02:42.000
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experiences.
55
00:02:42.800 --> 00:02:45.400
In psychological safety encompasses all
00:02:45.400 --> 00:02:45.800
of that.
57
00:02:46.500 --> 00:02:47.900
and therefore all of you
58
00:02:50.200 --> 00:02:53.500
today's presentation is going to talk specifically about a time
00:02:53.500 --> 00:02:56.500
when Boeing flight test inadvertently increased psychological
60
00:02:56.500 --> 00:02:59.200
safety, and we did that through all women flight test.
61
00:03:00.300 --> 00:03:03.400
And so as we go through the presentation today, I challenge you
62
00:03:03.400 --> 00:03:06.500
to keep in mind a Time the old time
63
00:03:06.500 --> 00:03:07.900
when you were new to flight test.
64
00:03:08.600 --> 00:03:10.900
Think about if you were hesitant to speak up.
65
00:03:11.700 --> 00:03:14.400
If you're concerned about judgment to yourself, or maybe
66
00:03:14.400 --> 00:03:15.300
even to your ideas.
67
00:03:16.400 --> 00:03:17.300
Did you think to yourself?
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68
00:03:18.300 --> 00:03:19.300
I should already know that.
00:03:20.100 --> 00:03:23.100
And thus stayed silent again. Just keep that the Forefront of
70
00:03:23.100 --> 00:03:23.400
your mind.
71
00:03:25.200 --> 00:03:28.600
Today, we're going to cover three main areas. We're going to Define
psychological safety
72
00:03:28.600 --> 00:03:31.300
for you. You'll start seeing an abbreviated PS throughout the
73
00:03:31.300 --> 00:03:34.400
presentation. We're going to share an example. We're Boeing flight
74
00:03:34.400 --> 00:03:37.200
test inadvertently increase logical safety with our all women
00:03:37.200 --> 00:03:40.400
flight. And then lastly we're going to leave you with methods where
76
00:03:40.400 --> 00:03:43.300
you can improve psychological safety in your workplace and your
00:03:43.300 --> 00:03:44.000
test environment.
00:03:47.200 --> 00:03:50.900
Awesome. Thanks so much, Casey. What a great start. So yes,
79
00:03:50.900 --> 00:03:53.500
what is psychological safety? It's the belief
80
00:03:53.500 --> 00:03:55.700
that you won't be punished or humiliated for speaking up.
81
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00:03:56.400 --> 00:03:59.300
So now let's dive a little further. What does that look like in our
82
00:03:59.300 --> 00:04:02.100
workplace? It's a state in which I as an individual
83
00:04:02.100 --> 00:04:05.400
feel comfortable exposing and learning from mistakes where
84
00:04:05.400 --> 00:04:09.100
I can speak up with my questions concerns ideas without
85
00:04:08.100 --> 00:04:11.400
fear that I'll be embarrassed or some form
86
00:04:11.400 --> 00:04:11.900
of Retribution.
87
00:04:13.400 --> 00:04:16.400
Here, we have a matrix that Dr. Amy Edmondson put
88
00:04:16.400 --> 00:04:19.700
together and it's psychological safety versus accountability. We
89
00:04:19.700 --> 00:04:22.800
have four zones. And so you might
90
00:04:22.800 --> 00:04:25.400
be asking why accountability. Well, it's really critical to
00:04:25.400 --> 00:04:26.700
accomplishing our business needs.
92
00:04:27.400 --> 00:04:30.900
So if you have high accountability, but no psychological
93
00:04:30.900 --> 00:04:33.400
safety you end up in the anxiety Zone which can
94
00:04:33.400 --> 00:04:36.500
be a very stressful anxious working
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95
00:04:36.500 --> 00:04:37.000
environment.
96
00:04:37.900 --> 00:04:40.900
On the flip side if you have high psychological safety.
97
00:04:41.700 --> 00:04:44.300
But low accountability than you end
98
00:04:44.300 --> 00:04:47.200
up in the comfort zone which can lead to complacency. So I'm
99
00:04:47.200 --> 00:04:50.400
going to walk you through some scenarios specifically to flight tests
that
100
00:04:50.400 --> 00:04:52.600
will further explain each Zone.
101
00:04:54.800 --> 00:04:57.400
All right. So our first scenario we have a teammate that's
102
00:04:57.400 --> 00:05:01.100
burnt out from constant schedule pressure and change they are
103
00:05:00.100 --> 00:05:01.100
told.
104
00:05:01.800 --> 00:05:04.300
To get used to it when they talk to when they
105
00:05:04.300 --> 00:05:06.500
try to talk to their teammates about it. They're met with get used to it.
