```
WEBVTT
1
00:00:03.065 --> 00:00:05.685
All right, we'll get started here.
2
00:00:05.685 --> 00:00:07.805
What better way to, uh, aid your digestion
3
00:00:07.805 --> 00:00:11.245
and help your, uh, food settle than regulatory change?
4
00:00:13.305 --> 00:00:15.045
Uh, I'm gonna start with a little, uh,
5
00:00:15.435 --> 00:00:18.245
risk management, uh, story.
6
00:00:19.985 --> 00:00:23.965
My, uh, my intended mode of transportation here was,
7
00:00:24.145 --> 00:00:25.445
was my personal airplane.
8
00:00:26.165 --> 00:00:30.565
I was gonna fly it here on Monday, on Sunday.
9
00:00:31.805 --> 00:00:33.285
I was working on, uh, putting,
10
00:00:33.285 --> 00:00:36.805
putting the old snowblower away in my garage.
11
00:00:37.195 --> 00:00:39.845
I've got a little gap between my workbenches there that I,
12
00:00:39.965 --> 00:00:42.445
I kinda shove it into and tip it up against the wall,
13
00:00:43.825 -> 00:00:46.365
and I put a jacks stand under it to hold it up there so
```

14 00:00:46.365 --> 00:00:47.445 that it stays tipped up. 15 00:00:48.465 --> 00:00:50.485 So, I was kneeling on the ground setting. 16 00:00:50.505 --> 00:00:52.285 The jacks stand up and the jacks stand slipped. 17 00:00:53.585 --> 00:00:58.525 And, uh, you can see the little gold bolt there at the top 18 00:00:58.545 --> 00:01:02.645 of the handle that came down right onto my head. 19 00:01:03.345 --> 00:01:05.765 That's 190 pound snowblower, by the way. 20 00:01:06.585 --> 00:01:09.645 And, uh, so I spent three hours in the emergency room 21 00:01:10.425 --> 00:01:12.285 and, uh, getting a CT scan, 22 00:01:12.345 --> 00:01:15.525 and they said, well, the CT scan can't really tell us if you 23 00:01:15.525 --> 00:01:17.885 have a concussion, so maybe don't 24 00:01:17.945 --> 00:01:19.165 fly your airplane tomorrow. 25 00:01:20.105 --> 00:01:22.245 Uh, and here's some staples in your scalp, 26 00:01:22.345 --> 00:01:23.485 by the way, to hold it together. 27 00:01:23.965 --> 00:01:26.245

I should have known the day wasn't starting off good, 28 00:01:26.245 --> 00:01:28.365 because you can also see the, that, 29 00:01:28.475 --> 00:01:30.605 that rope hanging down from the handle, 30 00:01:30.605 --> 00:01:35.365 that's the starter cord, uh, which pulled off when I tried 31 00:01:35.365 --> 00:01:36.845 to start it to run the gas out. 32 00:01:37.425 --> 00:01:39.365 Um, so the day didn't start off 33 00:01:39.365 --> 00:01:40.565 real good in the first place. 34 00:01:40.585 --> 00:01:45.285 So, anyway, uh, so no, uh, no Betty Lou 35 00:01:45.505 --> 00:01:47.485 for me, I let United do the flying. 36 00:01:48.385 --> 00:01:51.645 And, uh, if, if anything goes south on this presentation, 37 00:01:51.665 --> 00:01:53.165 I'm gonna blame it on the snowblower. 38 00:01:53.945 --> 00:01:58.245 But, uh, I, I, I now have to, uh, decide on 39 00:01:58.245 --> 00:02:00.565 what my options are for when I do garage work. 40 00:02:01.425 -> 00:02:05.725Um, I'm thinking this is probably a, a low cost option

41 00:02:05.865 --> 00:02:06.965 that's available to me. 42 00:02:07.585 --> 00:02:10.885 Uh, if I wanna spend a little more money, we've got the, uh, 43 00:02:11.005 --> 00:02:12.245 the Hulk buster armor there. 44 00:02:12.245 --> 00:02:13.565 That's gonna look good in the corner 45 00:02:13.565 --> 00:02:15.765 of my hangar too, uh, later. 46 00:02:16.185 --> 00:02:21.045 But, uh, there's also, um, the biggest helmet you can find. 47 00:02:21.865 --> 00:02:24.165 And, uh, this one's a little more formal too, for, 48 00:02:24.345 --> 00:02:25.965 for formal occasions, if you ever noticed 49 00:02:25.965 --> 00:02:29.365 that dark helmet actually wears a little black tie, uh, 50 00:02:29.705 --> 00:02:32.845 on the front of his costume, there've always enjoyed 51 00:02:32.845 --> 00:02:34.245 that, that one. 52 00:02:34.385 --> 00:02:38.885 So, um, we're gonna talk about, um, 53 00:02:39.535 --> 00:02:41.205 40 40 26 FAA order. 54 00:02:41.205 --> 00:02:43.645

