WEBVTT

1
00:00:03.225 --> 00:00:04.045
Oh, that, that's true.

2
00:00:04.195 --> 00:00:06.005
Yeah. Very good. Well, I, I guess that

3
00:00:06.005 --> 00:00:07.725
that presentation was a reminder that, uh,

4
00:00:07.885 --> 00:00:10.525
regardless if we're, uh, training, which, uh, is

5
00:00:10.525 --> 00:00:12.245
what Rafael was doing in that particular case

6
00:00:12.245 --> 00:00:14.005
or testing, we gotta be ready for the unexpected.

7
00:00:14.005 --> 00:00:15.085
There's, there's no doubt about that.

8
00:00:20.115 --> 00:00:23.245
Okay. Uh, the last presentation, uh,

9
00:00:23.265 --> 00:00:25.445
for the symposium is gonna be done by Tom Huff

10
00:00:25.445 --> 00:00:26.525
of Gulfstream Aviation.

11
00:00:26.875 --> 00:00:28.285
I've known Tom a long time.

12
00:00:28.385 --> 00:00:29.405
We actually, uh, started

13
00:00:29.865 --> 00:00:31.805
and finished the Naval Academy together, uh,

14
00:00:32.245 --> 00:00:34.045
starting in 1980 and finishing in 1984.

15
00:00:34.705 --> 00:00:37.485
Uh, he had a 28 year active duty career with the Navy,

16
00:00:37.595 --> 00:00:41.165
retired as in oh six operational command as a, uh,

17
00:00:41.585 --> 00:00:43.365
as a a Hornet skipper.

18
00:00:44.065 --> 00:00:45.165
He was the commanding officer

19
00:00:45.165 --> 00:00:46.805
of the Naval Test Pilot school at one point,

20
00:00:47.505 --> 00:00:48.805
and, uh, closed out his career

21
00:00:49.065 --> 00:00:51.845
as the Naval Test wing Atlantic Commodore, uh,

22
00:00:51.845 --> 00:00:53.685
overseeing all the flight test at Pax River.

23
00:00:53.685 --> 00:00:56.845
Essentially, he joined Gulfstream in 2012

24
00:00:56.845 --> 00:00:59.405
as the aviation safety manager there, primarily

25
00:00:59.405 --> 00:01:00.685
to facilitate the implementation

26
00:01:00.685 --> 00:01:02.725
of a safety management system, uh,

27
00:01:02.745 --> 00:01:05.485

and to provide independent safety oversight for Gulfstream.

28
00:01:05.865 --> 00:01:08.325
Uh, he is an associate fellow with the Society

29
00:01:08.325 --> 00:01:09.485
of Experimental Test Pilots,

30
00:01:09.485 --> 00:01:10.565
and he's also a board member

31
00:01:10.905 --> 00:01:12.365
of the Flight Test Safety Committee.

32
00:01:12.865 --> 00:01:14.685
And, uh, I understand, Tom, you're miked up

33
00:01:14.685 --> 00:01:16.485
and you're gonna do things a little bit differently here.

34
00:01:16.485 --> 00:01:18.085
Is that right? That's right. Okay.

35
00:01:18.085 --> 00:01:20.645
And knowing Huffer for as long as I have, I'm not surprised.

36
00:01:21.225 --> 00:01:22.445
Please welcome Tom Huff.

37
00:01:28.025 --> 00:01:31.965
Thanks, Steve-O How we doing? Claude Comp Check. 1, 2, 3.

38
00:01:32.105 --> 00:01:35.685
We good? I'm not gonna use the podium today, so I want

39
00:01:35.685 --> 00:01:38.245
to be up close and personal with my, with my audience.

40
00:01:38.245 --> 00:01:39.525
So we're gonna try a little something different.

41
00:01:39.555 --> 00:01:44.285
Last guy, last day safety. You gotta be kidding me.

42
00:01:45.105 --> 00:01:49.885
Um, and a fly by wire topic to add to that

43
00:01:49.885 --> 00:01:52.405
as well, but I will tell you that for the better part

44
00:01:52.405 --> 00:01:54.565
of 40 years, I was doing control by wire.

45
00:01:55.105 --> 00:01:56.965
Uh, any other, uh, control line model,

46
00:01:57.205 --> 00:01:58.285
airplane guys out here in the crowd.

47
00:01:58.395 --> 00:02:00.925
Yeah. So there you go. Single channel, single axis,

48
00:02:00.985 --> 00:02:02.525
uh, control by wire.

49
00:02:02.545 --> 00:02:04.645
So, I'm eminently qualified to talk about this,

50
00:02:05.425 --> 00:02:06.605
but the topic is quite serious.

51
00:02:06.665 --> 00:02:08.405
How many in this room would consider themselves

52
00:02:08.435 --> 00:02:11.245
practitioners of safety management systems?

53
00:02:13.995 --> 00:02:15.365
Okay, hands are going up.

54
00:02:16.505 --> 00:02:20.885

Uh, how many are SMS qualified, trained, qualified auditors?

55
00:02:23.025 --> 00:02:26.365
Nobody. Okay. Uh, there could be a conflict there.

56
00:02:26.485 --> 00:02:31.085
I i, there is a two day course for isbe OSMS auditing.

57
00:02:31.225 --> 00:02:34.485
Uh, I would say that that's only a ticket to learn.

58
00:02:34.865 --> 00:02:37.625
Um, and, uh, you can pay the money

59
00:02:37.625 --> 00:02:39.425
and you can be a certified SMS auditor.

60
00:02:40.925 --> 00:02:44.815
Um, so I'm gonna start my

61
00:02:44.815 --> 00:02:46.095
presentation a little out of order.

62
00:02:46.115 --> 00:02:47.535
I'm gonna start right with the lesson learned.

63
00:02:47.635 --> 00:02:50.135
So here's the fly by wire lesson learned. Alright,

64
00:02:50.135 --> 00:02:51.415
We're gonna finish standing in that table.

65
00:02:51.595 --> 00:02:54.215
Now we've got our belt attached with a rough grit,

66
00:02:54.215 --> 00:02:55.935
and we want to plug the thing in. Now,

67
00:02:56.115 --> 00:02:57.855
Of course, you wanna be sure the trigger switch is

68
00:02:57.855 --> 00:02:58.935
not locked in the on position.

69
00:02:59.265 --> 00:03:00.525
Any idiot knows that up.

70
00:03:13.295 --> 00:03:15.765
Quick exercise in ts. What is the hazard?

71
00:03:18.355 --> 00:03:22.605
Anybody? Power switch energizing the sander with the, uh,

72
00:03:22.745 --> 00:03:25.125
the, the, the trigger switch in the opposition.

73
00:03:25.225 --> 00:03:29.285
What's consequence? Runaway

74
00:03:29.285 --> 00:03:30.405
sand runaway sander.

75
00:03:30.405 --> 00:03:32.325
Well, it would've got launched right into the,

76
00:03:32.345 --> 00:03:34.525
the audience had he not, not grabbed the cable there.

77
00:03:34.625 --> 00:03:35.925
So did, did we,

78
00:03:35.985 --> 00:03:38.365
did the safety officer do enough to intervene in this case?

79
00:03:40.665 --> 00:03:43.925
He certainly, uh, forewarned the individual about, uh,

80
00:03:44.225 --> 00:03:46.245
you know, the, the, the potential of having a problem

81
00:03:46.305 --> 00:03:47.405

by plugging the sand in.

82
00:03:47.405 --> 00:03:49.965
But, uh, so there you go. Good job.

83
00:03:50.145 --> 00:03:52.125
So this is a tutorial, by the way, and

84
00:03:52.125 --> 00:03:54.645
because I'm walking around, Susan was kind enough to keep

85
00:03:54.645 --> 00:03:56.165
that, that camera trained on me.

86
00:03:56.205 --> 00:03:58.645
I actually wanted Claude to just get the camera right in our

87
00:03:58.645 --> 00:04:00.365
faces as we were doing this.

88
00:04:00.625 --> 00:04:02.885
Uh, and then I said, well, why don't we have a Claude,

89
00:04:03.125 --> 00:04:06.205
a Claude copter, uh, with a GoPro on it to do all this?

90
00:04:07.235 --> 00:04:09.485
There's gonna be some audience participation if,

91
00:04:09.505 --> 00:04:10.725
and there are prizes, by the way.

92
00:04:10.825 --> 00:04:14.805
So, um, if you answer the questions, you two could,

93
00:04:14.855 --> 00:04:16.325
could win one of these nice models.

94
00:04:16.985 --> 00:04:19.965
Uh, so Johnny, tell me the participants what they could win.

95
00:04:19.965 --> 00:04:22.845
Well, we have a model of the Gulfstream G two 80.

96
00:04:23.345 --> 00:04:26.965
So if you are a discriminating passenger, CEO

97
00:04:27.105 --> 00:04:29.685
or significant other, and you wanna travel in comfort,

98
00:04:29.865 --> 00:04:31.805
you two might want to get a G two eight

99
00:04:33.545 --> 00:04:37.325
for the globe trotting discriminating passenger, CEO

100
00:04:37.785 --> 00:04:41.805
or significant other a G six 50 er.

101
00:04:42.465 --> 00:04:45.205
If you really wanna go 6,000 miles at point 19 mock,

102
00:04:45.955 --> 00:04:47.125
this is your, this is your baby.