106
00:05:07.200 --> 00:05:10.700
And they feel like they're concerns aren't being heard. So here we
107
00:05:10.700 --> 00:05:13.400
have the apathy Zone. You can see we have
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108
00:05:13.400 --> 00:05:16.000
low psychological safety and low accountability.
00:05:16.800 --> 00:05:19.400
So in the apathy Zone not only is the
110
00:05:19.400 --> 00:05:22.300
employees health at risk, but also it poses
111
00:05:22.300 --> 00:05:25.600
a safety risk to the flight test team in this
112
00:05:25.600 --> 00:05:28.500
structure you tend to see that teams lack adequate
113
00:05:28.500 --> 00:05:29.600
support and communication.
114
00:05:34.200 --> 00:05:36.600
All right. So now we have our second Zone.
115
00:05:37.300 --> 00:05:40.500
The teammate feels fully engaged with their peers but isn't challenged
116
00:05:40.500 --> 00:05:43.700
by their work. There's no differentiation between high performance
00:05:43.700 --> 00:05:44.600
and low performance.
118
00:05:45.300 --> 00:05:48.600
Here we have our comfort zone in the comfort zone.
119
00:05:48.600 --> 00:05:51.800
We tend to see that teams. They have
120
00:05:51.800 --> 00:05:54.300
a relaxed working environment, but there's no push
121
00:05:54.300 --> 00:05:58.100
```

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for creativity or growth this can lead to complacency and
122
00:05:57.100 --> 00:06:00.600
as we've discussed in this Workshop complacency can
123
00:06:00.600 --> 00:06:02.900
lead to significant light risks for the team.
124
00:06:05.100 --> 00:06:08.500
Now we have our third scenario. So a teammate speaks
125
00:06:08.500 --> 00:06:12.100
up with concerns about meeting quality and schedule expectations.
126
00:06:12.900 --> 00:06:15.600
Their concerns are met with rejection and intimidation.
127
00:06:16.600 --> 00:06:19.300
Here we have the anxiety Zone in the
128
00:06:19.300 --> 00:06:22.400
anxiety Zone. It can be as I mentioned earlier
129
00:06:22.400 --> 00:06:25.800
a very stressful working environment and the teammate
130
00:06:25.800 --> 00:06:28.200
might feel pressured to cut Corners to try to meet
131
00:06:28.200 --> 00:06:31.600
those quality expectations and schedule expectations.
132
00:06:31.600 --> 00:06:34.900
And so if quality expectations aren't met that
133
00:06:34.900 --> 00:06:37.300
can pose a significant risk for the flight test
00:06:37.300 --> 00:06:37.500
team.
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135
00:06:38.700 --> 00:06:41.400
In the anxiety Zone people are afraid to take
00:06:41.400 --> 00:06:44.900
responsibility for their work and opportunities for
137
00:06:44.900 --> 00:06:46.800
learning and Innovation are scarce.
138
00:06:48.300 --> 00:06:51.200
All right. So now our final seminario. We have
139
00:06:51.200 --> 00:06:54.400
a test a teammate that expresses a concern during a PreFlight.
140
00:06:55.500 --> 00:06:58.600
And the testing pauses to discuss this finding here.
141
00:06:58.600 --> 00:07:01.400
We have the Learning Zone in the Learning Zone
142
00:07:01.400 --> 00:07:04.300
you tend to see teams Foster Innovation and growth.
143
00:07:05.200 --> 00:07:08.300
Not only do teammates support one another but people are
144
00:07:08.300 --> 00:07:09.900
willing to take responsibility for their work.
145
00:07:11.400 --> 00:07:14.300
So what I take away from these four different
146
00:07:14.300 --> 00:07:17.600
scenarios is that my actions
147
00:07:17.600 --> 00:07:20.900
the way that I respond to my teammates questions concerns
148
00:07:20.900 --> 00:07:23.500
```

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or ideas. It makes a difference in
149
00:07:23.500 --> 00:07:25.400
whether or not they're going to speak up the next time.
150
00:07:26.400 --> 00:07:29.400
so as flight test Engineers, it is our responsibility
151
00:07:29.400 --> 00:07:32.100
to pause the next time someone brings up
152
00:07:32.100 --> 00:07:33.800
a concern and discuss that finding
153
00:07:35.200 --> 00:07:38.300
All right. So now that you know, what psychological safety is, let's talk
154
00:07:38.300 --> 00:07:40.000
about what are some barriers.