40 40 26 is air cer, aircraft certification, 55 00:02:43.645 --> 00:02:46.925 risk management, uh, uh, aircraft certification, 56 00:02:46.925 --> 00:02:48.365 flight test, risk management. 57 00:02:51.505 --> 00:02:55.925 Uh, we'll talk about, uh, the current version of it, uh, 58 00:02:55.925 --> 00:02:57.525 which is the CC model. 59 00:02:57.745 --> 00:03:01.125 And then, uh, we're working on revision d including some 60 00:03:01.125 --> 00:03:04.245 focus items there, sharing of safety reports, uh, 61 00:03:04.245 --> 00:03:05.845 the accepted risk management process, 62 00:03:06.385 --> 00:03:08.085 and a, a new SMS chapter, 63 00:03:08.675 --> 00:03:10.405 some other little tidbits I'll show you. 64 00:03:10.945 --> 00:03:13.165 And then we'll talk about, uh, the next steps on that. 65 00:03:14.705 --> 00:03:18.445 So, the, uh, the order itself has, uh, 66 00:03:18.465 --> 00:03:20.485 was first published in the late 1990s, 67 00:03:21.185 --> 00:03:22.845 and it came about as a result

68 00:03:22.845 --> 00:03:25.085 of several flight test accidents, uh, 69 00:03:25.085 --> 00:03:27.965 including the last fatal aircraft accident involving 70 00:03:28.025 --> 00:03:29.285 an FAA flight tester. 71 00:03:29.905 --> 00:03:33.165 Uh, that person was FTE, uh, Darryl Schuler from Wichita. 72 00:03:33.165 --> 00:03:37.165 He was killed in a, a Piper Pawnee crash in 1996. 73 00:03:37.345 --> 00:03:40.485 So, uh, several things, uh, worked together 74 00:03:40.585 --> 00:03:42.325 to bring about the, the initial 75 00:03:42.325 --> 00:03:43.685 publication of that document. 76 00:03:44.225 --> 00:03:48.165 And it's been used by the industry ever since, uh, as sort 77 00:03:48.165 --> 00:03:50.605 of a quidebook for, for flight test risk management. 78 00:03:51.825 --> 00:03:56.805 Uh, of course, the audience is everyone who's involved in, 79 00:03:56.805 --> 00:03:58.685 uh, air flight test activities. 80 00:03:58.745 --> 00:04:01.925 Air is aircraft certification, FAA aircraft certification, 81 00:04:02.665 --> 00:04:04.245

if you don't know, that's our office symbol. 82 00:04:04.945 --> 00:04:07.725 Um, and their managers 83 00:04:07.945 --> 00:04:10.685 and flight test includes ground and flight test. 84 00:04:10.945 --> 00:04:13.165 Uh, that's be, that's done for certification. 85 00:04:13.785 --> 00:04:16.245 And we also, in the FAA in our branch, 86 00:04:16.345 --> 00:04:18.245 we do some research activities as well. 87 00:04:19.345 --> 00:04:21.325 Uh, and we also, we wanna manage the risk 88 00:04:21.325 --> 00:04:22.405 for those activities. 89 00:04:22.905 --> 00:04:26.445 And, uh, it also applies to other, uh, FAA lines of business 90 00:04:26.465 --> 00:04:28.045 who are involved in flight test activities, 91 00:04:28.495 --> 00:04:30.405 designated engineering representatives, 92 00:04:30.545 --> 00:04:33.485 and, uh, ODA holders in their conduct 93 00:04:33.545 --> 00:04:35.765 of FAA certification flight test activities. 94 00:04:35.765 --> 00:04:40.565 So, a lot of you folks in the room, uh,

