

WEBVTT

1

00:00:00.600 --> 00:00:04.500  
background and resume x35 retired combat

2

00:00:03.500 --> 00:00:07.900  
Marine Aviator and a

3

00:00:06.900 --> 00:00:09.700  
friend of the society and great

4

00:00:09.700 --> 00:00:10.300  
Americans, so

5

00:00:22.200 --> 00:00:26.200  
Okay, so normally the chairman wouldn't be presenting. I

6

00:00:25.200 --> 00:00:28.500  
would not have done this but we actually and

7

00:00:28.500 --> 00:00:31.300  
I'm telling you this for a reason we had a

8

00:00:31.300 --> 00:00:34.500  
bit of a challenge get enough papers to fill all the slots for this.

9

00:00:34.500 --> 00:00:37.200  
So the reason I shared that

10

00:00:37.200 --> 00:00:41.200  
with you is that if you've presented before you

11

00:00:40.200 --> 00:00:43.200  
know how rewarding it is to do this

12

00:00:43.200 --> 00:00:46.200  
if you've never presented before you've seen

13

00:00:46.200 --> 00:00:48.700  
at least so far today and hopefully through the rest of the day tomorrow.

14

00:00:50.600 --> 00:00:53.600

Everyone in this room has something worth talking

15

00:00:53.600 --> 00:00:56.000

about and you'd have to can you have to pull me aside and convince me

16

00:00:56.200 --> 00:00:59.200

that I'm wrong on that. So if you haven't presented before

17

00:00:59.200 --> 00:01:00.900

consider doing this

18

00:01:01.600 --> 00:01:05.200

So with that said I will get started how many

19

00:01:05.200 --> 00:01:09.400

in this room would consider themselves part

20

00:01:08.400 --> 00:01:11.900

of the aviation broad picture

21

00:01:11.900 --> 00:01:15.000

part of the aviation profession show

22

00:01:14.200 --> 00:01:15.400

of hands.

23

00:01:16.800 --> 00:01:19.500

Okay, pretty much Universal. How many

24

00:01:19.500 --> 00:01:23.400

of you Aviation professionals would

25

00:01:22.400 --> 00:01:25.500

say that you are dangerous?

26

00:01:27.800 --> 00:01:30.700

interesting

27

00:01:31.700 --> 00:01:31.900

Okay.

28

00:01:33.600 --> 00:01:35.000

so

29

00:01:37.600 --> 00:01:39.800

So we we know that we have.

30

00:01:41.300 --> 00:01:44.200

Danger endanger is something that we don't typically talk about

31

00:01:44.200 --> 00:01:47.800

in a positive light because the outcome of

32

00:01:47.800 --> 00:01:50.200

danger is often bad.

33

00:01:51.500 --> 00:01:52.800

Danger is inherently.

34

00:01:54.100 --> 00:01:54.600

dangerous

35

00:01:55.900 --> 00:01:58.100

so we don't like it, but

36

00:01:59.200 --> 00:02:02.600

We do it and someone once complained

37

00:02:02.600 --> 00:02:05.300

that I don't put enough data in my presentation. So I

38

00:02:05.300 --> 00:02:08.100

went out and as my aunt Ida would say go to the

39

00:02:08.100 --> 00:02:11.800

Google. So I went to the Google and I found data and

40

00:02:11.800 --> 00:02:14.100

it said that yes, if you

41  
00:02:14.100 --> 00:02:18.500  
can't read the fine print so I made it bigger that Yeah, we actually  
intentionally

42  
00:02:17.500 --> 00:02:21.300  
go out and do dangerous things.

43  
00:02:22.800 --> 00:02:25.700  
But with the exception of the eight who raised

44  
00:02:25.700 --> 00:02:28.800  
their hands, it's not all of us. It's just

45  
00:02:28.800 --> 00:02:31.300  
some of us and mostly we

46  
00:02:31.300 --> 00:02:35.000  
refer to the US that is doing dangerous things

47  
00:02:34.900 --> 00:02:37.800  
as the them. They

48  
00:02:37.800 --> 00:02:40.900  
they do dangerous things like

49  
00:02:40.900 --> 00:02:43.700  
them who do the run

50  
00:02:43.700 --> 00:02:46.500  
with the bulls every year most famous in

51  
00:02:46.500 --> 00:02:49.500  
Pamplona Spain you get out and

52  
00:02:49.500 --> 00:02:52.000  
you they put Bulls in the street

53  
00:02:52.200 --> 00:02:55.600  
and you run from the Bulls now, they have some rules you

54

00:02:55.600 --> 00:02:58.700  
must be 18 or older. You have

55  
00:02:58.700 --> 00:03:01.100  
to run in the same direction of the

56  
00:03:01.100 --> 00:03:05.600  
Bulls which sounds like a reasonably good risk mitigation. You are

57  
00:03:05.600 --> 00:03:08.500  
not allowed to incite the Bulls and

58  
00:03:08.500 --> 00:03:11.300  
you are not allowed and this is kind of what kills

59  
00:03:11.300 --> 00:03:14.800  
it for me. You're not allowed to be drunk when you do it because that  
would be the only way I

60  
00:03:14.800 --> 00:03:17.800  
would get out there and do that. We also

61  
00:03:17.800 --> 00:03:20.100  
have them who do all over the

62  
00:03:20.100 --> 00:03:22.500  
world this happens Polar Bear Plunge.

63  
00:03:22.700 --> 00:03:25.400  
Normal people in whatever physical condition. They may

64  
00:03:25.400 --> 00:03:28.700  
be in throw their bodies into freezing cold water, which

65  
00:03:28.700 --> 00:03:31.000  
is not a really good thing for the human body.