155
00:07:41.300 --> 00:07:44.100
The team identified five for starters the lack of
156
00:07:44.100 --> 00:07:47.700
awareness personally. I learned this term last fall so did
157
00:07:47.700 --> 00:07:50.300
Casey I'm sure many of you are learning the term for the first time
today.
158
00:07:51.200 --> 00:07:54.400
Second an organization that doesn't set ground rules
00:07:54.400 --> 00:07:57.500
or expectations on what's acceptable what
160
00:07:57.500 --> 00:08:00.300
creates a psychologically safe culture and what do
161
00:08:00.300 --> 00:08:01.200
we expect from you?
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162
00:08:01.800 --> 00:08:04.100
Third due to business
163
00:08:04.100 --> 00:08:07.500
pressures or schedule needs denying the team's pressure
164
00:08:07.500 --> 00:08:10.600
denying the team's space for these kinds of discussions.
165
00:08:11.900 --> 00:08:14.300
fourth a culture of blame or
166
00:08:14.300 --> 00:08:15.200
excessive Pride
167
00:08:16.200 --> 00:08:19.300
and lastly a lack of diversity in the
168
00:08:19.300 --> 00:08:22.200
following slides. I'm going to explain to you how identity plays a
169
00:08:22.200 --> 00:08:23.700
role in psychological safety.
170
00:08:25.600 --> 00:08:26.000
All right, so
171
00:08:27.500 --> 00:08:30.500
Anyone of us can feel psychologically unsafe this impacts
00:08:30.500 --> 00:08:33.500
all of us and much like being new plays a
173
00:08:33.500 --> 00:08:36.600
role in how comfortable we are speaking up so does our identity.
174
00:08:37.900 --> 00:08:40.100
so here I have a poll that Mackenzie & amp;
175
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00:08:40.100 --> 00:08:42.100
Company did in 2021 and they ask
176
00:08:43.100 --> 00:08:46.500
In the past year during normal course of business have you experienced
any
177
00:08:46.500 --> 00:08:49.000
of the following and they listed four microaggressions at the
178
00:08:49.300 --> 00:08:52.600
top others questioning your judgment being interrupted or
179
00:08:52.600 --> 00:08:54.000
spoken more over the others?
180
00:08:54.700 --> 00:08:58.200
others commenting on your emotional state hearing overhearing
181
00:08:57.200 --> 00:09:00.400
insults about your culture or people like you
182
00:09:01.100 --> 00:09:04.500
the identities that were surveyed at the bottom you'd see men are
183
00:09:04.500 --> 00:09:07.300
all women overall white women Latinas black
184
00:09:07.300 --> 00:09:10.800
women Asian women lgbtq+ women
185
00:09:10.800 --> 00:09:13.100
and women with disabilities. You can
186
00:09:13.100 --> 00:09:17.400
see that the three identities black women lqbtq+ women
187
00:09:17.400 --> 00:09:20.100
and women with disabilities identified as
188
00:09:20.100 --> 00:09:22.200
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having experience more microaggressions.
189
00:09:22.800 --> 00:09:25.400
And so since the experience more
190
00:09:25.400 --> 00:09:28.500
microaggressions, they might be less likely to
191
00:09:28.500 --> 00:09:31.400
feel comfortable speaking up. And so that affects
192
00:09:31.400 --> 00:09:34.500
their psychologically safe space. They might not experience
193
00:09:34.500 --> 00:09:37.700
it as well as others. And so what I want to tie
194
00:09:37.700 --> 00:09:40.800
it all back together, is that although psychological safety
195
00:09:40.800 --> 00:09:43.500
impacts all of us our identity plays a
196
00:09:43.500 --> 00:09:44.400
really critical role.
197
00:09:45.600 --> 00:09:48.500
So now as I mentioned lack of diversity is a barrier.
198
00:09:49.100 --> 00:09:52.500
So why and it's because being an only of
199
00:09:52.500 --> 00:09:55.300
your individual or your race or ability on
200
00:09:55.300 --> 00:09:55.900
a test flight?
201
00:09:56.600 \longrightarrow 00:09:57.300
It can be difficult.
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202
00:09:58.200 --> 00:10:01.100
Only stand out and you tend to be more
00:10:01.100 --> 00:10:04.500
heavily scrutinized your failures and your successes are
204
00:10:04.500 --> 00:10:06.300
usually under a microscope.
205
00:10:07.200 --> 00:10:10.600
And that can leave you encountering feedback
206
00:10:10.600 --> 00:10:12.500
or comments that.