103
00:04:48.305 --> 00:04:50.325
Uh, but you gotta answer the questions correctly.

104
00:04:53.145 --> 00:04:56.195
Many times you, you may hear, uh, maybe not many times,

105
00:04:56.295 --> 00:04:58.515
but you, you may have heard that, oh yeah,

106
00:04:58.535 --> 00:04:59.835
we don't have time to do that.

107
00:05:00.985 --> 00:05:02.475
Yeah, we don't have time for that kind of stuff.

108
00:05:02.475 --> 00:05:04.155

We don't, we don't have time to go back and,

109
00:05:04.455 --> 00:05:07.155
and do the, uh, flight test safety database research

110
00:05:07.415 --> 00:05:10.475
before we begin our testing or, or test planning.

111
00:05:11.805 --> 00:05:14.415
Well, if you don't have time to do it right the first time,

112
00:05:14.945 --> 00:05:16.535
where are you gonna find the time to do it again

113
00:05:16.635 --> 00:05:18.495
or to clean up after one of these disasters?

114
00:05:19.515 --> 00:05:22.455
Safety guys have the unenviable position of trying

115
00:05:22.455 --> 00:05:24.895
to explain return on investment, don't we?

116
00:05:26.115 --> 00:05:27.735
And that can be hard. You gotta prove a negative.

117
00:05:29.355 --> 00:05:32.695
And, you know, we've tried, we really have.

118
00:05:32.795 --> 00:05:33.975
And then disaster strikes

119
00:05:33.975 --> 00:05:36.055
and we go, well, let's blame the safety guy.

120
00:05:36.355 --> 00:05:37.695
Oh, wait a minute. Maybe we didn't

121
00:05:38.005 --> 00:05:39.135
give him the tools you needed.

122
00:05:40.555 --> 00:05:42.175
So whether you agree

123
00:05:42.175 --> 00:05:45.015
that safety management systems give you return on value,

124
00:05:45.045 --> 00:05:46.495
give you value, return free money

125
00:05:46.495 --> 00:05:49.255
or not, uh, it's still a good construct.

126
00:05:49.365 --> 00:05:50.735
It's a construct, it's a tool.

127
00:05:51.395 --> 00:05:53.615
Uh, let's not make it something it's not.

128
00:05:55.275 --> 00:05:57.530
And we know all these things. We know the impact of this.

129
00:05:57.530 --> 00:06:00.525
In fact, that's an actual snapshot of ExxonMobil's.

130
00:06:00.665 --> 00:06:01.965
I'm not calling them out. But that's,

131
00:06:01.965 --> 00:06:04.165
that was an actual snapshot of their, their stocks

132
00:06:04.165 --> 00:06:06.445
after the Exxon Valdez accident.

133
00:06:10.105 --> 00:06:14.365
Simple four pillar construct. Um, 12 sub components.

134
00:06:14.505 --> 00:06:15.685
I'm not gonna quiz you on those.

135
00:06:15.685 --> 00:06:17.005

That's the job of the safety guys,

136
00:06:17.105 --> 00:06:19.285
but it requires leadership involvement.

137
00:06:19.345 --> 00:06:22.125
So how does your boss in your boardroom feel about this?

138
00:06:22.945 --> 00:06:24.405
Are they resourcing it correctly?

139
00:06:25.905 --> 00:06:28.405
Um, is it like TQM, just another fly

140
00:06:28.405 --> 00:06:29.485
by night three letter acronym?

141
00:06:30.765 --> 00:06:32.805
I submit, not the writing's on the wall.

142
00:06:32.995 --> 00:06:37.365
It's gonna be mandatory coming up for the part 1 21 guys by

143
00:06:37.365 --> 00:06:38.525
what, 2018, I think.

144
00:06:38.985 --> 00:06:40.445
Uh, and they had to already submit their

145
00:06:40.445 --> 00:06:41.885
plans on how they're gonna get there.

146
00:06:43.345 --> 00:06:46.285
And then you, you may end up in a debate about, well,

147
00:06:46.285 --> 00:06:47.365
who's actually accountable?

148
00:06:47.875 --> 00:06:49.565
Well, the big cheese is accountable, of course.

149
00:06:50.115 --> 00:06:52.205
Well, no, no, no. I mean, there are some other things

150
00:06:52.465 --> 00:06:55.085
to this to consider within your organization

151
00:06:55.225 --> 00:06:59.125
who is responsible for resourcing, uh, and managing

152
00:06:59.345 --> 00:07:00.805
and making sure that the,

153
00:07:00.865 --> 00:07:03.205
the safety performance is what it's supposed to be.

154
00:07:04.105 --> 00:07:05.285
Is that the CEO of the company?

155
00:07:07.555 --> 00:07:09.605
Well, you certainly want the CEO support.

156
00:07:10.435 --> 00:07:12.525
It's gotta be a top-down type of approach.

157
00:07:12.585 --> 00:07:15.615
In fact, here's some definitions,

158
00:07:15.615 --> 00:07:17.095
right outta the safety management manual

159
00:07:17.555 --> 00:07:19.455
and the FAA order on the topic.

160
00:07:20.435 --> 00:07:21.575
And the key parts

161
00:07:21.575 --> 00:07:24.215
of this is a top-down management approach to safety.

162
00:07:24.885 --> 00:07:27.375

They want you talking about safety, much like they do about,

163
00:07:27.635 --> 00:07:30.295
uh, uh, uh, aircraft sales

164
00:07:31.155 --> 00:07:33.495
or flight test, progress, test point burn down.

165
00:07:33.675 --> 00:07:34.695
Uh, you know, it's supposed

166
00:07:34.695 --> 00:07:36.215
to be baked into all these things,

167
00:07:38.035 --> 00:07:40.015
um, policy.

168
00:07:41.275 --> 00:07:42.815
So that's the the first component.

169
00:07:42.955 --> 00:07:44.895
So you gotta explain in that document,

170
00:07:45.115 --> 00:07:47.975
and by the way, I brought some, I brought a couple samples,

171
00:07:48.795 --> 00:07:52.215
uh, with me as well, that, that I'll provide a here

172
00:07:52.215 --> 00:07:53.775
as evidence if you want to come and take a look.

173
00:07:54.275 --> 00:07:57.095
Um, you can cookie cutter this thing.

174
00:07:57.155 --> 00:08:00.495
You can buy an SMS, they're available.

175
00:08:00.735 --> 00:08:01.935
I mean, it almost makes your head spin

176
00:08:01.935 --> 00:08:03.855
how much stuff's out there, right?

177
00:08:03.915 --> 00:08:05.295
But I would suggest, and,

178
00:08:05.295 --> 00:08:07.335
and I'm, it's purely recommendation.

179
00:08:07.765 --> 00:08:10.295
Take the time or do the critical thinking, uh,

180
00:08:10.395 --> 00:08:11.695
and pen your own policy.

181
00:08:13.355 --> 00:08:15.935
If you're a flight test organizational leader,

182
00:08:16.095 --> 00:08:18.255
I would submit, you should probably pen your own.

183
00:08:18.355 --> 00:08:20.375
If it points to the corporate one, that's great.

184
00:08:20.955 --> 00:08:23.095
But you should explain things from the heart,

185
00:08:23.285 --> 00:08:25.055
from your perspective on

186
00:08:25.055 --> 00:08:26.575
what you expect outta your organization

187
00:08:26.575 --> 00:08:27.655
from a safety perspective.

188
00:08:30.015 --> 00:08:32.975
Policies, procedures, yeah, all that stuff is necessary

189
00:08:33.275 --> 00:08:34.375

to have a good SMS.

190
00:08:35.115 --> 00:08:37.375
And like I said, there is so much information out there,

191
00:08:37.375 --> 00:08:38.495
it will make your head spin.

192
00:08:38.955 --> 00:08:42.055
Um, really, this, this came from,

193
00:08:43.005 --> 00:08:45.215
from the European side into the annex.

194
00:08:45.315 --> 00:08:47.655
The IKO guys consolidated a lot

195
00:08:47.655 --> 00:08:49.455
of the safety elements outta the other annexes.

196
00:08:49.475 --> 00:08:51.375
And, and recently did this annex 19.

197
00:08:51.765 --> 00:08:54.855
It's not a bad, not a bad product. It's a tough read.

198
00:08:55.345 --> 00:08:57.285
Uh, that safety management manual's pretty thick.

199
00:08:57.625 --> 00:09:00.445
You got, uh, insomnia, maybe it's a good solution.

200
00:09:00.745 --> 00:09:01.805
But again, if you've got a safety

201
00:09:01.905 --> 00:09:03.885
guy, let him take care of that.

202
00:09:04.655 --> 00:09:06.285
He'll distill out the important parts of it.

203
00:09:06.435 --> 00:09:08.805
That advisory circular one 90 dash 92 B,

204
00:09:08.845 --> 00:09:11.605
I thought was actually a, a very good advisory circular.

205
00:09:11.825 --> 00:09:13.365
Now it's really more addressed

206
00:09:13.525 --> 00:09:16.925
to the commercial guys, but that was the night.

207
00:09:16.925 --> 00:09:18.285
The a version was the, the basis

208
00:09:18.315 --> 00:09:22.045
that I used at the test wing when I penned the SMS

209
00:09:22.045 --> 00:09:24.085
for the WING when it wasn't required in the Navy Marine

210
00:09:24.085 --> 00:09:27.805
Corps back in 2008, I think we had a seven pillar system.