66  
00:03:31.700 --> 00:03:34.200  
Every Easter on the Greek

67  
00:03:34.200 --> 00:03:35.500

island of chios.

68

00:03:36.200 --> 00:03:39.600

Two churches have a fireworks battle

69

00:03:39.600 --> 00:03:42.800

with homemade bottle rockets using gunpowder as

70

00:03:42.800 --> 00:03:45.400

their principal explosive and propellant.

71

00:03:46.500 --> 00:03:49.500

Tens of thousands of rockets are

72

00:03:49.500 --> 00:03:52.900

launched during this festival with the

73

00:03:52.900 --> 00:03:55.900

goal being trying to hit the bell in the

74

00:03:55.900 --> 00:03:58.300

other church, but humans are

75

00:03:58.300 --> 00:04:02.000

launching. This isn't any automated Disney Night Extravaganza. There's

76

00:04:01.300 --> 00:04:04.600

humans lighting the fuses and launching all these

77

00:04:04.600 --> 00:04:05.200

things.

78

00:04:06.800 --> 00:04:09.800

And then in the Gano Japan the onshawn

79

00:04:09.800 --> 00:04:12.700

bureau Festival, they go out into the woods and

80

00:04:12.700 --> 00:04:16.100

they cut down 16 giant trees tournament

81  
00:04:15.100 --> 00:04:18.600  
to pillars and then they move these pillars

82  
00:04:18.600 --> 00:04:21.700  
without equipment. Just human labor to

83  
00:04:21.700 --> 00:04:24.600  
the site some miles away of some Temple

84  
00:04:24.600 --> 00:04:27.000  
where they rebuild the Temple with these pillars.

85  
00:04:27.900 --> 00:04:31.100  
In order to get there, they have to go downhill and

86  
00:04:30.100 --> 00:04:33.900  
it is considered a proof

87  
00:04:33.900 --> 00:04:37.000  
of Bravery to ride those

88  
00:04:36.600 --> 00:04:39.100  
giant logs as they are

89  
00:04:39.100 --> 00:04:41.200  
going downhill.

90  
00:04:42.200 --> 00:04:45.300  
uncontrolled sliding down the side

91  
00:04:45.300 --> 00:04:47.000  
of a mountain on a log

92  
00:04:48.100 --> 00:04:50.400  
the good news is they only do this every seven years.

93  
00:04:51.800 --> 00:04:54.500  
So after looking at all that I have determined

94  
00:04:54.500 --> 00:04:58.200

that perhaps we just like Danger.

95

00:04:59.400 --> 00:05:03.000

Now any of you who have seen me present before have heard

96

00:05:02.200 --> 00:05:05.300

me use the term sticky learning and sticky learning

97

00:05:05.300 --> 00:05:08.500

if you haven't heard me before is this simply I

98

00:05:08.500 --> 00:05:11.400

know that I can tell you something and I can consider that something

99

00:05:11.400 --> 00:05:14.300

very important. But you may not remember it if

100

00:05:14.300 --> 00:05:17.200

I were to come to you 10 years from now you may or may not remember that thing

101

00:05:17.200 --> 00:05:21.200

I told you even if it was important. However, if

102

00:05:20.200 --> 00:05:23.100

I stick it to something that I

103

00:05:23.100 --> 00:05:27.000

know will reside in your brain forever movie

104

00:05:26.500 --> 00:05:29.100

quotes song lyrics things like

105

00:05:29.100 --> 00:05:32.400

that that you will retain for the rest of your life then if

106

00:05:32.400 --> 00:05:35.100

I can stick it to that and I know you will attain it

107

00:05:35.100 --> 00:05:38.200

because I get people come up to me and say, you know,



108  
00:05:38.200 --> 00:05:41.400  
I was watching movie X Monty Python,

109  
00:05:41.400 --> 00:05:42.800  
whatever and I thought of you

110  
00:05:43.700 --> 00:05:46.600  
now some of that's encouraging some of that's a little creepy depending

111  
00:05:46.600 --> 00:05:47.700  
on how they come at you but

112  
00:05:49.200 --> 00:05:49.600  
anyway, so

113  
00:05:51.200 --> 00:05:52.500  
I will tell you that.

114  
00:05:54.100 --> 00:05:58.000  
I would consider myself when I was flying airplanes to

115  
00:05:57.500 --> 00:06:01.300  
be a non-dangerous pilot.

116  
00:06:00.300 --> 00:06:03.100  
I didn't intentionally go out

117  
00:06:03.100 --> 00:06:06.100  
and do dangerous things. I wore my

118  
00:06:06.100 --> 00:06:09.400  
proper safety equipment. I did all the proper procedures when operating

119  
00:06:09.400 --> 00:06:12.400  
the aircraft so I would

120  
00:06:12.400 --> 00:06:13.600  
have told you that I am not.

121

00:06:14.600 --> 00:06:15.400  
a dangerous

122  
00:06:16.200 --> 00:06:16.600  
person

123  
00:06:18.400 --> 00:06:21.700  
But then if I were to take okay, this is a snapshot in

124  
00:06:21.700 --> 00:06:22.400  
time of that day.

125  
00:06:23.400 --> 00:06:26.500  
What I didn't say was hey that morning. Yeah that

126  
00:06:26.500 --> 00:06:29.300  
corned beef hash I had for breakfast was two days past but it

127  
00:06:29.300 --> 00:06:31.100  
just says Best Buy.