207
00:10:14.100 --> 00:10:17.300
Leaving you feeling leave you feeling othered or
208
00:10:17.300 --> 00:10:20.000
excluded and so I encourage you that the next
209
00:10:20.200 --> 00:10:21.000
time you walk into a room.
210
00:10:22.500 --> 00:10:23.700
pause and look around
211
00:10:24.500 --> 00:10:27.400
seek out the onlys if you identify yourself as
212
00:10:27.400 --> 00:10:30.200
being part of the majority group seek out only
213
00:10:30.200 --> 00:10:33.200
is you can make a difference between someone feeling excluded or
214
00:10:33.200 --> 00:10:36.400
included simple ways are introduced yourself
215
00:10:36.400 --> 00:10:39.800
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ask for their opinion on something or recognize
216
00:10:39.800 --> 00:10:42.500
for their contribution. Those are easy steps
217
00:10:42.500 --> 00:10:43.200
to make a difference.
218
00:10:46.700 --> 00:10:49.400
Next we're going to talk about a time or how
219
00:10:49.400 --> 00:10:52.100
we can recognize psychological safety and to do so,
220
00:10:52.100 --> 00:10:55.500
we're going to dive into the time when Boeing inadvertently
221
00:10:55.500 --> 00:10:58.400
increase psychological safety through our all women flight.
222
00:11:00.100 --> 00:11:03.600
To do that though. We need to give you some data as a
223
00:11:03.600 --> 00:11:06.200
baseline women make up about one to three members
224
00:11:06.200 --> 00:11:09.600
of a Boeing flight test crew and a crew itself is about 13 members
225
00:11:09.600 --> 00:11:12.600
looking at the chart here the dark navy color
226
00:11:12.600 --> 00:11:15.800
are the male participants on a flight the light
227
00:11:15.800 --> 00:11:18.300
are pink color represent. The female participants. I think
228
00:11:18.300 --> 00:11:22.100
a quick glance tells you pretty quickly that they're very
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229
00:11:21.100 --> 00:11:24.600
male-dominated and then with my
230
00:11:24.600 --> 00:11:27.800
laser. Yep, you can see that there's actually some
231
00:11:27.800 --> 00:11:30.600
there and there there
232
00:11:30.600 --> 00:11:34.300
and there sorry, it's really hard with the laser all male
233
00:11:33.300 --> 00:11:36.500
naturally occurring flights. And so
234
00:11:36.500 --> 00:11:39.200
this data only represents two airplanes two different
235
00:11:39.200 --> 00:11:41.800
months, but it's a very quick snapshot that
236
00:11:43.300 --> 00:11:46.100
there isn't very many women, but that's what makes
237
00:11:46.900 --> 00:11:50.000
are all women flight so special and
238
00:11:49.300 --> 00:11:52.100
this was an active effort to assemble all
239
00:11:52.100 --> 00:11:56.000
women crew and we did this because women are underrepresented
240
00:11:55.200 --> 00:11:58.400
in Boeing flight test and maybe you see that in
241
00:11:58.400 --> 00:12:00.800
your places of employment or Academia as well.
242
00:12:01.600 --> 00:12:04.700
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As we were creating this flight safety was
243
00:12:04.700 --> 00:12:08.100
and will always be the primary objective having
244
00:12:07.100 --> 00:12:10.300
100% women on board was a secondary
245
00:12:10.300 --> 00:12:13.300
objective the last two bullets all so apply
246
00:12:13.300 --> 00:12:16.400
to safety each test participant had to be qualified for
247
00:12:16.400 --> 00:12:19.200
their role. And then at least one of the piles flying that
248
00:12:19.200 --> 00:12:21.100
day had to be working that specific program.
249
00:12:21.900 --> 00:12:24.600
Now I'm going to direct your eyes to the chart on
250
00:12:24.600 --> 00:12:27.300
the right side of the screen. I think it's pretty clear
2.51
00:12:27.300 --> 00:12:30.100
what they are all women true to the air.
252
00:12:30.700 --> 00:12:34.000
Let me get the laser out October 20th. And
253
00:12:33.300 --> 00:12:36.300
in that month though itself. You can also
254
00:12:36.300 --> 00:12:39.400
pick out two all-male naturally occurring flights.
255
00:12:39.400 --> 00:12:42.400
So even with that ours was
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00:12:42.400 --> 00:12:44.800
definitely was not naturally occurring it took some coordination.