95 00:04:40.565 --> 00:04:43.405 the main reasons for, uh, the last revision, uh, 96 00:04:43.405 --> 00:04:46.805 the most current revision, which was published in 2021, uh, 97 00:04:46.945 --> 00:04:50.045 our organization went through a reorganization in 2017. 98 00:04:50.145 --> 00:04:52.405 So we wanted to make all the office symbols 99 00:04:52.405 --> 00:04:54.285 and terminology correct, uh, for that. 100 00:04:55.025 --> 00:04:58.965 Uh, we had a, a team, uh, look at our safety review board 101 00:04:58.965 --> 00:05:00.925 and risk management review process, 102 00:05:01.945 --> 00:05:05.805 and they, uh, produced an appendix that's in the CE version, 103 00:05:07.145 --> 00:05:09.365 uh, talking about the details of, of 104 00:05:09.365 --> 00:05:10.685 how a safety review board 105 00:05:10.945 --> 00:05:14.205 or a risk management review, um, should be done. 106 00:05:16.145 --> 00:05:19.845 We had, uh, an outstanding NTSB safety recommendation from 107 00:05:19.845 --> 00:05:23.525 the 2011 Gulfstream accident in Roswell, um, 108 00:05:25.195 --> 00:05:27.165

that the NTSB recommended 109 00:05:27.165 --> 00:05:31.285 that the FAA publish guidelines on F-A-A-S-M-S 110 00:05:31.585 --> 00:05:33.245 or, uh, flight test SMS. 111 00:05:34.305 --> 00:05:38.285 And, uh, so the C version was, uh, an attempt at addressing 112 00:05:38.285 --> 00:05:40.885 that recommendation and then some other low hanging fruit, 113 00:05:41.225 --> 00:05:42.605 um, to, to change. 114 00:05:44.505 --> 00:05:47.045 So that team, there are a couple of them in the room. 115 00:05:47.045 --> 00:05:50.365 David Weber, 1 Wilson, and Jason Bryce are all here, 116 00:05:50.365 --> 00:05:52.125 and Eric Kinney, uh, 117 00:05:52.125 --> 00:05:54.405 those folks were all involved in the C revision. 118 00:05:56.465 --> 00:06:00.005 And the structure is, um, a bunch of 119 00:06:00.115 --> 00:06:01.845 what I call fluff at the beginning. 120 00:06:02.665 --> 00:06:06.845 Um, the meat of the document is, uh, paragraph six 121 00:06:06.845 --> 00:06:08.125 through 10, and

122 00:06:08.125 --> 00:06:10.885 with seven being the flight test risk management paragraph, 123 00:06:11.585 --> 00:06:14.245 uh, with an asterisk on that that'll show on the next slide. 124 00:06:14.825 --> 00:06:16.965 Uh, it also talks about organization safety, 125 00:06:16.965 --> 00:06:19.965 event reporting, uh, risk accident response plans, 126 00:06:20.225 --> 00:06:22.965 and, uh, personnel participation in flight testing. 127 00:06:23.665 --> 00:06:27.085 The appendices include appendix C, 128 00:06:27.375 --> 00:06:29.285 which is a further description 129 00:06:29.285 --> 00:06:30.325 of the risk management process. 130 00:06:30.585 --> 00:06:33.245 So the document is called risk management, 131 00:06:33.345 --> 00:06:35.365 but you have to get to chapter seven 1.32 00:06:35.425 --> 00:06:37.765 and Appendix C to actually find the, the meat 133 00:06:37.785 --> 00:06:39.325 of the risk management stuff. 134 00:06:40.425 --> 00:06:45.125 Um, some other, uh, well used appendices are the, uh, 135 00:06:45.125 --> 00:06:48.045

appendix D, the examples of tpha, basically. 136 00:06:49.625 --> 00:06:53.605 And, uh, appendix G, the, uh, typical examples 137 00:06:53.665 --> 00:06:55.445 of flight tests at various risk levels. 138 00:06:55.885 --> 00:06:57.845 A lot of people start from this when they, 139 00:06:57.915 --> 00:06:59.725 when they assess risk levels. 140 00:07:00.745 --> 00:07:05.295 Um, this, this appendix and the keyword here is typical. 141 00:07:06.045 --> 00:07:08.535 Doesn't mean you can't designate a different risk level 142 00:07:08.555 --> 00:07:12.655 for a particular kind of test, um, if you feel that, uh, 143 00:07:13.045 --> 00:07:14.655 that the risk level is different, 144 00:07:14.655 --> 00:07:19.155 and you have, um, uh, reasons for, for changing it. 145 00:07:22.775 --> 00:07:26.435 So the d revision, uh, was begun immediately 146 00:07:26.435 --> 00:07:27.955 after C was published 147 00:07:28.465 --> 00:07:31.075 because we knew that, uh, the document 148 00:07:31.715 --> 00:07:34.155 structure needed some, some, uh, attention.