128  
00:06:31.500 --> 00:06:34.800  
On there, that's not that dangerous and I

129  
00:06:34.800 --> 00:06:37.200  
drove and I I stayed within

130  
00:06:37.200 --> 00:06:40.100  
the allowable average of 10 miles an

131  
00:06:40.100 --> 00:06:43.600  
hour over the speed limit through my entire Drive.

132  
00:06:43.600 --> 00:06:47.400  
Yes. I did have two texts

133  
00:06:46.400 --> 00:06:49.400  
that I absolutely had to respond to on

134  
00:06:49.400 --> 00:06:51.400  
the way into work that day.

135

00:06:52.600 --> 00:06:55.100

Um, when I got home, my wife said there was a problem

136

00:06:55.100 --> 00:06:58.500

with the light switch that I had installed over the weekend. It wasn't working. So

137

00:06:58.500 --> 00:07:01.100

I thought you know, I can quickly fix this because I wanted to get

138

00:07:01.100 --> 00:07:04.300

out and go do some exercise. I can quickly fix this took the panel off.

139

00:07:04.300 --> 00:07:07.200

It's a hassle to go turn off the power of the circuit breaker,

140

00:07:07.200 --> 00:07:10.300

but I can be very careful about manipulating the wires so

141

00:07:10.300 --> 00:07:13.500

I don't touch anything, right and then surviving that

142

00:07:13.500 --> 00:07:16.200

I did go out and get on my inline skates and go for my typical

143

00:07:16.200 --> 00:07:19.100

10 Mile thing now, I don't wear helmet. I don't wear pads because

144

00:07:19.100 --> 00:07:23.500

I've been skating for like 40 years and I've

145

00:07:22.500 --> 00:07:25.300

gotten pretty good at it. I have reasonably good

146

00:07:25.300 --> 00:07:28.200

balance or at least I did when I was in my 20s and

147

00:07:28.200 --> 00:07:30.800

I just assumed that that doesn't change as you get older.

148

00:07:32.700 --> 00:07:34.300  
and for at least

149

00:07:35.200 --> 00:07:38.600  
I don't know 80% of my skate. I'm near

150

00:07:38.600 --> 00:07:41.600  
grass so I can fall gracefully without too much injury. There's

151

00:07:41.600 --> 00:07:44.400  
a 20% where I'm not near grass so that could be bad if a

152

00:07:44.400 --> 00:07:45.000  
fall happened there, but

153

00:07:45.600 --> 00:07:46.900  
what's the likelihood of that happen?

154

00:07:49.200 --> 00:07:53.100  
So we've talked about infusing safety

155

00:07:52.100 --> 00:07:56.000  
making our cultures safer.

156

00:07:57.500 --> 00:07:59.500  
And when I look at my culture of one here.

157

00:08:01.300 --> 00:08:05.200  
Hmm. Maybe I need to inject some more safety into my culture.

158

00:08:06.400 --> 00:08:07.300  
but what if

159

00:08:08.100 --> 00:08:11.700  
what if our culture could inject safety

160

00:08:11.700 --> 00:08:13.700  
into us and isn't?

161

00:08:14.100 --> 00:08:17.800

That sort of what we would hope for we would have a culture that

162

00:08:17.800 --> 00:08:18.600  
created.

163

00:08:19.600 --> 00:08:19.900  
safe

164

00:08:21.200 --> 00:08:21.500  
better

165

00:08:22.600 --> 00:08:23.200  
safer

166

00:08:23.900 --> 00:08:24.400  
I think so.

167

00:08:25.300 --> 00:08:28.300  
So, let's see. What can we derive from our

168

00:08:28.300 --> 00:08:31.800  
culture that can help us. This gets really good. I

169

00:08:31.800 --> 00:08:33.200  
can help us stay safe.

170

00:08:36.300 --> 00:08:38.800  
We are going to need a bigger boat.

171

00:08:41.700 --> 00:08:44.800  
I shouldn't we always choose the proper equipment

172

00:08:44.800 --> 00:08:46.900  
for everything we do.

173

00:08:48.300 --> 00:08:52.300  
It's critical when we were developing the safety

174

00:08:51.300 --> 00:08:54.600  
photo Chase plan for

175

00:08:54.600 --> 00:08:57.200  
x35. It was

176

00:08:57.200 --> 00:09:01.000  
kind of straightforward. Hey, we were a Lockheed product.

177

00:09:00.800 --> 00:09:03.200  
There was a

178

00:09:03.200 --> 00:09:07.400  
large number of F-16 available at

179

00:09:06.400 --> 00:09:09.400  
Edwards. We were going to primarily do our flying so

180

00:09:09.400 --> 00:09:12.800  
f-16s were kind of the easy choice for Chase.

181

00:09:12.800 --> 00:09:15.100  
Most people already had quals in the airplane. So it was

182

00:09:15.100 --> 00:09:18.400  
pretty straightforward but there was a version of the x35 called

183

00:09:18.400 --> 00:09:21.900  
the x35b that could convert into

184

00:09:21.900 --> 00:09:24.900  
short takeoff and vertical Landing mode hover into

185

00:09:24.900 --> 00:09:27.400  
a vertical Landing now for doing all

186

00:09:27.400 --> 00:09:30.300  
the supersonic stuff and all the high speed stuff

187

00:09:30.300 --> 00:09:33.500  
the F-16 was an awesome Chase airplane, but it has a

188

00:09:33.500 --> 00:09:36.300

problem getting into a hover for anyone who

189

00:09:36.300 --> 00:09:36.900  
has floated.