211
00:09:28.145 --> 00:09:28.845
We had AIRMANSHIP

212
00:09:29.085 --> 00:09:30.365
communication and some various other things.

213
00:09:30.365 --> 00:09:32.765
But again, just put it into those four pillar

214
00:09:33.035 --> 00:09:34.245
four component construct.

215
00:09:34.625 --> 00:09:38.205
It just organizes your safety efforts is all, uh,

216
00:09:38.345 --> 00:09:42.005

the orders are really the trickle down through the FAA, um,

217
00:09:42.235 --> 00:09:43.445
including airports

218
00:09:43.445 --> 00:09:45.605
and other aviation providers within the FAA.

219
00:09:45.705 --> 00:09:47.285
And then you really get into the, the,

220
00:09:47.285 --> 00:09:49.965
the pure aviation side, uh, with the,

221
00:09:50.185 --> 00:09:52.525
the 360 7 instruction.

222
00:09:53.145 --> 00:09:55.365
The 40 40 26 B is actually another pretty good

223
00:09:55.365 --> 00:09:56.525
flight test document, I think.

224
00:09:56.905 --> 00:09:58.405
Um, why recreate the wheel?

225
00:09:59.115 --> 00:10:01.365
Just use that when you're crafting your partnership

226
00:10:01.365 --> 00:10:03.125
for safety plan with the fa with,

227
00:10:03.185 --> 00:10:05.165
and when you embark on your new program, just use,

228
00:10:05.165 --> 00:10:06.885
that would be my recommendation.

229
00:10:07.875 --> 00:10:10.645
It's all there. Uh, risk management's all baked in there.

230
00:10:11.825 --> 00:10:13.845
And again, the safety management, uh, manual.

231
00:10:14.515 --> 00:10:16.965
There's some interesting, uh, discussions in there about,

232
00:10:17.145 --> 00:10:21.685
uh, SMS and QMS in my view, you can't delink the two.

233
00:10:22.585 --> 00:10:26.045
And that pretty much describes the, the, uh, differences.

234
00:10:26.505 --> 00:10:27.725
And there's not a whole lot.

235
00:10:28.105 --> 00:10:29.885
Um, but they are complimentary

236
00:10:29.885 --> 00:10:33.125
and you shouldn't decouple 'em when you're trying

237
00:10:33.125 --> 00:10:34.685
to implement and sustain your SMS.

238
00:10:34.865 --> 00:10:36.365
It, it truly isn't rocket science,

239
00:10:36.425 --> 00:10:38.405
but you've got to have some support to do it.

240
00:10:38.945 --> 00:10:42.005
Um, you don't want to meet resistance, but that's okay.

241
00:10:42.005 --> 00:10:45.885
You gotta be persistent sometimes. So there it is.

242
00:10:45.885 --> 00:10:48.045
There's your four components and your 12 sub-components.

243
00:10:48.075 --> 00:10:50.805

Take a quick snapshot in your your mind's eye on that

244
00:10:50.905 --> 00:10:52.565
as we move forward through this presentation.

245
00:10:53.225 --> 00:10:55.245
Uh, because that's how they've organized this.

246
00:10:55.245 --> 00:10:56.685
Whether you agree or disagree, you know,

247
00:10:56.985 --> 00:10:59.245
change management's actually in safety assurance.

248
00:10:59.745 --> 00:11:02.645
Uh, okay, well you could consider that a risk management

249
00:11:03.395 --> 00:11:05.725
component, uh, of how you operate.

250
00:11:05.825 --> 00:11:07.325
But be that as it may, that's

251
00:11:07.325 --> 00:11:08.525
how they've, they've organized it.

252
00:11:08.825 --> 00:11:12.005
So the question we have, is it a good fit for flight test?

253
00:11:12.865 --> 00:11:17.765
Now, SMS typically is made for your typical

254
00:11:18.405 --> 00:11:20.525
business aviation flight departments, for instance, uh,

255
00:11:20.525 --> 00:11:21.885
or commercial operator.

256
00:11:22.545 --> 00:11:25.485
Um, nobody has really, uh,

257
00:11:26.595 --> 00:11:28.005
made a differences document

258
00:11:28.665 --> 00:11:31.045
or guidance document for flight test organizations.

259
00:11:31.745 --> 00:11:33.165
And you have to ask the question, well,

260
00:11:33.625 --> 00:11:35.125
is it a fit for flight test at all?

261
00:11:35.125 --> 00:11:37.045
And I would submit to you, well, yes, it's not

262
00:11:37.045 --> 00:11:38.765
that big a deal 'cause you choose those components.

263
00:11:38.825 --> 00:11:42.405
But just describe the uniqueness of our profession

264
00:11:42.985 --> 00:11:45.365
and what we expect out of our team when we execute test.

265
00:11:47.305 --> 00:11:49.405
Uh, yeah, some tongue in cheek stuff there for you.

266
00:11:49.745 --> 00:11:52.565
But I will tell you that if you don't have culture set

267
00:11:52.565 --> 00:11:55.085
right, your SMS is dead on arrival.

268
00:11:56.525 --> 00:12:00.265
Now interestingly, I just, I just got in my hands a, uh,

269
00:12:00.465 --> 00:12:05.345
a document from the Aviation Industries Association

270
00:12:06.345 --> 00:12:08.265

National Aerospace Standards.

271
00:12:09.005 --> 00:12:10.425
So this is being circulated there.

272
00:12:10.625 --> 00:12:13.905
Apparently there's a committee, um, with this group for

273
00:12:14.485 --> 00:12:16.745
safety management system practices for design

274
00:12:16.765 --> 00:12:18.385
and manufacturing organizations.

275
00:12:20.245 --> 00:12:22.185
So I've gotten about halfway through this document.

276
00:12:22.455 --> 00:12:24.225
It's, uh, a pretty good rendition

277
00:12:24.225 --> 00:12:25.825
of the safety Management system manual.

278
00:12:26.885 --> 00:12:29.105
The thing that, that really kind of disappointed me,

279
00:12:30.985 --> 00:12:32.385
I probably should have stopped reading it this one,

280
00:12:32.385 --> 00:12:35.105
but, uh, it is not intended

281
00:12:35.105 --> 00:12:37.585
that any D-N-M-D-N-M organization be required

282
00:12:37.585 --> 00:12:39.545
to demonstrate a positive safety culture.

283
00:12:43.805 --> 00:12:47.025
You're kidding me? That's the whole basis for this thing.

284
00:12:47.025 --> 00:12:48.305
And then they go on to say how important

285
00:12:48.505 --> 00:12:49.905
a positive safety culture is.

286
00:12:50.475 --> 00:12:53.025
We'll give 'em the feedback. The other thing, uh,

287
00:12:53.025 --> 00:12:55.065
that I wanted to point out that I noticed in this thing is

288
00:12:55.065 --> 00:12:57.425
that they don't require DNM organizations

289
00:12:58.085 --> 00:12:59.865
to have an emergency response plan.

290
00:13:01.765 --> 00:13:03.105
That's not good folks.

291
00:13:03.165 --> 00:13:04.585
And I'll explain why as we go forward.

292
00:13:05.565 --> 00:13:07.345
But anyway, that's something that maybe the manufacturers

293
00:13:07.345 --> 00:13:08.985
group might want take a look at.

294
00:13:09.445 --> 00:13:12.345
Uh, but I'm trying to review that document, uh,

295
00:13:12.345 --> 00:13:14.985
because it will affect us if they adopt that,

296
00:13:15.015 --> 00:13:18.545
because you can use that as your kind of basis to go

297
00:13:18.545 --> 00:13:20.985

to the FAA and say, Hey, I want to get my DNM

298
00:13:21.005 --> 00:13:23.585
or, uh, organization blessed as having a,

299
00:13:24.545 --> 00:13:25.645
a safety management system.

300
00:13:28.205 --> 00:13:31.365
I like this Pat Hudson slide, uh, is really good stuff.

301
00:13:31.565 --> 00:13:33.765
I love the pathological comment down here.

302
00:13:34.665 --> 00:13:36.685
Ah, we'll just drag the idiot out to the firing squad.

303
00:13:36.685 --> 00:13:40.835
Shoot him. What does that say about your culture?

304
00:13:42.305 --> 00:13:44.475
What kind of things define culture?

305
00:13:45.375 --> 00:13:46.915
Any gym reason fans out here?

306
00:13:47.955 --> 00:13:50.755
I mean, isn't everybody a gym reason fan Swiss cheese?

307
00:13:51.375 --> 00:13:52.395
You got a learning culture,

308
00:13:52.465 --> 00:13:53.955
reporting culture, flexible culture.

309
00:13:54.775 --> 00:13:58.355
Um, that's important stuff. It really is.

310
00:13:58.585 --> 00:13:59.955
It's soft skills kind of stuff.

311
00:14:02.445 --> 00:14:05.515
We're are your organizations on this scale?

312
00:14:08.185 --> 00:14:10.635
Yeah, we tend to spool up our safety stuff

313
00:14:10.635 --> 00:14:13.835
and our safety emphasis after tragedy, right?

314
00:14:13.835 --> 00:14:15.915
That, that tends to be what happens.

315
00:14:16.335 --> 00:14:18.475
We wanna be proactive and predictive.

316
00:14:19.935 --> 00:14:21.755
That's the way we need to do our, our thinking.