00:12:46.100 --> 00:12:49.100
Let's talk about the flight itself. It was a really standard day. It was
258
00:12:49.100 --> 00:12:52.200
handling qualities medium risk testing testing. It had
259
00:12:52.200 --> 00:12:55.600
the standard array of test participants on board. You can see them
pictured
260
00:12:55.600 --> 00:12:58.500
below at the bottom of the screen the outcome of
261
00:12:58.500 --> 00:13:01.400
the Day quote from one of the crew members. It felt
262
00:13:01.400 --> 00:13:05.300
like a normal flight, but there's just, you know a little bit of
excitement. They
263
00:13:04.300 --> 00:13:08.000
said that there are weather challenges because let's be
2.64
00:13:07.100 --> 00:13:10.800
honest most of us face weather challenges while
265
00:13:10.800 --> 00:13:13.600
doing flight test and then they also said
266
00:13:13.600 --> 00:13:16.500
that are they also managed to complete four test
267
00:13:16.500 --> 00:13:18.500
plans. So a standard sequence
268
00:13:19.200 --> 00:13:22.300
In about three hours all in all a very
```

```
00:13:22.300 --> 00:13:24.800
standard day of testing for the Boeing Company I should say.
270
00:13:26.100 --> 00:13:27.500
But now let's talk about findings.
271
00:13:29.700 --> 00:13:32.600
After the debrief that the crew had they
272
00:13:32.600 --> 00:13:35.400
noted that everyone operated and performed as
273
00:13:35.400 --> 00:13:36.500
they would on any other flight.
274
00:13:37.200 --> 00:13:40.400
That's huge because what that tells us is that this
275
00:13:40.400 --> 00:13:43.600
unique occurrence, like we saw with the data very unique
276
00:13:43.600 --> 00:13:45.900
to have all women on a single flight test.
277
00:13:46.900 --> 00:13:49.300
It was unique and there was changes that came from it. But
278
00:13:49.300 --> 00:13:52.600
this did not inhibit test performance or the physical safety
279
00:13:52.600 --> 00:13:55.700
of the crew what this is telling us is that
280
00:13:55.700 --> 00:13:58.300
the changes that came from this flight have the
00:13:58.300 --> 00:14:01.600
potential to be sustainable and then applied to every
282
00:14:01.600 --> 00:14:02.200
```

```
other flight.
283
00:14:03.100 --> 00:14:06.300
Within Boeing and without within the industry as
284
00:14:06.300 --> 00:14:06.400
well.
285
00:14:07.600 --> 00:14:10.200
The next finding the crew said that they felt more
286
00:14:10.200 --> 00:14:11.700
comfortable in the test environment.
287
00:14:13.200 --> 00:14:16.700
At the end of the day feeling more comfortable will increase and
288
00:14:16.700 --> 00:14:19.400
develop psychological safety, and it does this
289
00:14:19.400 --> 00:14:22.400
because at the end of the day it will Foster an environment people
290
00:14:22.400 --> 00:14:24.100
aren't concerned about being right or wrong.
291
00:14:25.100 --> 00:14:28.300
It'll improve communication. It will reduce barriers to speaking
292
00:14:28.300 --> 00:14:28.500
up.
293
00:14:29.200 --> 00:14:31.500
Which is a good seque to the next finding.
294
00:14:32.100 --> 00:14:34.700
The women noted in increased ability to speak up.
295
00:14:35.500 \longrightarrow 00:14:38.400
This is huge and this directly relates
```

```
296
00:14:38.400 --> 00:14:41.900
to psychological safety. Now people are raising concerns.
00:14:41.900 --> 00:14:44.200
They're asking questions. They're attempting to
298
00:14:44.200 --> 00:14:45.300
provide answers.
299
00:14:46.700 --> 00:14:50.000
By being able to speak up will prevent accidents.
300
00:14:52.600 --> 00:14:55.700
On the right side of the screen. We have a quote from one of the test
participants.
301
00:14:55.700 --> 00:14:57.200
I'll read this out loud.
302
00:14:58.500 --> 00:15:01.600
Most notably one of the pilots asked about prediction for
303
00:15:01.600 --> 00:15:01.900
the test.
304
00:15:02.800 --> 00:15:05.500
I felt comfortable in accepted saying I don't
305
00:15:05.500 --> 00:15:07.000
know and I need to call someone.
306
00:15:07.900 --> 00:15:10.400
While I would have done this in any other pre-brief with
307
00:15:10.400 --> 00:15:13.600
more men, I would have left feeling guilty and shameful
308
00:15:13.600 --> 00:15:14.800
due to the atmosphere.
```

```
00:15:16.800 --> 00:15:19.600
I would have left feeling guilty and shameful.