190

00:09:38.500 --> 00:09:41.600  
So it wasn't necessarily the right

191

00:09:41.600 --> 00:09:45.500  
size boat for that particular job.

192

00:09:46.400 --> 00:09:49.300  
So we decided hey, well, maybe on the flights

193

00:09:49.300 --> 00:09:53.500  
where we got to do both where we got to be high speed and no

194

00:09:52.500 --> 00:09:55.800  
speed. Maybe we get something else.

195

00:09:56.700 --> 00:09:59.300  
So we had a t34 from NASA. We

196

00:09:59.300 --> 00:10:03.200  
used occasionally that could do lower speeds than everything.

197

00:10:02.200 --> 00:10:05.800  
We had Harrier that we used occasionally

198

00:10:05.800 --> 00:10:08.200  
on loan from our friends at China Lake.

199

00:10:09.100 --> 00:10:12.600  
We just helicopters so that we were able to cover the

200

00:10:12.600 --> 00:10:15.600  
way we wanted to cover the airplane with safety and

201

00:10:15.600 --> 00:10:18.500  
photo Chase using the proper tool. So

202

00:10:18.500 --> 00:10:21.300  
always pick the right size boot.

203

00:10:26.100 --> 00:10:29.700  
Please do your research before purchasing a

204

00:10:29.700 --> 00:10:30.100  
home.

205

00:10:31.900 --> 00:10:34.700  
Because research is important what you

206

00:10:34.700 --> 00:10:38.200  
don't want to find out is there was information available to

207

00:10:37.200 --> 00:10:40.400  
tell you that something was dangerous, but you

208

00:10:40.400 --> 00:10:42.400  
failed to do the research to find it out.

209

00:10:43.400 --> 00:10:46.300  
In my command tour at Pax River. We are sitting

210

00:10:46.300 --> 00:10:48.500  
in a test plan review one day.

211

00:10:49.300 --> 00:10:52.400  
And one of the benefits of being in an organization like

212

00:10:52.400 --> 00:10:56.300  
that is they tend to populate that with good experienced

213

00:10:55.300 --> 00:10:58.700  
people. So my chief test engineer

214

00:10:58.700 --> 00:11:01.700  
had been around for a long time had

215

00:11:01.700 --> 00:11:04.300



seen a lot of things. So when

216

00:11:04.300 --> 00:11:07.100

we're listening to this particular test plan here any new that

217

00:11:07.100 --> 00:11:10.400

hey we've done something like this before and here was a major Pitfall we

218

00:11:10.400 --> 00:11:13.000

encountered so when he asked the question about that,

219

00:11:13.900 --> 00:11:16.200

The team said now we don't

220

00:11:16.200 --> 00:11:19.200

know anything about that. Did you do what is required

221

00:11:19.200 --> 00:11:22.100

says right here in the plan to doing test plan stuff

222

00:11:22.100 --> 00:11:23.900

that you're supposed to go review the literature and everything.

223

00:11:24.800 --> 00:11:25.500

We didn't have time.

224

00:11:26.400 --> 00:11:28.900

To do this. So he embarked on this discussion about

225

00:11:29.900 --> 00:11:32.400

the thing and talking in equations and Greek

226

00:11:32.400 --> 00:11:33.900

letters and I yeah just

227

00:11:34.800 --> 00:11:37.500

You know kind of did that and finally he said

228

00:11:37.500 --> 00:11:40.700

so what do you mean you don't you didn't have the time to do

229

00:11:40.700 --> 00:11:41.700  
the research?

230

00:11:42.700 --> 00:11:45.200  
And ah I can fix that. So I'm

231

00:11:45.200 --> 00:11:48.900  
going to give everyone every other Monday morning off.

232

00:11:49.600 --> 00:11:52.400  
To do things like research for your

233

00:11:52.400 --> 00:11:55.500  
upcoming flight test to actually let the

234

00:11:55.500 --> 00:11:58.400  
pilots have time to talk with their test

235

00:11:58.400 --> 00:12:01.200  
Engineers because another thing we found out in that discussion

236

00:12:01.200 --> 00:12:04.700  
was the pilot in the engineer had not talked before coming into

237

00:12:04.700 --> 00:12:05.900  
the test plan review.

238

00:12:07.500 --> 00:12:10.900  
Because quote were too busy flying.

239

00:12:12.200 --> 00:12:15.900  
I can fix that. I'm the real easy doesn't

240

00:12:15.900 --> 00:12:18.500  
take any effort now. I will tell you in a

241

00:12:18.500 --> 00:12:20.900  
place like Patuxent River where there are a lot of program offices.

242

00:12:22.100 --> 00:12:25.300

Taking a half day off of flying even every other

243

00:12:25.300 --> 00:12:29.000

week was not a hugely popular decision on the other side of the

244

00:12:28.000 --> 00:12:29.300

base.

245

00:12:30.200 --> 00:12:33.400

But it was important enough to me to allow people time to

246

00:12:33.400 --> 00:12:34.800

do their research.

247

00:12:38.700 --> 00:12:41.000

Not all dogs are friendly.

248

00:12:42.400 --> 00:12:45.600

If you approached a strange dog,

249

00:12:45.600 --> 00:12:48.600

you would approach that strange dog, especially one

250

00:12:48.600 --> 00:12:49.400

that looks like this.