317
00:14:23.575 --> 00:14:26.915
So there's, here's another gym reason optic for you.

318
00:14:27.215 --> 00:14:29.915
And we do navigate in that, that tension space, don't we,

319
00:14:30.375 --> 00:14:33.315
as safety guys, trying to balance protection and production.

320
00:14:34.405 --> 00:14:35.745
You don't wanna slow things down,

321
00:14:37.005 --> 00:14:38.425
but you want to have just the right amount

322
00:14:38.425 --> 00:14:41.665
of safety stink going on in your operations so

323
00:14:41.665 --> 00:14:45.905
that you don't have catastrophe reducing risk to as low

324
00:14:45.965 --> 00:14:49.475

as reasonably practical or possible.

325
00:14:49.555 --> 00:14:51.315
I like possible better than practicable.

326
00:14:52.225 --> 00:14:53.405
So first question,

327
00:14:54.095 --> 00:14:56.035
what's the most important discussion

328
00:14:56.035 --> 00:14:57.555
point that you can have?

329
00:14:57.775 --> 00:14:58.995
Now, you're gonna have to read my mind,

330
00:14:59.055 --> 00:15:00.915
but I'm not alone in this thinking.

331
00:15:02.495 --> 00:15:06.705
In your policy statement, G two 80 on the line here.

332
00:15:07.215 --> 00:15:09.585
Most important discussion point in your policy

333
00:15:09.925 --> 00:15:11.985
letter in this component.

334
00:15:13.185 --> 00:15:16.705
Expectations. CEO,

335
00:15:19.725 --> 00:15:21.065
senior leadership court.

336
00:15:21.895 --> 00:15:23.625
Keep going. Set The expectation.

337
00:15:24.205 --> 00:15:26.985
It was in a previous chart in a bumper sticker.

338
00:15:27.465 --> 00:15:28.945
Emphasizing culture, accountability,

339
00:15:29.025 --> 00:15:30.025
Culture.

340
00:15:32.425 --> 00:15:33.665
I should have brought an astro model.

341
00:15:33.865 --> 00:15:35.785
'cause I know you've got Astros in your wing. Now, boss

342
00:15:37.325 --> 00:15:38.825
One commodore to another Commodore.

343
00:15:40.285 --> 00:15:42.785
It wasn't rigged. It was not rigged.

344
00:15:44.845 --> 00:15:46.865
If it was, I would've given him the er.

345
00:15:49.365 --> 00:15:54.185
So there, I do wanna talk about a couple, uh,

346
00:15:54.185 --> 00:15:59.025
important points in, in that component one, uh, area,

347
00:15:59.025 --> 00:16:03.415
though, yes, like I said, culture is,

348
00:16:03.435 --> 00:16:04.615
is vitally important, right?

349
00:16:04.775 --> 00:16:07.095
I mean, it, it is really the essence. It's the fabric.

350
00:16:07.165 --> 00:16:09.815
It's the DNA that's gonna hold this whole thing together

351
00:16:09.875 --> 00:16:11.215

and really make it effective.

352
00:16:11.595 --> 00:16:13.775
And you gotta have the management support. Absolutely.

353
00:16:13.775 --> 00:16:15.575
Everybody was really right in answering the question,

354
00:16:15.635 --> 00:16:17.015
but that was after the C word.

355
00:16:18.315 --> 00:16:20.255
Um, and you're actually supposed

356
00:16:20.255 --> 00:16:23.015
to do some critical thinking about what your targets are.

357
00:16:24.945 --> 00:16:27.155
That can be pretty hard, especially when you,

358
00:16:27.155 --> 00:16:28.315
you're talking about safety assurance.

359
00:16:28.855 --> 00:16:30.435
But, uh, yeah, you're actually supposed

360
00:16:30.435 --> 00:16:31.635
to put some thought into this and just,

361
00:16:31.815 --> 00:16:33.795
and try to figure out what your target is.

362
00:16:33.895 --> 00:16:35.515
And I see this all the time. Target zero.

363
00:16:36.295 --> 00:16:39.075
We want zero mishap, zero x. Well, that's a good goal.

364
00:16:39.575 --> 00:16:44.075
Is it realistic? Now, from the OSH standpoint,

365
00:16:44.135 --> 00:16:45.635
and I'm, I'm going a little off track,

366
00:16:45.695 --> 00:16:47.635
but just to, to kind of demonstrate a point.

367
00:16:48.175 --> 00:16:50.515
Uh, so we have injury reporting, right?

368
00:16:50.535 --> 00:16:53.155
And so that may be the metric that, uh,

369
00:16:53.215 --> 00:16:55.315
an EHS organization would be using total

370
00:16:55.315 --> 00:16:56.355
case injury reporting.

371
00:16:57.175 --> 00:17:01.835
And they go, well look, you know, if we have 14 days of

372
00:17:02.505 --> 00:17:05.565
zero TCIR, we'll have a pizza lunch.

373
00:17:06.585 --> 00:17:08.765
So what happens? What are the unintended consequences you

374
00:17:08.765 --> 00:17:10.205
think of maybe setting a goal like that?

375
00:17:11.635 --> 00:17:13.245
They don't report or they don't go

376
00:17:13.245 --> 00:17:14.605
to the in-service medical providers

377
00:17:14.605 --> 00:17:17.085
because they don't wanna be the guy they got the pizza

378
00:17:17.085 --> 00:17:18.445

party canceled, right?

379
00:17:18.445 --> 00:17:19.445
So you gotta be careful on

380
00:17:19.445 --> 00:17:20.525
how you roll these kind of things out.

381
00:17:20.595 --> 00:17:23.765
Just food for thought emergency response planning.

382
00:17:24.845 --> 00:17:27.205
I will tell you, you, you really do wanna be prepared.

383
00:17:28.385 --> 00:17:31.125
Um, and so I, I ask you to think about this.

384
00:17:31.195 --> 00:17:33.885
What are your priorities as a company,

385
00:17:33.885 --> 00:17:35.885
as a test organization, et cetera, um,

386
00:17:36.625 --> 00:17:37.965
for your response planning.

387
00:17:38.085 --> 00:17:39.885
I would submit to you victims

388
00:17:40.025 --> 00:17:43.785
and their families supporting the investigation

389
00:17:45.285 --> 00:17:49.445
and your customers, if you frame it that way.

390
00:17:49.825 --> 00:17:51.365
Now, build your emergency response plan.

391
00:17:51.365 --> 00:17:53.005
Again, you can go buy one off the shelf.

392
00:17:53.005 --> 00:17:54.725
There's a lot of good vendors out there that'll do it.

393
00:17:54.725 --> 00:17:55.885
In fact, they'll even come to your

394
00:17:56.125 --> 00:17:57.645
location and give you training.

395
00:17:57.645 --> 00:18:00.925
They'll do ambush uh, interviews with you as well.

396
00:18:02.265 --> 00:18:05.085
And I think it, uh, judge Ra even said, Hey, you really try

397
00:18:05.085 --> 00:18:07.365
to keep your CEO off the stage.

398
00:18:08.025 --> 00:18:09.165
That's probably good advice.

399
00:18:10.225 --> 00:18:12.685
But if you have, you know, a training provider come in and,

400
00:18:12.705 --> 00:18:17.565
and, and tell your your leadership team that, then,

401
00:18:17.565 --> 00:18:19.565
then maybe you get a little bit more traction on it

402
00:18:20.825 --> 00:18:22.045
and you gotta drill, baby drill.

403
00:18:22.625 --> 00:18:23.885
You gotta practice this stuff.

404
00:18:24.865 --> 00:18:28.885
Uh, so one of the things that we did at Gulfstream, uh, is

405
00:18:29.195 --> 00:18:31.685

with Ben's help, because we're checklist driven kind

406
00:18:31.685 --> 00:18:34.245
of people, is create a checklist in the TM room.

407
00:18:35.385 --> 00:18:38.125
So what we did is we called every asset

408
00:18:38.125 --> 00:18:42.205
that we thought could enable a quicker response to.

409
00:18:42.865 --> 00:18:44.845
We do a lot of our testing offshore.

410
00:18:45.145 --> 00:18:47.205
So we called the Coast Guard, we called the Army

411
00:18:47.525 --> 00:18:49.965
'cause we got large army presences there.

412
00:18:49.965 --> 00:18:51.245
We called fast fact tracks,

413
00:18:51.245 --> 00:18:52.605
who were the range surveillance guys.

414
00:18:53.425 --> 00:18:54.605
Um, so

415
00:18:54.605 --> 00:18:56.925
that we have better response if we have

416
00:18:56.925 --> 00:18:58.045
an airplane go down offshore.

417
00:18:59.235 --> 00:19:01.845
When we do the drill, we call ahead all those organizations,

418
00:19:01.845 --> 00:19:04.005
just let 'em know you guys are gonna get a call.

419
00:19:05.205 --> 00:19:06.285
'cause we're gonna do an exercise

420
00:19:07.025 --> 00:19:09.325
so they don't launch assets unnecessarily.

421
00:19:09.505 --> 00:19:10.725
You find out some interesting things,

422
00:19:10.725 --> 00:19:12.525
especially if you're gonna do testing offsite.

423
00:19:13.385 --> 00:19:16.605
So I know people do testing at uncontrolled airfields. Yeah.