149 00:07:34.935 --> 00:07:36.075 Uh, we wanted to make sure 150 00:07:36.075 --> 00:07:38.435 that it reflects the latest thinking and best practices. 151 00:07:38.435 --> 00:07:39.835 So it was kind of a back to the, 1.52 00:07:40.055 --> 00:07:43.315 the drawing board build from the bottom up sort of activity, 153 00:07:43.935 --> 00:07:45.875 um, answering frequently asked questions 154 00:07:46.615 --> 00:07:49.955 and, uh, better organized to, uh, 155 00:07:50.175 --> 00:07:52.035 to find the information you want. 156 00:07:52.815 --> 00:07:55.115 Um, here's the focus areas. I'm gonna cover. 157 00:07:55.735 --> 00:07:58.995 The safety report sharing was something that was, uh, well, 158 00:07:58.995 --> 00:08:01.035 we'll get into that, uh, safety report Sharing 1.59 00:08:01.595 --> 00:08:04.435 FAA risk management process, the flight test, SMS chapter, 160 00:08:05.055 --> 00:08:06.635 and, uh, talk. 161 00:08:06.815 --> 00:08:08.635 I'm going to ask a little bit about, uh, 162 00:08:08.655 --> 00:08:12.275

pre mitigate risk versus post mitigate risk acceptance. 163 00:08:14.225 --> 00:08:18.925 So, uh, um, on the topic of sharing safety reports, 164 00:08:18.945 --> 00:08:23.765 so the c revision started saying, introduced language, 165 00:08:23.765 --> 00:08:27.765 saying that, uh, applicant should share safety reports 166 00:08:27.765 --> 00:08:30.405 with us, and we should share safety reports with applicants, 167 00:08:31.145 --> 00:08:33.525 uh, without much beyond that. 168 00:08:33.665 --> 00:08:35.645 And I'll show the, the current language, 169 00:08:35.645 --> 00:08:37.565 and I'll show the new, the proposed new 170 00:08:37.805 --> 00:08:39.005 language here in a minute. 171 00:08:39.825 --> 00:08:44.005 But what we also had happen during this revision time 172 00:08:45.465 --> 00:08:49.085 was, uh, the new, uh, part five, the SMS rule 173 00:08:49.745 --> 00:08:54.405 in 14 CFR was published, uh, a year ago 174 00:08:55.025 --> 00:08:56.685 now in April of 2024. 175 00:08:57.305 -> 00:09:00.325And it added this paragraph on notification of hazards

176 00:09:00.325 --> 00:09:01.605 to interfacing persons. 177 00:09:02.705 --> 00:09:05.805 And, uh, it says that if any, uh, person required 178 00:09:05.805 --> 00:09:08.565 to have an SMS identifies a hazard in the operating 179 00:09:08.565 --> 00:09:10.725 environment, the person must provide notice of the hazard 180 00:09:11.465 --> 00:09:14.005 to any interfacing person that to the best 181 00:09:14.005 --> 00:09:15.565 of the person's knowledge, could address the 182 00:09:15.565 --> 00:09:16.685 hazard or mitigate the risk. 183 00:09:17.625 --> 00:09:19.725 Um, for the purpose of this section, 184 00:09:19.725 --> 00:09:22.285 interfacing persons are those that contribute to the safety 185 00:09:22.305 --> 00:09:24.485 of the certificate or letter of authorization holders, 186 00:09:24.845 --> 00:09:26.845 aviation related products and services. 187 00:09:27.705 --> 00:09:30.645 So a lot of, um, kind of squishy language there 188 00:09:31.315 --> 00:09:33.245 that I think is, uh, going 189 00:09:33.245 --> 00:09:36.445

to be navigated here in the near future as, uh, all 190 00:09:36.445 --> 00:09:41.085 of us work together to implement these, uh, design 191 00:09:41.085 --> 00:09:42.445 and manufacturing SMSs. 192 00:09:44.425 --> 00:09:48.365 But this, um, has interesting implications for the sharing 193 00:09:48.365 --> 00:09:51.325 of safety reports, which I'll get into here. 194 00:09:51.985 --> 00:09:54.645 Uh, we understand that there's a tension between sharing 195 00:09:54.645 --> 00:09:57.285 of safety information, which we're all here to do today, 196 00:09:58.505 --> 00:10:01.565 and the compromise of proprietary intellectual property. 197 00:10:01.565 --> 00:10:03.565 You're all running businesses, you're all competing, 198 00:10:03.785 --> 00:10:04.885 you're all trying to make money. 199 00:10:04.945 --> 00:10:06.365 We get that. Um, 200 00:10:06.585 --> 00:10:10.045 and we want to, um, pay attention to that as we try 201 00:10:10.045 --> 00:10:11.685 to craft this language. 202 00:10:12.505 --> 00:10:16.045 Um, so bottom line is the more people that are aware