251

00:12:50.300 --> 00:12:51.100

with caution

252

00:12:52.100 --> 00:12:55.600

So shouldn't we approach the unknown with sort

253

00:12:55.600 --> 00:12:58.700

of the same level of caution? Shouldn't we

254

00:12:58.700 --> 00:13:01.800

go out and do things like first flights

255

00:13:01.800 --> 00:13:04.400

envelope expansion and approach them

256

00:13:04.400 --> 00:13:07.100  
with some level of caution. Just

257

00:13:07.100 --> 00:13:10.300  
like we would come up to this cute looking

258

00:13:10.300 --> 00:13:11.500  
Saint Bernard.

259

00:13:12.700 --> 00:13:13.300  
I think so.

260

00:13:18.600 --> 00:13:22.700  
Good technology can

261

00:13:22.700 --> 00:13:23.400  
be bad.

262

00:13:24.400 --> 00:13:25.400  
So think about this.

263

00:13:26.300 --> 00:13:27.200  
a system

264

00:13:28.200 --> 00:13:29.800  
That is powerful enough.

265

00:13:30.600 --> 00:13:33.400  
To protect a pilot like me

266

00:13:33.400 --> 00:13:36.900  
and I didn't when I showed you that picture of me in the flight gear, but  
I

267

00:13:36.900 --> 00:13:39.800  
didn't tell you, you know, most people have this this impression,  
especially

268

00:13:39.800 --> 00:13:42.400  
if we talk to folks who are not in the profession. They

269

00:13:42.400 --> 00:13:46.000

have this impression that test pilots are these great pilots

270

00:13:45.100 --> 00:13:48.900

and I have met a lot of great test pods.

271

00:13:48.900 --> 00:13:51.300

In fact, we go to events like this and I said at a table and the

272

00:13:51.300 --> 00:13:54.000

waitress comes around says wow, that's a great pilot. That's a great

273

00:13:54.500 --> 00:13:57.500

pilot. That's a great pilot and turbo, you know a lot of great Pilots, right? So that's

274

00:14:00.200 --> 00:14:04.500

Because I'm I was never a great pilot. I

275

00:14:03.500 --> 00:14:06.800

am a pilot who is here who still

276

00:14:06.800 --> 00:14:09.200

standing here and can talk about things they did as a pilot

277

00:14:09.200 --> 00:14:12.300

which I consider a plus I was a good

278

00:14:12.300 --> 00:14:16.100

pilot and I think I was a good buy only because I made

279

00:14:15.100 --> 00:14:18.300

a lot of mistakes. But each one

280

00:14:18.300 --> 00:14:20.900

of those mistakes made me a little bit.

281

00:14:21.700 --> 00:14:25.100

Better so if we have technology in

282

00:14:24.100 --> 00:14:27.900  
an airplane, that is so powerful.

283  
00:14:29.100 --> 00:14:33.000  
That it doesn't require it can protect just a basic Good Pilot

284  
00:14:32.300 --> 00:14:35.800  
like me or maybe even protect a

285  
00:14:35.800 --> 00:14:38.300  
not so good pilot. Don't you think

286  
00:14:38.300 --> 00:14:42.000  
that incredible that incredibly powerful technology has

287  
00:14:41.500 --> 00:14:44.600  
the power to mess with you as well.

288  
00:14:44.600 --> 00:14:47.400  
If you don't understand it, if

289  
00:14:47.400 --> 00:14:50.900  
you don't know how to use it if you don't know what

290  
00:14:50.900 --> 00:14:52.400  
it's supposed to do.

291  
00:14:53.300 --> 00:14:55.700  
So good technology can be bad.

292  
00:15:01.500 --> 00:15:04.500  
Everyone has what it takes to be on

293  
00:15:04.500 --> 00:15:05.200  
the team.

294  
00:15:06.400 --> 00:15:09.800  
I would highly recommend if you were to get a friend request from

295  
00:15:09.800 --> 00:15:12.300  
either a Mr. F Kruger a Mr.

296

00:15:12.300 --> 00:15:15.300

Jay Voorhees or Mr. M. Myers that you

297

00:15:15.300 --> 00:15:18.300

swipe left. That's the bad one right swipe left on that. You

298

00:15:18.300 --> 00:15:21.200

don't want those people around there's no good that can come

299

00:15:21.200 --> 00:15:23.500

from having them as part of your team.

300

00:15:25.800 --> 00:15:28.700

But do we actually live in a world where

301

00:15:28.700 --> 00:15:31.500

we can pick and choose who is on our team? Some people

302

00:15:31.500 --> 00:15:34.500

would say? Yes, we have the luxury of doing that and some

303

00:15:34.500 --> 00:15:35.300

maybe not.

304

00:15:36.200 --> 00:15:40.000

But what do you do when you have a person who doesn't have whatever

305

00:15:39.400 --> 00:15:42.200

it is that's required to be

306

00:15:42.200 --> 00:15:45.300

not only an effective and contributing

307

00:15:45.300 --> 00:15:46.800

here, but not to be a dangerous.

308

00:15:47.700 --> 00:15:51.300

Part of that team or that organization. That

309

00:15:50.300 --> 00:15:53.600  
is a huge cultural challenge.

310  
00:15:54.800 --> 00:15:57.400  
But our culture says hey, they're bad

311  
00:15:57.400 --> 00:15:59.700  
people out there. You just got to accept that they are.

312  
00:16:00.500 --> 00:16:03.800  
So we need to have thought through. How do we deal with

313  
00:16:03.800 --> 00:16:05.700  
that sort of situation?

314  
00:16:09.500 --> 00:16:12.600  
Never ever pick the window seat.