424
00:19:18.035 --> 00:19:19.735
How many times have you called the airport manager

425
00:19:19.735 --> 00:19:20.815
to see about wildlife?

426
00:19:21.235 --> 00:19:24.295
Uh, you know, lighting Pappy,

427
00:19:24.635 --> 00:19:26.855
uh, just do that.

428
00:19:26.855 --> 00:19:28.055
It's in the checklist. And by the way,

429
00:19:28.055 --> 00:19:30.615
we're gonna show you some, some best practice information

430
00:19:30.615 --> 00:19:34.335
available to you at no cost on the website

431
00:19:35.505 --> 00:19:36.725
for air aircraft, uh, rescue

432
00:19:36.745 --> 00:19:39.405

and firefighting food for thought, tailor it

433
00:19:39.465 --> 00:19:40.565
to your operation.

434
00:19:43.515 --> 00:19:45.525
Risk management. I submit to you,

435
00:19:46.105 --> 00:19:48.325
flight testers are the best at this.

436
00:19:49.545 --> 00:19:53.215
If you do it right, as Ben said, do the critical thinking.

437
00:19:53.235 --> 00:19:55.455
If you bake everything in there that you can possibly think

438
00:19:55.455 --> 00:19:58.815
of into your test plan, then we're, I don't know

439
00:19:58.815 --> 00:20:00.775
where Colin Miller is, he made a good comment about

440
00:20:00.775 --> 00:20:02.175
doing analysis during the brief.

441
00:20:02.925 --> 00:20:04.535
Well, that's not where we wanna be doing that.

442
00:20:05.685 --> 00:20:08.025
We want a comprehensive test, but we wanna plan the flight

443
00:20:08.045 --> 00:20:09.865
and fly the plan, right?

444
00:20:09.865 --> 00:20:11.425
Yeah, you're gonna have to make some adjustments,

445
00:20:11.445 --> 00:20:13.465
but you don't wanna be talking about the basic stuff

446
00:20:13.925 --> 00:20:15.665
and just wrote reading

447
00:20:16.165 --> 00:20:19.545
and trying to memorize, uh, t HHAs that

448
00:20:19.545 --> 00:20:20.625
that's just not effective.

449
00:20:22.965 --> 00:20:23.985
And boy, don't we have a lot

450
00:20:23.985 --> 00:20:25.105
of risk management tools out there,

451
00:20:26.665 --> 00:20:29.285
but you need to have some of this stuff available, right?

452
00:20:29.285 --> 00:20:30.845
You need to have a fatigue risk management plan.

453
00:20:31.465 --> 00:20:33.645
Do your flight test engineers have the same

454
00:20:34.525 --> 00:20:36.855
work duty requirements or limitations

455
00:20:36.995 --> 00:20:39.015
or restrictions, constraints?

456
00:20:39.045 --> 00:20:40.815
Call it what you will as the pilots.

457
00:20:41.485 --> 00:20:42.895
What about the guys in the TM room?

458
00:20:45.995 --> 00:20:47.765
You gotta think about it. I would submit, yeah,

459
00:20:47.765 --> 00:20:49.765

you probably wanna have the same, especially if you're doing

460
00:20:49.765 --> 00:20:53.365
high risk testing, you want the entire team to have the same

461
00:20:54.695 --> 00:20:57.365
level of risk management afforded

462
00:20:57.365 --> 00:21:00.565
to them In terms of your reviews.

463
00:21:00.905 --> 00:21:02.885
So murder boarding test plans, uh, you,

464
00:21:02.905 --> 00:21:04.565
you should identify that process.

465
00:21:04.865 --> 00:21:06.845
And so if you have an auditor that comes in

466
00:21:06.845 --> 00:21:08.405
and they ask you these pointed questions, well,

467
00:21:08.405 --> 00:21:10.685
how do you do your test preparation and readiness?

468
00:21:11.265 --> 00:21:13.765
And moreover, who approves the residual

469
00:21:13.875 --> 00:21:15.205
risk on behalf of the company?

470
00:21:16.385 --> 00:21:18.925
That's a big deal. We shouldn't shy away from that,

471
00:21:19.035 --> 00:21:20.485
that awesome responsibility.

472
00:21:21.505 --> 00:21:24.325
If I asked, uh, Commodore, who's empowered

473
00:21:24.405 --> 00:21:26.485
to sign off on a high risk test, commanding officer,

474
00:21:26.485 --> 00:21:29.725
service Squadron, 42-year-old guy oh five in the Navy Marine

475
00:21:29.725 --> 00:21:33.005
Corps, awesome responsibility.

476
00:21:35.775 --> 00:21:36.825
It's impressive. I I,

477
00:21:36.925 --> 00:21:38.985
and I think we should, we should appreciate that

478
00:21:39.565 --> 00:21:41.025
we not shy away from it,

479
00:21:41.405 --> 00:21:43.065
but make sure we're doing everything possible

480
00:21:43.065 --> 00:21:44.585
to make sure we extract as much risk

481
00:21:44.605 --> 00:21:45.745
out of our operations as we can.

482
00:21:47.805 --> 00:21:49.625
Uh, and Ben mentioned this exposure.

483
00:21:50.165 --> 00:21:52.865
So coming to a cockpit article perhaps,

484
00:21:52.885 --> 00:21:54.545
or another briefing by Ben Luther.

485
00:21:55.165 --> 00:21:59.505
Um, he's gonna talk about 2D versus 3D risk management

486
00:22:00.605 --> 00:22:02.025

and, and maybe some food

487
00:22:02.025 --> 00:22:04.065
for thought about separating out the,

488
00:22:04.165 --> 00:22:06.225
the exposure element outta the probability.

489
00:22:08.065 --> 00:22:11.475
Something think about, okay,

490
00:22:11.475 --> 00:22:13.875
so this is probably the most challenging component.

491
00:22:14.015 --> 00:22:15.715
How do you know that you're safe?

492
00:22:16.505 --> 00:22:18.035
What metrics are you gonna be looking at?

493
00:22:18.865 --> 00:22:20.395
What feedback are you gonna provide?

494
00:22:20.395 --> 00:22:22.955
Management that you're achieving your safety performance?

495
00:22:22.955 --> 00:22:24.275
Just because you're not bending metal

496
00:22:25.165 --> 00:22:26.335
doesn't make you safe, right?

497
00:22:27.915 --> 00:22:30.175
How do you sniff out those latent threats that are in there?

498
00:22:32.695 --> 00:22:34.145
This is a tough one, it really is.

499
00:22:34.925 --> 00:22:37.945
But in your classic flight department, um,

500
00:22:38.925 --> 00:22:42.225
flight data monitoring is a big, is kind of a big deal.

501
00:22:42.645 --> 00:22:44.305
So fowa and everybody familiar

502
00:22:44.305 --> 00:22:45.625
with flight operations, quality assurance.

503
00:22:46.245 --> 00:22:49.025
So when we did our SMS audit at flight test,

504
00:22:49.865 --> 00:22:52.665
I took a non-test guy, SMS,

505
00:22:52.665 --> 00:22:53.945
auditor professional SMS auditor,

506
00:22:54.205 --> 00:22:55.305
and I tried to convince him

507
00:22:55.305 --> 00:22:58.065
that telemetry data was uber fois.

508
00:22:59.125 --> 00:23:00.185
Now, he didn't agree with me.

509
00:23:01.885 --> 00:23:03.945
And perhaps I didn't make as convincing as argument

510
00:23:03.945 --> 00:23:06.785
as I should have, but I submit to you that it is

511
00:23:06.785 --> 00:23:10.425
because it's the fly the plan, it's the assurance

512
00:23:10.425 --> 00:23:11.985
that we're, we're flying it to

513
00:23:11.985 --> 00:23:13.025

what we said we were gonna do.

514
00:23:14.725 --> 00:23:17.745
Now it's, it's a different twist to the whole, well,

515
00:23:18.035 --> 00:23:19.505
we're just checking front stable approaches.

516
00:23:19.565 --> 00:23:22.225
Did we exceed the air speed on the gear extension and flaps?

517
00:23:23.445 --> 00:23:24.745
That's not really where we're after,

518
00:23:25.025 --> 00:23:26.545
although that's important stuff, don't get me wrong.

519
00:23:27.125 --> 00:23:29.545
And it's especially important too that we're okay,

520
00:23:29.545 --> 00:23:31.745
test complete data recorder's off.

521
00:23:31.745 --> 00:23:35.875
We're RTB. How do you know your guys are safe?

522
00:23:38.275 --> 00:23:40.335
Trying to rip the wings off in the break? Yeah. Whew.

523
00:23:40.445 --> 00:23:43.695
Hair on fire. Nah, we, we mustn't be doing that stuff.

524
00:23:43.695 --> 00:23:45.885
They exercise some restraint. That's all part of assurance.

525
00:23:45.885 --> 00:23:47.365
We wanna make sure that that's happening.

526
00:23:49.105 --> 00:23:50.725
And then you're supposed to do management review

527
00:23:50.725 --> 00:23:51.845
of your SMS performance.

528
00:23:52.145 --> 00:23:53.245
So you gotta give 'em that feedback.

529
00:23:53.945 --> 00:23:55.845
You should always be looking and assessing your,

530
00:23:55.845 --> 00:23:56.845
your risk controls, right?