203 00:10:16.045 --> 00:10:17.565 of hazards, risks, and risk controls, 204 00:10:17.565 --> 00:10:18.965 the the safer we'll all be. 205 00:10:19.825 --> 00:10:22.685 And SETP and SFTE were both founded on that idea. 206 00:10:22.705 --> 00:10:24.725 The more lessons are shared, the more people can learn them, 207 00:10:25.705 --> 00:10:27.045 uh, or attempt to learn them. 208 00:10:28.105 --> 00:10:30.765 And, uh, we're also very aware of the workload required 209 00:10:30.825 --> 00:10:32.925 for commercial flight testers to get a lessons learned, 210 00:10:32.925 --> 00:10:34.005 presentation vetted 211 00:10:34.005 --> 00:10:36.085 through legal media relations, et cetera. 212 00:10:36.545 --> 00:10:38.565 We know that when you guys present up here, it's, 213 00:10:38.565 --> 00:10:42.205 it's the end of a long process of getting all that approved, 214 00:10:42.585 --> 00:10:45.925 um, so that you can share lessons learned, share lessons 215 00:10:45.995 --> 00:10:47.605 that may be learned by the rest of us. 216 00:10:50.345 --> 00:10:54.965

So with that in mind, um, I show the, 217 00:10:55.065 --> 00:10:56.405 the old language on the left 218 00:10:56.405 --> 00:10:57.645 and the new language on the right. 219 00:10:57.745 --> 00:10:59.365 In this case, there is no old 220 00:10:59.605 --> 00:11:00.685 language that covers this topic. 221 00:11:00.825 --> 00:11:03.085 So I'm gonna, we want to start off this section 222 00:11:03.085 --> 00:11:04.365 of the document saying, 223 00:11:05.645 --> 00:11:07.365 A strong reporting culture is essential 224 00:11:07.365 --> 00:11:08.725 to effective safety assurance. 225 00:11:08.995 --> 00:11:11.525 When FAA crew members fly on TIA flights, 226 00:11:11.995 --> 00:11:14.765 they do not have the benefit of the experience of months 227 00:11:14.825 --> 00:11:17.085 or years of developmental testing on the aircraft 228 00:11:17.705 --> 00:11:18.925 in the spirit of informing 229 00:11:18.925 --> 00:11:20.365 and preparing FAA crew members

230 00:11:20.505 --> 00:11:23.565 so they can be valuable contributors in an emergent 231 00:11:23.965 --> 00:11:25.525 situation, colon. 232 00:11:25.745 --> 00:11:27.405 And then we go through the next sections. 233 00:11:27.995 --> 00:11:31.685 This topic has already been mentioned at this event, uh, 234 00:11:31.715 --> 00:11:36.285 this week, and I appreciate, um, that, uh, that 235 00:11:36.285 --> 00:11:39.325 that is recognized that, uh, when we get on the flight, 236 00:11:39.385 --> 00:11:41.685 you want us to be valuable contributors to the mission, 237 00:11:41.745 --> 00:11:45.885 and you want us to understand the system under test as, 238 00:11:45.985 --> 00:11:47.045 as well as you do. 239 00:11:47.505 --> 00:11:49.245 Um, and we, we strive for that, 240 00:11:49.265 --> 00:11:50.485 but it's not always possible. 241 00:11:51.065 --> 00:11:54.325 Um, especially in the case of knowing the history of, 242 00:11:54.385 --> 00:11:56.485 of the item, um, you, 243 00:11:56.505 --> 00:11:58.805

you're always gonna know more about it than we do. 244 00:11:59.545 --> 00:12:03.125 So, uh, in the, in the spirit of trying 245 00:12:03.125 --> 00:12:05.965 to educate us on the history of the, the, um, 246 00:12:06.585 --> 00:12:10.445 the system under test, this is what we're striving for. 247 00:12:11.105 --> 00:12:14.765 So we've got the old language on the left, which said, uh, 248 00:12:15.465 --> 00:12:18.605 DRS ODAs and applicants are strongly encouraged 249 00:12:18.605 --> 00:12:20.445 to submit safety significant events 2.50 00:12:20.545 --> 00:12:21.645 in accordance with this order. 251 00:12:22.305 --> 00:12:24.005 The new language says ODAs 2.52 00:12:24.065 --> 00:12:26.685 and applicants with an FAA approved risk management process 253 00:12:26.865 --> 00:12:31.385 are required to have a process for sharing 254 00:12:31.385 --> 00:12:32.545 with FAA flight tests. 255 00:12:32.555 --> 00:12:34.265 Those safety reports relevant 256 00:12:34.885 --> 00:12:36.905 to TIA certification flight tests.