315  
00:16:16.100 --> 00:16:19.300  
Because you may have a vantage point from the

316  
00:16:19.300 --> 00:16:22.800  
window seat and you may see something from your perspective

317  
00:16:22.800 --> 00:16:26.000  
that looks really terrible but no one else because

318  
00:16:25.200 --> 00:16:28.300  
they're not sitting in the windows seat may have

319  
00:16:28.300 --> 00:16:29.900  
that same perspective.

320  
00:16:30.800 --> 00:16:32.900  
And then what what do you do?

321  
00:16:34.200 --> 00:16:37.300  
What is what is our culture tell us to do in that

322  
00:16:37.300 --> 00:16:37.500  
situation?



323

00:16:38.400 --> 00:16:41.700

Well, you've got to convince people that there's

324

00:16:41.700 --> 00:16:44.100

something bad out on the wing.

325

00:16:44.900 --> 00:16:45.100

right

326

00:16:46.700 --> 00:16:49.200

They can't see it. They're not in the

327

00:16:49.200 --> 00:16:49.800

right place.

328

00:16:51.300 --> 00:16:54.700

You've been acting a little strange lately. So maybe there's some challenge

329

00:16:54.700 --> 00:16:57.500

to your credibility. But you've

330

00:16:57.500 --> 00:17:00.200

seen that thing out on the wing and you

331

00:17:00.200 --> 00:17:03.500

need to convince people. So this is kind of like the novo thing

332

00:17:03.500 --> 00:17:06.900

and how do you create an environment where it's

333

00:17:06.900 --> 00:17:10.300

okay to say I saw something scary.

334

00:17:09.300 --> 00:17:13.200

I saw something bad. I

335

00:17:12.200 --> 00:17:16.400

saw something that has me concerned and

336  
00:17:15.400 --> 00:17:17.400  
convince people.

337  
00:17:18.400 --> 00:17:19.100  
about that

338  
00:17:25.900 --> 00:17:28.800  
Beware of the triple dog dare

339  
00:17:32.300 --> 00:17:35.500  
how many in this room have ever

340  
00:17:35.500 --> 00:17:38.400  
experienced in any of its many

341  
00:17:38.400 --> 00:17:39.800  
forms or shapes?

342  
00:17:40.600 --> 00:17:40.900  
pressure

343  
00:17:43.400 --> 00:17:46.300  
so, you know about the Triple Dog.

344  
00:17:47.000 --> 00:17:47.300  
there

345  
00:17:49.900 --> 00:17:50.500  
so what do you do?

346  
00:17:53.500 --> 00:17:56.800  
We'd like to think that we choose to do the right

347  
00:17:56.800 --> 00:17:57.100  
thing.

348  
00:17:58.200 --> 00:18:02.000  
Right because the right thing is don't.

349  
00:18:03.300 --> 00:18:05.600

Stick your tongue on the Frozen Pole.

350

00:18:09.400 --> 00:18:10.000  
sometimes

351

00:18:11.300 --> 00:18:14.100  
for me my ego got in the

352

00:18:14.100 --> 00:18:16.300  
way of doing the right thing.

353

00:18:17.400 --> 00:18:20.500  
Because I didn't want to seem like I was afraid to

354

00:18:20.500 --> 00:18:24.000  
stick my tongue on the Frozen pole. I thought

355

00:18:23.300 --> 00:18:26.000  
that I knew better. I thought that I

356

00:18:26.300 --> 00:18:28.500  
was good enough that nothing bad.

357

00:18:29.600 --> 00:18:30.200  
would happen

358

00:18:32.200 --> 00:18:35.600  
flying Harrier 29 palms and some of you have heard me do this

359

00:18:35.600 --> 00:18:36.400  
presentation before.

360

00:18:37.600 --> 00:18:41.100  
We're operating at night night. No

361

00:18:40.100 --> 00:18:44.200  
moon Starlight conditions on Generation 3

362

00:18:44.200 --> 00:18:47.500  
night vision goggles. So for those who've been around a while, those are  
not very good.

363

00:18:47.500 --> 00:18:50.200

Those are the classic sort of soda straw. I

364

00:18:50.200 --> 00:18:52.000

can only see here in front of me.

365

00:18:52.600 --> 00:18:55.200

My system on the airplane for the

366

00:18:55.200 --> 00:18:58.900

forward-looking infrared that would show up on the display inside.

367

00:18:58.900 --> 00:19:00.400

The cockpit was degraded.

368

00:19:01.100 --> 00:19:05.000

so it wasn't giving me good visual and because I had degraded

369

00:19:04.200 --> 00:19:08.100

equipment and because it was a really bad condition

370

00:19:07.100 --> 00:19:10.300

night and even though we had

371

00:19:11.100 --> 00:19:14.500

Briefed to what? We thought was a pretty well thought out

372

00:19:14.500 --> 00:19:18.900

plan of how we were going to approach Landings at this expeditionary Airfield.