531
00:23:56.845 --> 00:23:58.885
Because sometimes as you get more mature deeper into your

532
00:23:58.885 --> 00:24:00.845
test program, maybe the original risk

533
00:24:00.845 --> 00:24:02.085
controls aren't necessary anymore.

534
00:24:02.085 --> 00:24:04.325
Well get rid of 'em. Why are we briefing this when it

535
00:24:04.325 --> 00:24:05.845
doesn't even apply to the test that we're doing?

536
00:24:06.385 --> 00:24:09.825
See that all the time. And then finally, safety promotion.

537
00:24:09.825 --> 00:24:13.585
Congratulations. Each of you is doing safety promotion.

538
00:24:14.685 --> 00:24:16.905
And not only that, but I don't know if you know or not,

539
00:24:16.905 --> 00:24:18.265
but we're already through three of the four pillars.

540
00:24:18.285 --> 00:24:19.625

So you got your tutorial done today

541
00:24:19.625 --> 00:24:20.865
too, in less than half an hour.

542
00:24:20.865 --> 00:24:23.945
I don't know what my timing is right now, but, uh, so yeah.

543
00:24:24.245 --> 00:24:26.145
But what I wanna bring out here is, so

544
00:24:26.735 --> 00:24:29.305
when you do implementation sustainment of your SMS

545
00:24:29.565 --> 00:24:32.825
and your shop, you need to tailor the training,

546
00:24:33.405 --> 00:24:34.945
the safety training to

547
00:24:34.945 --> 00:24:37.505
where the individual is positionally in the organization.

548
00:24:37.695 --> 00:24:39.625
Your frontline guys, bucking roads.

549
00:24:40.635 --> 00:24:42.535
Do they need to understand the resourcing

550
00:24:42.555 --> 00:24:43.735
for the safety management system?

551
00:24:43.915 --> 00:24:47.015
Or do they need to understand the risk management, uh,

552
00:24:47.315 --> 00:24:48.935
or the risk controls that are being applied?

553
00:24:50.035 --> 00:24:51.375
No, no, not really.

554
00:24:52.085 --> 00:24:54.215
They need to understand that someone's got their back.

555
00:24:54.325 --> 00:24:58.095
That they, when they report, it's not retribution

556
00:24:59.265 --> 00:25:00.685
as long as it's not a violation.

557
00:25:00.855 --> 00:25:02.685
We'll get to that in a minute. Um,

558
00:25:03.675 --> 00:25:06.205
that they're getting feedback on things that they identify.

559
00:25:06.275 --> 00:25:09.885
They're the best ones to find the hazards, right?

560
00:25:10.005 --> 00:25:12.605
I mean, they're the ones that, that, that see this

561
00:25:13.105 --> 00:25:15.325
and they probably have the right answer on how to fix it.

562
00:25:16.145 --> 00:25:17.365
Are you listening to these guys?

563
00:25:17.825 --> 00:25:20.245
Do they feel encouraged to come forward?

564
00:25:20.865 --> 00:25:22.045
And oh, by the way, you're still supposed

565
00:25:22.045 --> 00:25:23.445
to have an anonymous reporting system.

566
00:25:23.705 --> 00:25:26.925
One metric I look at is the reduction in the number

567
00:25:26.925 --> 00:25:28.005

of anonymous reports.

568
00:25:29.575 --> 00:25:34.115
Whoa, where does that go Back to culture reporting.

569
00:25:34.115 --> 00:25:36.395
Culture, Jim, reason. Thank you, sir. That's right.

570
00:25:37.695 --> 00:25:38.795
And you're supposed to have a

571
00:25:38.795 --> 00:25:40.355
drumbeat on the safety training.

572
00:25:40.655 --> 00:25:44.595
So you're doing some safety pauses for the cause. Call me.

573
00:25:44.615 --> 00:25:46.995
Be happy to come out and give you a, a brief turbo.

574
00:25:47.535 --> 00:25:48.595
Be happy to come out and do it.

575
00:25:48.675 --> 00:25:52.435
I think this is the synergy that we have, uh, as a community

576
00:25:52.585 --> 00:25:54.715
that we can, we can do that in house.

577
00:25:55.055 --> 00:25:57.755
Do lunch and learns, do half day safety stand downs.

578
00:25:57.755 --> 00:25:58.755
Invite us out, we'll do it.

579
00:25:59.235 --> 00:26:00.915
I know Gulfstream supports it, which is great.

580
00:26:01.215 --> 00:26:02.955
And I know other companies would support it as well.

581
00:26:03.635 --> 00:26:05.315
'cause we just had turbo out to Gulfstream

582
00:26:05.775 --> 00:26:06.835
to do a safety stand down,

583
00:26:07.015 --> 00:26:08.595
hit it outta the ballpark as he usually does.

584
00:26:09.225 --> 00:26:10.475
Very challenging scenario by the way,

585
00:26:10.475 --> 00:26:14.395
because we didn't decouple or separate the pilots, uh,

586
00:26:15.215 --> 00:26:19.835
and FTEs from the, uh, the, the guys on the shop floor

587
00:26:22.105 --> 00:26:23.165
and the instrumentation guys.

588
00:26:23.385 --> 00:26:26.005
So, you know, he brought material that he had that

589
00:26:26.005 --> 00:26:27.165
that resonated with everybody.

590
00:26:27.825 --> 00:26:31.245
Uh, he he's one of a kind, obviously. Uh, yeah.

591
00:26:31.245 --> 00:26:32.645
So we talked about this building block

592
00:26:32.645 --> 00:26:34.685
and of course the senior managers, they, they need

593
00:26:34.685 --> 00:26:35.845
to have a little bit different flavor

594
00:26:35.865 --> 00:26:37.045

to the training they're getting, right?

595
00:26:37.545 --> 00:26:42.045
And so this is the hard conversation on, you know, what kind

596
00:26:42.045 --> 00:26:43.960
of soft skills you need to have to have there, boss you need

597
00:26:43.960 --> 00:26:46.965
to quit talking about cost and sales and stuff.

598
00:26:46.965 --> 00:26:48.965
And maybe throw in a couple nuggets on safety.

599
00:26:49.105 --> 00:26:53.965
For me, communication is key.

600
00:26:53.965 --> 00:26:57.645
Transparency of what's going on within the safety system is

601
00:26:57.645 --> 00:27:00.085
vitally important, right?

602
00:27:00.085 --> 00:27:02.085
And that's hard 'cause you, we don't like

603
00:27:02.085 --> 00:27:03.325
to talk about our mistakes,

604
00:27:04.945 --> 00:27:07.325
but you don't have to put the who in it, just talk about

605
00:27:07.325 --> 00:27:08.685
what happened so we can learn from it.

606
00:27:09.065 --> 00:27:11.805
If you sweep it under the rug like it never happened,

607
00:27:12.795 --> 00:27:14.605
then guess what?

608
00:27:14.605 --> 00:27:16.965
You didn't fix a problem. You probably didn't do a very good

609
00:27:16.965 --> 00:27:18.045
job investigation to begin with.

610
00:27:18.585 --> 00:27:22.245
Um, and that doesn't align to this philosophy.

611
00:27:23.535 --> 00:27:25.155
You wanna have a real, truly

612
00:27:25.695 --> 00:27:27.395
robust safety management system.

613
00:27:27.895 --> 00:27:32.505
You gotta talk about your, your shortfalls as well

614
00:27:32.505 --> 00:27:33.705
as safety critical information.

615
00:27:33.725 --> 00:27:34.865
So what are we really after here?

616
00:27:34.865 --> 00:27:36.665
Well, we don't want the blame game, right?

617
00:27:36.665 --> 00:27:38.545
We wanna look at the other factors involved.

618
00:27:38.925 --> 00:27:42.425
And I'm gonna show you, uh, a chart of, uh, Wagman

619
00:27:42.425 --> 00:27:43.585
and Chappelle's HVACs.

620
00:27:43.805 --> 00:27:46.785
How many people are familiar with HVACs human factors now?

621
00:27:46.935 --> 00:27:50.305

Okay, that's great. So now required, uh, DOD wide from

622
00:27:50.305 --> 00:27:52.305
what I understand, but it started out as Navy Marine Corps,

623
00:27:53.685 --> 00:27:54.905
uh, investigation tool.

624
00:27:55.405 --> 00:27:56.745
And I think it's great. It it,

625
00:27:56.745 --> 00:27:57.985
there are, there are others out there.

626
00:27:58.405 --> 00:28:01.185
Say what? You will use something,

627
00:28:01.845 --> 00:28:05.225
but what it drives you to is asking the why questions

628
00:28:05.365 --> 00:28:08.025
and trying to figure out what are those other factors

629
00:28:08.095 --> 00:28:12.585
that may have contributed to the, the act

630
00:28:12.585 --> 00:28:14.625
of failure condition that resulted in some sort of incident.

631
00:28:14.625 --> 00:28:15.825
Maybe it was just in near miss,

632
00:28:15.915 --> 00:28:18.865
maybe it didn't have it, which would be good.

633
00:28:18.865 --> 00:28:21.965
That's what you want. So here it is.

634
00:28:22.085 --> 00:28:23.565
I don't know how well you can read it,

635
00:28:23.585 --> 00:28:26.605
but, uh, so it's a four tier taxonomy

636
00:28:27.345 --> 00:28:29.365
and it forces you to go through those levels.

637
00:28:29.745 --> 00:28:31.485
So right at the be right out of the gate.