310
00:15:20.800 --> 00:15:23.700
I think that's a mental state. We can all empathize with.
311
00:15:24.700 --> 00:15:27.300
You remember at the beginning when I asked you to picture and remember
the
312
00:15:27.300 --> 00:15:30.500
time when you were new to flight test, let's bring that to the Forefront
now.
313
00:15:31.700 --> 00:15:34.500
Do you remember when you were terrified to ask that quote unquote
314
00:15:34.500 --> 00:15:35.400
dumb question?
315
00:15:36.300 --> 00:15:39.300
Or that if you pointed out that rattling noise
316
00:15:39.300 --> 00:15:42.700
you hear you would actually be pointing out how new and
317
00:15:42.700 --> 00:15:43.600
inexperienced you are.
318
00:15:45.100 --> 00:15:48.900
We can all relate to that feeling of being feeling guilty
00:15:48.900 --> 00:15:51.000
and shameful for not knowing the answer.
320
00:15:52.100 --> 00:15:55.200
But that's what makes this quote so powerful.
321
00:15:55.900 --> 00:15:58.500
This test participant did not feel quilty
322
```

```
00:15:58.500 --> 00:16:01.600
or shameful something about this test made everybody
323
00:16:01.600 --> 00:16:04.300
on board feel psychologically safe enough to
324
00:16:04.300 --> 00:16:07.300
ask that quote unquote dumb question to point out
325
00:16:07.300 --> 00:16:10.500
that rattling noise and to say that they didn't
326
00:16:10.500 --> 00:16:11.200
know the answer.
327
00:16:13.100 --> 00:16:16.500
By increasing psychological safety, we can increase
328
00:16:16.500 --> 00:16:19.600
the safety of every single flight and everybody
329
00:16:19.600 --> 00:16:21.800
on board can feel more comfortable to raise their voices.
330
00:16:23.900 --> 00:16:26.500
At the bottom of the screen. I have the definition
331
00:16:26.500 --> 00:16:29.200
of psychological safety, which is the belief that
00:16:29.200 --> 00:16:31.700
you won't be punished or humiliated for speaking up.
00:16:33.100 --> 00:16:36.600
all the findings on the screen point to an increase
334
00:16:36.600 --> 00:16:38.000
in psychological safety
335
00:16:39.100 --> 00:16:41.600
But that was a very unexpected result.
```

```
336
00:16:42.600 --> 00:16:45.300
All the same it's a result that we
337
00:16:45.300 --> 00:16:47.400
should all pay. He too and learn from
338
00:16:49.500 --> 00:16:52.500
let's tie it a little bit back together. Why did psychological safety
339
00:16:52.500 --> 00:16:52.900
increase?
340
00:16:53.700 --> 00:16:56.500
Earlier we talked about only on this
341
00:16:56.500 --> 00:16:59.300
flight women were no longer in only the whole crew was women
342
00:16:59.300 --> 00:17:02.400
instead of being one to three members. We had
343
00:17:02.400 --> 00:17:03.500
the whole kit and caboodle.
344
00:17:05.300 --> 00:17:08.400
The team also noted that they had the opportunity in space
345
00:17:08.400 --> 00:17:11.300
to debrief on their experience directly addressing one
00:17:11.300 --> 00:17:13.800
of the barriers to psychological safety. We brought up earlier.
347
00:17:15.200 --> 00:17:18.200
They also noted a healthier culture of humility and support
348
00:17:18.200 --> 00:17:21.400
again addressing one of the barriers we brought up earlier.
```

```
00:17:22.500 --> 00:17:25.100
And lastly the women noted that the
350
00:17:25.100 --> 00:17:28.800
flight was more inclusive and as we described there is
351
00:17:28.800 --> 00:17:32.000
a relationship between psychological safety inclusion
00:17:31.300 --> 00:17:32.800
and diversity.
353
00:17:33.600 --> 00:17:36.300
And it's important that we acknowledge on this
354
00:17:36.300 --> 00:17:39.400
flight. We had a homogeneous crew. We had all women
355
00:17:39.400 --> 00:17:42.000
diversity decreased on this flight.
356
00:17:42.600 --> 00:17:44.800
but at the same time inclusion increased
357
00:17:45.500 --> 00:17:48.200
So what I want to still think about and imagine is what
358
00:17:48.200 --> 00:17:51.500
if we could increase the diversity on each flight and the inclusion.
00:17:51.500 --> 00:17:54.600
Imagine how much the psychological safety
00:17:54.600 --> 00:17:55.200
would increase.