373

00:19:17.900 --> 00:19:20.200

Nothing went according

374

00:19:20.200 --> 00:19:23.600

to plan that night where we were going to put marker lights

375

00:19:23.600 --> 00:19:26.400

didn't happen and didn't work out the way we had planned how we

376

00:19:26.400 --> 00:19:29.300

were going to refuel the airplanes and then go out for the second story

377

00:19:29.300 --> 00:19:32.600

where we're going to practice The Landings we had to turn the taxiway lights

378

00:19:32.600 --> 00:19:35.400

on and because we couldn't see her way

379

00:19:35.400 --> 00:19:38.300

to get to the fuel pits and we forgot to turn the taxiway lights

380

00:19:38.300 --> 00:19:41.400

off and taxiway lights through all these goggles look just like

381

00:19:41.400 --> 00:19:44.300

the markers we were going to try to put down on the side of the runway

382

00:19:44.300 --> 00:19:47.700

and long story short instead of landing on the runway,

383

00:19:47.700 --> 00:19:50.300

which is the more desirable place to

384

00:19:50.300 --> 00:19:53.400

land jet airplane. I landed on

385

00:19:53.400 --> 00:19:57.300

that space in between the runway and the taxiway in

386

00:19:56.300 --> 00:19:59.500

the desert and the only reason I'm here today to

387

00:19:59.500 --> 00:20:02.100

talk about that event is I happen to touch

388

00:20:03.300 --> 00:20:04.200

The Crossing taxiway

389

00:20:04.800 --> 00:20:07.100

So people use that Crossing taxi way to

390

00:20:07.100 --> 00:20:10.300

get from the runway to the taxiway, but they typically use

391

00:20:10.300 --> 00:20:13.200

the full width of it by Crossing in that direction. I used

392

00:20:13.200 --> 00:20:16.700

it the wrong way the short way flying at about 80

393

00:20:16.700 --> 00:20:18.100

miles per hour.

394

00:20:18.900 --> 00:20:21.100

But had it not hit I had I not hit

395

00:20:21.100 --> 00:20:24.100

that then ditch on this side ditch on that side. And somebody else

396

00:20:24.100 --> 00:20:27.700

is standing in front of you today talking I did

397

00:20:27.700 --> 00:20:30.300

that because I did not want to be seen

398

00:20:30.300 --> 00:20:32.700

as the person who couldn't hack it.

399

00:20:33.400 --> 00:20:36.600

I was the weapons and tactics instructor for

400

00:20:36.600 --> 00:20:39.600

the Squadron. I was one of the more experienced people

401

00:20:39.600 --> 00:20:42.000

in the Squadron. I was not going to

402

00:20:42.100 --> 00:20:46.400

be the one who couldn't hack what we were trying to do that night.

403

00:20:45.400 --> 00:20:48.300

So I let

404

00:20:48.300 --> 00:20:51.700

myself Triple Dog there myself into sticking

405

00:20:51.700 --> 00:20:53.700

my tongue on the pole.

406

00:20:58.200 --> 00:21:01.700

You've got to pay attention to things that happen

407

00:21:01.700 --> 00:21:04.400

and learn lessons.

408

00:21:05.600 --> 00:21:05.900

so

409

00:21:06.900 --> 00:21:09.600

if I were to say hey.

410

00:21:10.400 --> 00:21:11.800

We're on our ship.

411

00:21:12.800 --> 00:21:15.300

And everything's cool up here on our ship. But there's

412

00:21:15.300 --> 00:21:18.300

a planet here. We want to go down because there's some weird stuff happening down on the

413

00:21:18.300 --> 00:21:18.400

planet.

414

00:21:19.300 --> 00:21:23.100

So it's going to be me and you and you and that guy

415

00:21:22.100 --> 00:21:24.700

in the red shirt.

416  
00:21:27.200 --> 00:21:30.500  
And you don't have to be a Trekkie to know when it's

417  
00:21:30.500 --> 00:21:33.500  
time to go back to the ship who is not in the

418  
00:21:33.500 --> 00:21:35.700  
group at that point, right?

419  
00:21:36.900 --> 00:21:37.100  
so

420  
00:21:39.300 --> 00:21:42.500  
you would think that the rest of the dudes would

421  
00:21:42.500 --> 00:21:43.600  
figure it out, right?

422  
00:21:45.300 --> 00:21:48.400  
surely someone's paying attention to what's happening

423  
00:21:48.400 --> 00:21:49.400  
and can go

424  
00:21:50.400 --> 00:21:54.000  
Oh, that's it. Knee football

425  
00:21:53.500 --> 00:21:56.500  
in your eye. Hey Bill. Why don't you go on

426  
00:21:56.500 --> 00:22:00.600  
the thing with the guy in the yellow shirt? Because

427  
00:21:59.600 --> 00:22:02.700  
he's been paying attention to last

428  
00:22:02.700 --> 00:22:05.100  
me. I mean, that's kind of one of the

429  
00:22:05.100 --> 00:22:08.400



big reasons. We do things like this. So that

430

00:22:08.400 --> 00:22:11.800

those of us who have gone down to the planet with

431

00:22:11.800 --> 00:22:14.200

the team can tell the rest of the people.

432

00:22:14.200 --> 00:22:17.300

Hey, if you're wearing a red shirt do not

433

00:22:17.300 --> 00:22:18.600

go on the mission.

434

00:22:25.800 --> 00:22:29.100

We need to pay attention and understand the

435

00:22:28.100 --> 00:22:31.500

numbers and we need to understand what the

436

00:22:31.500 --> 00:22:35.300

data is telling us because we know that 99

437

00:22:34.300 --> 00:22:37.800

Red Balloons is

438

00:22:37.800 --> 00:22:40.700

okay, right? It's it when you think of 99 Red

439

00:22:40.700 --> 00:22:43.400

Balloons you get this sort of poppy dancing

440

00:22:43.400 --> 00:22:45.800

happy sort of feeling right?

441

00:22:47.700 --> 00:22:49.000

but when you think of one

442

00:22:50.100 --> 00:22:51.200

red balloon

443  
00:22:52.500 --> 00:22:55.300  
not exactly the same feeling so you

444  
00:22:55.300 --> 00:22:58.600  
have to understand the numbers you

445  
00:22:58.600 --> 00:23:01.300  
have to understand the data is one

446  
00:23:01.300 --> 00:23:04.300  
thing and especially in the world. We live in today. We can

447  
00:23:04.300 --> 00:23:08.100  
collect and gather so much data.