257 00:12:37.085 --> 00:12:38.785 So it's a requirement, 2.58 00:12:39.125 --> 00:12:40.745 but there's some wiggle room in there. 259 00:12:41.245 --> 00:12:42.625 We don't want all your dirty laundry, 2.60 00:12:42.725 --> 00:12:44.465 we don't want every safety report you've ever 261 00:12:45.015 --> 00:12:47.665 submitted on the whole system from day one. 2.62 00:12:48.005 --> 00:12:50.185 We just want the ones that you think 263 00:12:50.965 --> 00:12:53.065 we should know about when we get on the airplane 264 00:12:53.065 --> 00:12:55.225 to do TIA certification flight test. 265 00:12:59.515 --> 00:13:01.345 Again, no old language for this part. 266 00:13:01.815 --> 00:13:05.225 This, this is gonna refer to the part five FSMS changes. 2.67 00:13:05.245 --> 00:13:06.865 So applicants required to operate 268 00:13:07.545 --> 00:13:10.545 a part five SMS may be required to share hazard data, 269 00:13:11.355 --> 00:13:13.785 which we think could be safety reports. 270 00:13:14.325 --> 00:13:18.785

Ses, um, is what we call 'em with FAA flight test 271 00:13:18.805 --> 00:13:22.825 as an interfacing person under 14 c, FFR 5 57 272 00:13:23.645 --> 00:13:26.865 and TCPC holders are required to submit a summary 273 00:13:26.965 --> 00:13:29.625 of the confidential employee reports to the administrator. 274 00:13:29.675 --> 00:13:30.985 We're not sure who that is yet. 275 00:13:31.045 --> 00:13:34.345 We think it's going to be the certificate management section 276 00:13:34.535 --> 00:13:36.905 that o Old Air 800, the MIT o folks. 277 00:13:37.845 --> 00:13:39.625 Um, we think that's who's gonna get 278 00:13:39.625 --> 00:13:40.785 that report every six months. 279 00:13:42.085 --> 00:13:43.745 And, uh, we're gonna be interested. 280 00:13:44.365 --> 00:13:47.105 Flight test FAA flight test is gonna be interested in, 281 00:13:47.125 --> 00:13:48.185 in that report as well. 282 00:13:49.285 --> 00:13:49.505 Um, 2.8.3 00:13:53.965 --> 00:13:57.395 again, um, no old language to compare this to, but DR

284 00:13:57.395 --> 00:14:00.355 and applicants without an FAA approved risk management 285 00:14:00.665 --> 00:14:04.195 process are still strongly encouraged to report SES 286 00:14:04.215 --> 00:14:06.515 to the flight test section responsible for their oversight. 2.87 00:14:08.655 --> 00:14:13.635 So, just to be clear, this section says, for an ODA 288 00:14:13.815 --> 00:14:16.275 or an applicant with an FA accepted risk management process 289 00:14:16.415 --> 00:14:18.675 are required to.dot. 290 00:14:19.215 --> 00:14:22.635 If you don't have that, you're strongly encouraged. 291 00:14:31.545 --> 00:14:34.565 Uh, this gets to the crux of the matter of, uh, 292 00:14:34.595 --> 00:14:37.565 what makes you all nervous about 293 00:14:37.565 --> 00:14:38.845 sharing information with us. 294 00:14:39.665 --> 00:14:43.885 Um, and that is that once it leaves your control, it's out 295 00:14:43.885 --> 00:14:48.165 of your control, and you have to trust the person you give 296 00:14:48.165 --> 00:14:51.685 that information to, to control it just as you would 297 00:14:51.705 --> 00:14:56.325

to take, uh, and to make sure that it doesn't, um, get, uh, 298 00:14:56.345 --> 00:14:57.485 beyond where it should. 299 00:14:58.985 --> 00:15:01.525 So the old language personal applicant identifying 300 00:15:01.525 --> 00:15:04.005 information will be removed to ensure the confidentiality 301 00:15:04.185 --> 00:15:06.205 of safety significant event submitters 302 00:15:06.955 --> 00:15:08.325 proprietary data cannot 303 00:15:08.385 --> 00:15:10.845 and will not be shared outside the FAA new language. 304 00:15:10.895 --> 00:15:14.205 We're trying to address that discomfort that, uh, 305 00:15:14.265 --> 00:15:18.205 we know exists, um, with some more 306 00:15:18.705 --> 00:15:20.365 of the legal citations here. 307 00:15:20.385 --> 00:15:24.045 So, applicant slash oda slash DR report should be marked 308 00:15:24.045 --> 00:15:25.125 voluntarily submitted, 309 00:15:25.585 --> 00:15:28.805 and if they contain proprietary data marked proprietary 310 00:15:29.535 --> 00:15:32.605 prior to submission, the FAA is required