638
00:28:31.905 --> 00:28:34.325
And what's supposed to be in your policy statement is

639
00:28:34.525 --> 00:28:36.805
defining what behaviors are acceptable

640
00:28:36.825 --> 00:28:38.925
and not in terms of errors and violations.

641
00:28:38.945 --> 00:28:41.845
If it's just an honest mistake, look, you report it.

642
00:28:44.535 --> 00:28:48.675
No harm, no foul. I left a tool in, in the Bay, I,

643
00:28:48.755 --> 00:28:51.115
I I i the chip's there.

644
00:28:51.195 --> 00:28:55.155
I can't find my tool. You want that information, right?

645
00:28:55.985 --> 00:28:58.755
What if your culture's the other way where we're,

646
00:28:58.765 --> 00:28:59.875
we're pathological

647
00:28:59.895 --> 00:29:01.955
and we're gonna drag the guy out to the firing squad

648
00:29:02.455 --> 00:29:04.195

and he just stays zip lip.

649
00:29:04.815 --> 00:29:06.755
We know wrenches will bring airplanes down, don't we?

650
00:29:07.775 --> 00:29:09.355
So you can see how this, we got this goes.

651
00:29:09.495 --> 00:29:10.635
You gotta be able to, you know,

652
00:29:10.635 --> 00:29:12.115
where we get really uncomfortable is up here.

653
00:29:13.935 --> 00:29:15.425
Well, we knew for a long time

654
00:29:15.455 --> 00:29:17.505
that we were cutting corners on this thing.

655
00:29:17.965 --> 00:29:19.985
We know that we're not flying with our mask on

656
00:29:19.985 --> 00:29:21.385
above 41,000 feet.

657
00:29:21.685 --> 00:29:24.985
We know that this is going on. Well, guess what?

658
00:29:24.995 --> 00:29:26.465
Guess who gets in trouble?

659
00:29:27.375 --> 00:29:31.085
Well, it's not the guy that committed the, the active

660
00:29:31.955 --> 00:29:33.125
violation or error.

661
00:29:34.365 --> 00:29:36.615
It's really up here because they allowed it to happen.

662
00:29:36.845 --> 00:29:40.345
They knew it. And that's not

663
00:29:40.345 --> 00:29:42.565
where we wanna be in a robust safety culture, right?

664
00:29:44.445 --> 00:29:45.825
So this is in here for your reference.

665
00:29:45.985 --> 00:29:47.505
'cause I think these charts are gonna be available to you.

666
00:29:47.545 --> 00:29:48.745
I couldn't say it better myself.

667
00:29:48.765 --> 00:29:49.985
So here's 10 dot points

668
00:29:50.045 --> 00:29:52.705
for you at no cost from Department of Transportation.

669
00:29:53.765 --> 00:29:56.705
Um, and it, it says everything that every

670
00:29:57.255 --> 00:30:01.975
good safety management system document says about

671
00:30:02.155 --> 00:30:04.335
how to have a robust safety system.

672
00:30:08.115 --> 00:30:11.375
So I wanna do a quick update on

673
00:30:12.115 --> 00:30:13.735
the flight test safety committee work on this.

674
00:30:13.795 --> 00:30:16.495
So I brought our most recent letter that just got launched

675
00:30:16.495 --> 00:30:18.455

to the NTSB up here for reference if,

676
00:30:18.475 --> 00:30:20.495
if jury will allow people to take a look at it.

677
00:30:20.955 --> 00:30:24.375
Um, so the, these are the raw recommendations that came out

678
00:30:24.375 --> 00:30:26.255
of our G six 50 crash at Roswell New Mexico

679
00:30:26.445 --> 00:30:27.735
five years ago, last month.

680
00:30:28.915 --> 00:30:30.455
Um, we lost four of our friends

681
00:30:30.475 --> 00:30:31.655
and colleagues in that accident.

682
00:30:32.785 --> 00:30:34.175
There were 10 recommendations

683
00:30:34.175 --> 00:30:35.975
that came outta the NTSB on that accident.

684
00:30:36.555 --> 00:30:40.255
10 total. Um, the process worked very good

685
00:30:40.475 --> 00:30:42.295
as Joe described it on day one.

686
00:30:42.675 --> 00:30:45.255
You you want to work collaboratively with the investigators

687
00:30:45.445 --> 00:30:46.895
that you really do

688
00:30:47.355 --> 00:30:49.855
and you wanna be prepared part

689
00:30:49.855 --> 00:30:51.055
of your emergency response planning.

690
00:30:51.125 --> 00:30:52.855
Take some training with these guys

691
00:30:52.955 --> 00:30:54.695
so you know what's gonna happen.

692
00:30:56.675 --> 00:30:59.015
Uh, and we don't see eye to eye on everything by the way,

693
00:30:59.155 --> 00:31:01.815
but, so here are the, here are the, the three that,

694
00:31:01.815 --> 00:31:03.335
that came to the flight test safety committee.

695
00:31:03.355 --> 00:31:04.815
And so what we heard on day one

696
00:31:05.235 --> 00:31:07.535
or day two, I think that the flight test safety committee

697
00:31:07.555 --> 00:31:09.215
was born from a flight test accident.

698
00:31:09.675 --> 00:31:12.055
So we should actually be quite proud

699
00:31:12.525 --> 00:31:15.895
that the NTSB recognized us as a group

700
00:31:16.925 --> 00:31:18.415
that can address these issues.

701
00:31:21.145 --> 00:31:23.405
So what they wanted to see was, uh,

702
00:31:23.515 --> 00:31:27.885

some safety management system information shared

703
00:31:27.885 --> 00:31:29.285
amongst the, the flight test community.

704
00:31:29.765 --> 00:31:32.365
Secondly, they wanted to see a flight test,

705
00:31:32.435 --> 00:31:34.725
operating guidance document.

706
00:31:35.665 --> 00:31:37.205
And thirdly, they wanted to see

707
00:31:37.715 --> 00:31:41.485
some recommended practice on, uh, how to coordinate, uh,

708
00:31:41.485 --> 00:31:43.205
emergency resources if you're,

709
00:31:43.225 --> 00:31:44.685
you're doing high risk flight testing.

710
00:31:45.145 --> 00:31:47.965
So, um, what we've done

711
00:31:48.865 --> 00:31:53.765
is we've pretty much completed the work on the aircraft

712
00:31:53.765 --> 00:31:55.485
rescue and firefighting checklist.

713
00:31:55.515 --> 00:31:57.885
There's some one page of motherhood and apple pie.

714
00:31:57.885 --> 00:31:58.925
Another is a checklist.

715
00:31:59.185 --> 00:32:01.165
You tailor it as you will, but it's just a checklist.

716
00:32:01.165 --> 00:32:04.045
Things to consider, uh, with a kind of a countdown format.

717
00:32:04.705 --> 00:32:06.485
Um, so I think we've got that one done.

718
00:32:06.485 --> 00:32:08.245
We're hoping they're gonna close that recommendation.

719
00:32:10.105 --> 00:32:14.525
Um, the safety management system guidance.

720
00:32:15.105 --> 00:32:17.485
So what we have asked is that they, they go ahead

721
00:32:17.485 --> 00:32:18.885
and close that one based on

722
00:32:19.505 --> 00:32:22.405
the safety management system protocols that we developed.

723
00:32:22.425 --> 00:32:23.525
So Ben and I

724
00:32:23.625 --> 00:32:28.605
and, uh, my analyst, we, we took the safety man, uh,

725
00:32:28.605 --> 00:32:31.165
the Safety Management International Collaborative Group

726
00:32:32.085 --> 00:32:35.695
template and wrote it for flight test organizations.

727
00:32:35.815 --> 00:32:38.215
I got a copyright here if you wanna look at it. Okay?

728
00:32:38.215 --> 00:32:40.125
So it's got a little bit of preamble material,

729
00:32:42.225 --> 00:32:44.005

but what it does is it drives to questions

730
00:32:44.005 --> 00:32:47.685
that you probably should look at as you're, you're building

731
00:32:47.745 --> 00:32:49.005
or sustaining your SMS.

732
00:32:50.135 --> 00:32:52.035
Um, and you'll see that there's some,

733
00:32:52.035 --> 00:32:53.395
some kind of grading criteria here.

734
00:32:53.395 --> 00:32:55.515
Present suitable operational effective.

735
00:32:55.575 --> 00:32:58.515
Now, the sizing of flight test organization varies,

736
00:32:58.655 --> 00:32:59.875
and that's, and they allow that.

737
00:32:59.935 --> 00:33:02.155
So you tailor your safety management system to,

738
00:33:02.255 --> 00:33:03.475
to your particular organization.

739
00:33:03.495 --> 00:33:05.435
That's fine. Uh,

740
00:33:05.455 --> 00:33:06.515
but these are the things that

741
00:33:06.695 --> 00:33:08.115
you probably might want to think about.

742
00:33:08.815 --> 00:33:10.395
Um, and certainly an auditor

743
00:33:10.395 --> 00:33:11.515
should ask you about these things.

744
00:33:13.855 --> 00:33:18.105
Okay? So here is the flight flight test

745
00:33:18.105 --> 00:33:19.545
safety.org website.

746
00:33:19.845 --> 00:33:22.425
And Susan's done a marvelous job going ahead

747
00:33:22.425 --> 00:33:24.745
and uploading these reference documents for your use.