448  
00:23:09.600 --> 00:23:12.100  
But do we have the capacity? Do we have

449  
00:23:12.100 --> 00:23:12.700  
the time?

450  
00:23:13.700 --> 00:23:16.500  
To analyze all that data and know what

451  
00:23:16.500 --> 00:23:17.800  
it is telling us.

452  
00:23:21.600 --> 00:23:22.600  
And the last one?

453  
00:23:23.500 --> 00:23:25.800  
Do not tempt fate.

454  
00:23:28.200 --> 00:23:31.300  
Do not say Beetlejuice three times.

455  
00:23:34.400 --> 00:23:37.400  
We know because someone has told us hey that can

456  
00:23:37.400 --> 00:23:40.700

be hazardous that can be dangerous do

457

00:23:40.700 --> 00:23:43.300

not tempt fate. So I shared a

458

00:23:43.300 --> 00:23:46.200

story The Harrier that night where I'm I did the wrong

459

00:23:46.200 --> 00:23:49.300

thing. I triple dog there myself

460

00:23:49.300 --> 00:23:52.300

into a bad situation A Nearly

461

00:23:52.300 --> 00:23:53.800

fatal situation.

462

00:23:55.400 --> 00:23:58.400

But I learned from that I told you that one of the reasons I consider myself

463

00:23:58.400 --> 00:24:01.200

a good pilot is because I made mistakes and I figured out from each of

464

00:24:01.200 --> 00:24:04.400

those mistakes how not to do that again and how to be a little bit better about it

465

00:24:04.400 --> 00:24:06.600

so fast forward a little bit of time.

466

00:24:07.500 --> 00:24:10.500

X35 we're going out. We've just completed

467

00:24:10.500 --> 00:24:11.700

this highly successful.

468

00:24:12.800 --> 00:24:13.200

mission

469

00:24:14.200 --> 00:24:17.300

and we had to brief a bonus. Okay. We just did all

470

00:24:17.300 --> 00:24:20.200

this cool stuff. Now we're gonna do this bonus. We're gonna go out and do execute a

471

00:24:20.200 --> 00:24:23.900

vertical takeoff with the airplane was not a requirement for program

472

00:24:23.900 --> 00:24:27.400

was not a requirement for the demonstration, but it

473

00:24:26.400 --> 00:24:29.300

was something that Lockheed knew

474

00:24:29.300 --> 00:24:32.000

that their competitor probably couldn't do with their airplanes so

475

00:24:32.600 --> 00:24:35.600

could help and give a little bit of competitive advantage in

476

00:24:35.600 --> 00:24:38.100

something. That was Loosely called a fly off between the two

477

00:24:38.100 --> 00:24:38.400

airplanes.

478

00:24:39.300 --> 00:24:42.800

And in the brief, they said you when attempting

479

00:24:42.800 --> 00:24:45.300

this vertical takeoff because you will be light on gas

480

00:24:45.300 --> 00:24:48.800

are going to go up like a champagne cork now. I'm

481

00:24:48.800 --> 00:24:51.000

a marine every now and then I have been at a party

482

00:24:51.100 --> 00:24:54.300

where Sam I can't afford champagne, but I've been at a party where champagne has been

483

00:24:54.300 --> 00:24:57.300

served and I know that analogy. I know what champagne Court going up exactly

484

00:24:57.300 --> 00:25:01.000

looks like when I Advance the power in that airplane, we

485

00:25:00.100 --> 00:25:01.600

went sideways.

486

00:25:03.700 --> 00:25:03.800

now

487

00:25:04.800 --> 00:25:07.700

not been to a lot of parties, but I've never seen a champagne cork

488

00:25:07.700 --> 00:25:10.200

come out of the bottle and go sideways. I've only ever seen

489

00:25:10.200 --> 00:25:13.400

it go up. It did not go according to plan.

490

00:25:14.500 --> 00:25:17.500

So control them says give us a minute. We've looked

491

00:25:17.500 --> 00:25:20.700

at all the data. Everything's fine. You are cleared to try again. I look

492

00:25:20.700 --> 00:25:22.000

in my airplane. There's no bad lights.

493

00:25:23.400 --> 00:25:23.900

All good.

494

00:25:25.500 --> 00:25:29.000

Don't tempt fate nothing about

495

00:25:28.200 --> 00:25:32.400

what just happened was what we talked about. Nothing about

496

00:25:32.400 --> 00:25:35.600

what just happened was what was supposed to happen. Nothing about

497

00:25:35.600 --> 00:25:38.500

what just happened was modeled or

498

00:25:38.500 --> 00:25:41.100

predicted. So I said no we are done for the

499

00:25:41.100 --> 00:25:42.900

day until we figure this out.

500

00:25:44.600 --> 00:25:48.300

So that's my thing. Look at all of these things culture.

501

00:25:49.400 --> 00:25:50.500

can do to make us

502

00:25:51.500 --> 00:25:52.000

safer

503

00:25:52.600 --> 00:25:54.300

You just have to pay attention.

504

00:25:55.300 --> 00:25:56.800

And I believe you with that.

505

00:25:58.400 --> 00:25:59.800

May the fourth be with you.

506

00:26:01.800 --> 00:26:06.200

Thanks. We'll do

507

00:26:06.200 --> 00:26:06.900

questions on the panel.