311 00:15:32.605 --> 00:15:36.285 to protect proprietary data under Title 18, US Code 1905 312 00:15:36.955 --> 00:15:39.405 proprietary data cannot and will not be shared outside. 313 00:15:39.405 --> 00:15:43.525 The F-A-A-S-M-S data are protected from FOIA under 314 00:15:43.855 --> 00:15:46.565 49 US code, et cetera, et cetera. 315 00:15:47.865 --> 00:15:49.725 If there's some caveats here, 316 00:15:50.585 --> 00:15:55.245 if the data has been voluntarily submitted, um, and is not 317 00:15:55.245 --> 00:15:56.965 otherwise required by regulation. 318 00:15:57.065 --> 00:16:00.925 So we kind of shot ourselves in the foot when that paragraph 319 00:16:00.925 --> 00:16:03.045 to part five was added. 320 00:16:03.625 --> 00:16:06.645 So there's some, some nuances here that I'm still trying 321 00:16:06.645 --> 00:16:08.605 to navigate to make sure this language is correct 322 00:16:09.145 --> 00:16:12.725 and to make sure that your data will be protected the way we 323 00:16:12.725 --> 00:16:14.285 say it is and the way we want it to be, 324 00:16:14.625 --> 00:16:15.685

so that this all works. 325 00:16:15.865 --> 00:16:19.645 And so that, um, so that lessons can be learned. 326 00:16:20.665 --> 00:16:22.885 Um, submitters are highly encouraged 327 00:16:22.885 --> 00:16:24.205 to sanitizer submissions 328 00:16:24.205 --> 00:16:26.245 of proprietary data enabling wider sharing. 329 00:16:26.665 --> 00:16:30.765 And then, um, okay, not this one, but the next one. 330 00:16:30.785 --> 00:16:32.845 So this is just the format. 331 00:16:33.145 --> 00:16:35.765 You may use the seven 10 SSE report format, 332 00:16:36.815 --> 00:16:39.685 which is now added as an appendix to the document. 333 00:16:39.685 --> 00:16:41.765 So you'll be able to have the format right there, 334 00:16:42.065 --> 00:16:44.725 or a suitable alternate format if you have a report format. 335 00:16:45.585 --> 00:16:47.165 Um, and, 336 00:16:47.185 --> 00:16:50.045 and your section safety officer that you deal with is, 337 00:16:50.105 --> 00:16:52.485 is okay with that format, then you can just use your,

338 00:16:52.795 --> 00:16:54.605 your own format if you have an internal 339 00:16:54.785 --> 00:16:55.885 safety report format. 340 00:16:57.585 --> 00:17:02.285 Um, so this is the part where 341 00:17:03.145 --> 00:17:04.325 we share our data with you. 342 00:17:04.325 --> 00:17:07.085 And the, so the old document, the current document, 343 00:17:07.245 --> 00:17:10.045 I should say, says, in the interest of sharing safety data, 344 00:17:10.065 --> 00:17:13.005 the FAA should also share their SSE data with applicants. 345 00:17:13.005 --> 00:17:14.485 And I know that makes a lot of people nervous. 346 00:17:14.765 --> 00:17:18.925 'cause now if we have an SSE that happened on your airplane 347 00:17:18.925 --> 00:17:20.045 during a TIA test, 348 00:17:20.145 --> 00:17:21.925 and then we share that with your competitor, 349 00:17:22.915 --> 00:17:24.805 that could be a bad thing for you. 350 00:17:25.385 --> 00:17:27.525 And we, we don't do that right now, 351 00:17:27.545 --> 00:17:28.725

and we don't intend to do that. 352 00:17:29.145 --> 00:17:30.325 So here's what we intend to do. 353 00:17:30.325 --> 00:17:31.925 In the interest of sharing safety data, 354 00:17:32.665 --> 00:17:35.365 the FAA should also share their SSE data 355 00:17:35.365 --> 00:17:36.765 with the appropriate entities 356 00:17:36.765 --> 00:17:39.165 that can address a hazard or mitigate risk. 357 00:17:39.345 --> 00:17:40.885 So that's the language from part five. 358 00:17:42.035 --> 00:17:44.845 Sharing of any SSE will be coordinated 359 00:17:44.845 --> 00:17:47.605 with the involved entities before wider dissemination. 360 00:17:47.705 --> 00:17:50.645 For example, example, if an SSE is generated 361 00:17:50.645 --> 00:17:51.685 during a TIA flight 362 00:17:51.685 --> 00:17:55.125 with company XFAA flight test would coordinate 363 00:17:55.125 --> 00:17:57.165 with Company X and get their permission 364 00:17:57.305 --> 00:17:59.725 before sharing the SSE with company Y