361
00:17:56.500 --> 00:17:59.200
And with that psychological safety, we will
362
00:17:59.200 --> 00:18:00.000
also raise.
```

```
363
00:18:00.800 --> 00:18:02.400
the safety of our flight test campaign
364
00:18:04.900 --> 00:18:08.700
We want to share a few other metrics with you as well. Some
365
00:18:07.700 --> 00:18:10.700
of our Boeing colleagues spoke earlier about
366
00:18:10.700 --> 00:18:13.400
SMS and orms, so we'll
367
00:18:13.400 --> 00:18:14.400
be building on that a little bit.
368
00:18:15.300 --> 00:18:18.700
Boeing we're always striving for continuous safety Improvement we want
369
00:18:18.700 --> 00:18:21.100
to see that positive culture change and we have a few
370
00:18:21.100 --> 00:18:25.400
tools that we're using to do that here on the screen we have the orms
371
00:18:24.400 --> 00:18:28.000
forms have been submitted over the past few years with
372
00:18:27.700 --> 00:18:31.000
2022 projected to have about 700. We
00:18:30.300 --> 00:18:33.700
also have our safety management system Hazard reporting
374
00:18:34.400 --> 00:18:37.200
with 2022 projected to have 40 submitted by
375
00:18:37.200 --> 00:18:40.300
the end of the year. You can see a good increase in our
376
```

```
00:18:40.300 --> 00:18:40.800
metrics.
377
00:18:41.700 --> 00:18:44.500
And while these do not relate directly to our
378
00:18:44.500 --> 00:18:48.200
all women flight psychological safety does relate
379
00:18:47.200 --> 00:18:48.600
to these
380
00:18:49.800 --> 00:18:51.300
When I'm in a pre-brief.
381
00:18:52.100 --> 00:18:55.400
I need to feel psychologically safe enough to raise my
382
00:18:55.400 --> 00:18:57.400
hand and say I feel scheduled pressure today.
383
00:18:58.200 --> 00:19:01.200
I need to feel psychologically safe enough to say do we
384
00:19:01.200 --> 00:19:03.000
have enough daylight to complete this mission?
385
00:19:04.400 --> 00:19:07.900
For me to submit my hazard report. I need to feel psychologically safe
386
00:19:07.900 --> 00:19:10.100
enough to go and write that down and submit it.
387
00:19:12.200 --> 00:19:15.800
Right. Now these forms do not explicitly in
388
00:19:15.800 --> 00:19:18.700
cake into account psychological safety. So
389
00:19:18.700 --> 00:19:20.400
there's opportunity for improvement there.
```

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390
00:19:23.800 --> 00:19:26.200
So how can we apply these learnings to improve
391
00:19:26.200 --> 00:19:27.100
psychological safety?
392
00:19:28.900 --> 00:19:31.700
What we want you to take away from this presentation is that
393
00:19:31.700 --> 00:19:34.600
your behavior creates your culture and therefore it
394
00:19:34.600 --> 00:19:36.000
affects your day-to-day testing.
395
00:19:36.700 --> 00:19:39.100
How you react to someone's questions going to make a difference
396
00:19:39.100 --> 00:19:41.100
on whether or not they speak up the next time?
397
00:19:43.200 --> 00:19:46.200
So some personal call to action for starters each one
398
00:19:46.200 --> 00:19:49.400
of us learned today. What's psychological safety is take that
399
00:19:49.400 --> 00:19:52.400
back to your teams share why it's
400
00:19:52.400 --> 00:19:55.300
important and how it plays a role in Flight tests. You
401
00:19:55.300 --> 00:19:58.200
can take it one step further and speak up the next time you
402
00:19:58.200 --> 00:19:59.800
see someone dismissing a concern.
```

```
00:20:00.400 --> 00:20:03.900
There's a lot of benefits to this first for starters courageous
404
00:20:03.900 --> 00:20:06.200
contained Kate contagious. I'll be more
405
00:20:06.200 --> 00:20:08.200
likely to speak up when I see someone speaking up.
406
00:20:08.900 --> 00:20:12.700
Also, if the concerns of no issue then you
407
00:20:11.700 --> 00:20:14.600
know, I see someone that's going
408
00:20:14.600 --> 00:20:17.600
to be educated rather than dismissed and this creates
409
00:20:17.600 --> 00:20:19.400
a mindset of continuous learning.
410
00:20:20.500 --> 00:20:23.900
I challenge you and your colleagues to come from a place of curiosity
411
00:20:23.900 --> 00:20:27.100
explore that tension rather than defensiveness be
412
00:20:26.100 --> 00:20:27.200
curious.