748
00:33:26.765 --> 00:33:30.905
Uh, and like I mentioned, the SMG over here is the template

749
00:33:30.905 --> 00:33:35.135
that we used because it was, shall we say, open source, uh,

750
00:33:35.595 --> 00:33:37.295
is BO you can buy the IS BO.

751
00:33:37.395 --> 00:33:40.455
And I know Rod had been working on, on doing a, uh, version

752
00:33:40.475 --> 00:33:42.135
of the IS BO for flight test,

753
00:33:42.595 --> 00:33:45.175
and I think we we're still gonna continue down that path.

754
00:33:45.595 --> 00:33:47.255
Uh, but that's licensed material.

755
00:33:48.195 --> 00:33:49.615
So at the time, Ben

756
00:33:49.615 --> 00:33:51.215

and I decided, well, let's just go with the smic

757
00:33:51.215 --> 00:33:53.055
because gu that's what Gulfstream is using at EH

758
00:33:53.315 --> 00:33:56.815
and s anyway, um, so that, that's why it's in this format.

759
00:33:58.235 --> 00:34:02.455
Um, anyway, it's available

760
00:34:02.455 --> 00:34:04.135
to you use something.

761
00:34:04.355 --> 00:34:07.215
But that, that was hopefully what we were gonna use

762
00:34:07.235 --> 00:34:09.575
to satisfy the requirement of the NTSB recommendation.

763
00:34:09.675 --> 00:34:12.695
So we have gone back to the NTSB to try

764
00:34:12.695 --> 00:34:14.455
to get some clarification on the operating guidance,

765
00:34:14.455 --> 00:34:16.055
because in my mind's I'm thinking, okay,

766
00:34:16.055 --> 00:34:19.135
they want a full fledged flight test maneuver guide.

767
00:34:19.635 --> 00:34:21.135
That's not what they want. They want a five

768
00:34:21.135 --> 00:34:22.655
to 10 page motherhood

769
00:34:22.655 --> 00:34:25.615
and apple, uh, apple pie type of document, uh, flight test,

770
00:34:25.615 --> 00:34:28.015
team formation, uh, those kinds of things.

771
00:34:28.595 --> 00:34:30.775
Uh, you know, what are your test review

772
00:34:31.155 --> 00:34:33.695
and residual risk approval processes, those kinds of things.

773
00:34:33.715 --> 00:34:35.095
So I think we, we can achieve that.

774
00:34:35.115 --> 00:34:36.535
Ben and I have volunteered to do it

775
00:34:36.535 --> 00:34:38.415
and I think one other, I forget who else,

776
00:34:38.635 --> 00:34:39.775
uh, POed up to help.

777
00:34:40.355 --> 00:34:42.375
But, uh, we're, we're gonna try to pen a draft

778
00:34:42.475 --> 00:34:45.615
for consideration for the, for the committee, take a look at

779
00:34:45.615 --> 00:34:47.175
and see if we can't get that recommendation complete.

780
00:34:47.175 --> 00:34:48.255
I think it's very important

781
00:34:48.255 --> 00:34:50.495
that we address these recommendations and close 'em.

782
00:34:50.955 --> 00:34:54.695
Uh, so I just wanted to hopefully, I'm not overstepping my,

783
00:34:55.355 --> 00:34:57.375

my comments here by, uh, saying that,

784
00:34:57.435 --> 00:34:59.935
but you know, I think it's, it, we have the support of,

785
00:34:59.995 --> 00:35:01.495
of the, uh, uh,

786
00:35:01.495 --> 00:35:03.575
flight test safety committee board and it's important to get that done.

787
00:35:03.835 --> 00:35:05.855
And you probably rehear too that, um,

788
00:35:06.755 --> 00:35:10.415
or on the recommendations that, uh, Bruce is gonna get,

789
00:35:10.875 --> 00:35:12.855
get some help here too, because as a member

790
00:35:12.915 --> 00:35:14.215
of the flight test safety committee,

791
00:35:14.245 --> 00:35:15.775
once we get this work completed,

792
00:35:16.075 --> 00:35:17.415
he can take credit for those as well.

793
00:35:17.415 --> 00:35:18.815
And I think they had five total

794
00:35:18.815 --> 00:35:22.255
with some offshoots on some airport stuff on, uh, Manning

795
00:35:22.255 --> 00:35:24.855
and nine one one call recordings and those kinds of things.

796
00:35:24.955 --> 00:35:26.135
So I think we're,

797
00:35:26.135 --> 00:35:28.615
we're closing in on getting these recommendations closed

798
00:35:28.615 --> 00:35:31.015
out, which is, I think important. Yeah,

799
00:35:31.015 --> 00:35:33.575
We had two linked to 59 60, which

800
00:35:34.905 --> 00:35:38.965
Right, essentially, yeah, work for the FAA work

801
00:35:38.965 --> 00:35:41.325
with flex It make, done, done.

802
00:35:42.585 --> 00:35:47.205
I'm not, okay, so everybody good

803
00:35:47.205 --> 00:35:49.625
with the website know where to find the materials, uh,

804
00:35:50.085 --> 00:35:52.185
and we enc use 'em and give us the feedback.

805
00:35:52.535 --> 00:35:54.545
This is, we, we consider this a living document.

806
00:35:55.245 --> 00:35:57.625
Um, that's not the final answer by any stretch.

807
00:36:00.215 --> 00:36:04.115
So the final question, and then I'll exit stage left.

808
00:36:07.095 --> 00:36:08.595
I'm gonna read it to you so I don't get

809
00:36:08.595 --> 00:36:10.155
it so it's not rigged.

810
00:36:11.175 --> 00:36:13.835

So what is the key human characteristic

811
00:36:13.855 --> 00:36:17.355
to achieve a higher safety state within your organization?

812
00:36:18.425 --> 00:36:20.915
What is the enabling force to achieve

813
00:36:22.615 --> 00:36:25.545
high performing safety in your organization?

814
00:36:25.635 --> 00:36:28.785
Leadership right there, right outta the gate.

815
00:36:29.645 --> 00:36:32.105
And it's the FA, a. So, you know, this isn't rigged.

816
00:36:35.165 --> 00:36:36.145
Congratulations,

817
00:36:42.555 --> 00:36:43.305
Steve, back to you.

818
00:36:45.615 --> 00:36:46.865
I'll just wait for the, the panel.

819
00:36:46.865 --> 00:36:51.505
Good, thanks.

820
00:36:51.505 --> 00:36:52.505
Thank you.

821
00:36:57.365 --> 00:36:59.865
All right. Nice job Huffer. Uh, appreciate that very much.

822
00:37:00.005 --> 00:37:02.705
Uh, I think, uh, all of us would agree that there's,

823
00:37:02.705 --> 00:37:04.145
there's nothing that'll bring an organization

824
00:37:04.145 --> 00:37:05.625
to its knees quicker than, uh,

825
00:37:05.625 --> 00:37:07.505
having a accident slash mishap.

826
00:37:08.005 --> 00:37:10.185
Uh, depending on, uh, you know, where you came from

827
00:37:10.185 --> 00:37:11.585
and what definition you want to use,

828
00:37:11.685 --> 00:37:15.505
but, uh, uh, without the top down approach, uh,

829
00:37:15.505 --> 00:37:19.105
the empowerment, personal empowerment, um, we,

830
00:37:19.245 --> 00:37:22.345
we run the risk of, of having people not report things.

831
00:37:22.405 --> 00:37:24.545
And I won't rehash all of what Huffer said, but,

832
00:37:24.545 --> 00:37:26.945
but I certainly personally subscribe to everything he said,

833
00:37:26.945 --> 00:37:28.345
and I hope, uh, all of you do as well.

834
00:37:29.045 --> 00:37:30.905
And we, we probably will have to continue

835
00:37:30.905 --> 00:37:33.305
to fight the corporate battles to make sure that, uh,

836
00:37:33.305 --> 00:37:34.825
appropriate resources are applied

837
00:37:35.125 --> 00:37:37.025

and, uh, appropriate empowerment to all levels

838
00:37:37.025 --> 00:37:38.825
of the organization are given to, to make sure

839
00:37:38.825 --> 00:37:41.265
that we conduct our business in a safe manner

840
00:37:41.325 --> 00:37:42.505
and that that works for everybody.

841
00:37:43.045 --> 00:37:44.905
So at this time, I'd like to invite all

842
00:37:44.905 --> 00:37:46.985
of our five presenters, Huffer, get back up here,

843
00:37:46.985 --> 00:37:49.465
and all the other folks, uh, the five presenters that, that,

844
00:37:49.465 --> 00:37:50.745
uh, presented this morning, come back

845
00:37:50.745 --> 00:37:51.785
up for the panel discussion.

846
00:37:52.285 --> 00:37:53.825
Uh, we're essentially right on time.

847
00:37:54.245 --> 00:37:56.265
Uh, we're just a couple minutes before 11.

848
00:37:56.685 --> 00:37:58.305
The panel discussion is scheduled, uh,

849
00:37:58.305 --> 00:38:00.105
for a half an hour from 11 to 1130.

850
00:38:00.685 --> 00:38:03.705
And then, uh, then at that point we turn it back over to Bob

851
00:38:03.705 --> 00:38:05.385
and Jerry, uh, to conclude

852
00:38:05.385 --> 00:38:07.025
with the awards presentation and such.

853
00:38:07.165 --> 00:38:07.385
So.