413
00:20:30.200 --> 00:20:33.400
Challenge yourself to come a place from Curiosity. And so
414
00:20:33.400 --> 00:20:36.700
when you walk into a room as I mentioned earlier seek
415
00:20:36.700 --> 00:20:39.600
out only you can make a difference between someone feeling included
416
00:20:39.600 --> 00:20:42.200
or excluded and just like we're doing
```

```
417
00:20:42.200 --> 00:20:45.700
today in this Workshop share those Lessons Learned. I think
418
00:20:45.700 --> 00:20:48.900
we could have a workshop in itself on how to do that effectively, but
00:20:48.900 --> 00:20:50.800
I'll leave it at that.
420
00:20:51.500 --> 00:20:53.800
So then I'll take you to organizationwide.
421
00:20:54.500 --> 00:20:57.600
What gets measured gets done so set goals around psychological
422
00:20:57.600 --> 00:21:00.500
safety and integrate it into your
423
00:21:00.500 --> 00:21:03.200
training and onboarding processes just like
424
00:21:03.200 --> 00:21:06.500
safety. It's not a one-time activity. It's a
425
00:21:06.500 --> 00:21:09.500
mindset that we each need to have and it needs to be integrated.
426
00:21:10.300 --> 00:21:12.000
into our everyday activity
00:21:13.300 --> 00:21:17.100
Another thing is practice scenarios. So for me, you know
428
00:21:17.100 --> 00:21:20.200
talking over calms is a big barrier is
429
00:21:20.200 --> 00:21:23.500
it's a very stressful environment ATC the
430
```

```
00:21:23.500 --> 00:21:26.400
pilots test Director people on box
431
00:21:26.400 --> 00:21:29.900
whether you're in the Telemetry room on an airplane. It's a
432
00:21:29.900 --> 00:21:32.800
very stressful environment. So offer Hands-On training
433
00:21:32.800 --> 00:21:35.900
so that you can practice increase your comfortability create
434
00:21:35.900 --> 00:21:38.900
a base so that when you actually go and test you
435
00:21:38.900 --> 00:21:41.700
have something to work off of and improve
436
00:21:42.800 --> 00:21:45.700
Lastly ensure that you have an anonymous
437
00:21:45.700 --> 00:21:48.200
reporting system. This will ensure that
438
00:21:48.200 --> 00:21:51.400
you are working towards a robust safety culture
439
00:21:51.400 --> 00:21:54.500
with effective SMS policies now, I'll
440
00:21:54.500 --> 00:21:56.300
pass it over to KC to wrap up our presentation.
441
00:21:59.400 --> 00:22:03.100
Yep, there's three takeaways. We want you to leave this conference
442
00:22:02.100 --> 00:22:05.100
room with today. The first ones on the
443
00:22:05.100 --> 00:22:08.300
screen is the definition of psychological safety. This is
```

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444
00:22:08.300 --> 00:22:11.500
where teams will feel comfortable exposing and learning from their
mistakes.
445
00:22:11.500 --> 00:22:14.700
They're going to speak up with questions ideas concerns because
446
00:22:14.700 --> 00:22:17.700
they are not worried about embarrassment or retribution.
447
00:22:19.500 --> 00:22:22.800
The second takeaway personal and organizational change
448
00:22:22.800 --> 00:22:25.800
can and will increase psychological safety.
449
00:22:25.800 --> 00:22:28.500
We've just heard several great actions
450
00:22:28.500 --> 00:22:32.000
that you could walk out of here today and start doing immediately. You
451
00:22:31.200 --> 00:22:33.300
can even start in here before you leave.
452
00:22:34.300 --> 00:22:37.900
And then lastly increasing psychological safety
453
00:22:37.900 --> 00:22:40.500
will increase the safety of every single
454
00:22:40.500 --> 00:22:40.900
flight.
455
00:22:42.700 --> 00:22:45.700
I'd like to say thank you for creating a psychologically safe
456
00:22:45.700 --> 00:22:48.400
place for us to share and our fellow
```

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457
00:22:48.400 --> 00:22:51.200
presenters. And now you actually know what that means so we

458
00:22:51.200 --> 00:22:52.400
can open up to our questions now.

459
00:22:53.300 --> 00:23:02.400
Thank you. Should we

460
00:23:02.400 --> 00:23:03.200
go over and sit down instead?

461
00:23:04.500 --> 00:23:04.700
Okay.
```