365 00:18:00.265 --> 00:18:01.725 or with the flight test community. 366 00:18:01.825 --> 00:18:03.365 So we're basically gonna, 367 00:18:03.425 --> 00:18:05.325 before your information goes anywhere, 368 00:18:05.325 --> 00:18:07.485 we're gonna get your permission to share it 369 00:18:08.265 --> 00:18:11.685 in whatever format or content that you approve. 370 00:18:11.815 --> 00:18:14.725 We're not gonna, we're we're trying to convince you 371 00:18:14.725 --> 00:18:17.565 that we're gonna take care of your data, uh, your, 372 00:18:17.595 --> 00:18:18.685 your information 373 00:18:19.225 --> 00:18:21.725 and not, uh, let it go somewhere you don't want it to go. 374 00:18:27.345 --> 00:18:29.365 Um, one of the things that has occurred 375 00:18:29.365 --> 00:18:34.045 to me in this whole evolution is that if the FA is going 376 00:18:34.045 --> 00:18:37.285 to mandate, mandate, all this data sharing, um, 377 00:18:37.985 --> 00:18:39.125 should it provide a tool 378 00:18:39.125 --> 00:18:40.645

where these data can be safely shared 379 00:18:40.645 --> 00:18:42.645 and protected, IE some sort of website 380 00:18:42.645 --> 00:18:45.525 that you have a sign into, and, um, 381 00:18:47.465 --> 00:18:50.165 and, and that, um, that all 382 00:18:50.165 --> 00:18:52.165 that information can be shared and protected. 383 00:18:53.145 --> 00:18:55.925 Um, I don't know if that's happening yet. 384 00:18:56.125 --> 00:18:59.365 I know there, there are lots of sectors in the FAA part 21. 385 00:18:59.365 --> 00:19:03.325 Part 1 21 has required SMSs for quite a while, 386 00:19:03.875 --> 00:19:06.125 including this kind of data sharing. 387 00:19:06.985 --> 00:19:10.725 Um, and now airports are required to have an SMS 388 00:19:10.945 --> 00:19:13.005 and part 1 35, 389 00:19:13.465 --> 00:19:16.605 and, um, several other sectors. 390 00:19:16.705 --> 00:19:21.085 So design and manufacturing, all of those folks have SMSs 391 00:19:21.105 --> 00:19:23.165 and are required to share hazard information,

392 00:19:23.165 --> 00:19:27.765 hazard information, um, with interfacing persons. 393 00:19:28.745 --> 00:19:33.605 So, uh, I feel like that, uh, it would be great if we, 394 00:19:33.895 --> 00:19:36.525 after we mandate such a thing, we should provide you a tool 395 00:19:36.525 --> 00:19:38.285 to do it, um, where it's easy. 396 00:19:38.785 --> 00:19:41.525 And, um, I don't want to invent that, 397 00:19:42.305 --> 00:19:46.045 but, uh, I, I will be involved in the inventing of that if, 398 00:19:46.105 --> 00:19:47.925 if nobody else is working on it. 399 00:19:48.105 --> 00:19:50.485 I'm, I'm gonna try to see what we can do about that. 400 00:19:55.755 --> 00:19:58.535 So that sharing of safety reports, um, 401 00:19:59.915 --> 00:20:02.535 the accepted RM process, I talked about this last year. 402 00:20:02.715 --> 00:20:05.495 I'm just gonna highlight some of the, the language that we, 403 00:20:05.595 --> 00:20:10.255 uh, are looking at as far as what, what will be required 404 00:20:10.555 --> 00:20:12.335 to get the RM process accepted. 405 00:20:12.875 --> 00:20:16.375

Um, here's the old, the current language, I should say, um, 406 00:20:17.075 --> 00:20:18.255 to be found acceptable 407 00:20:18.435 --> 00:20:20.375 by the Cognizant Flight Test Organization. 408 00:20:20.395 --> 00:20:23.135 The applicant's risk management process must comply 409 00:20:23.675 --> 00:20:25.695 at a minimum with the requirements of this order. 410 00:20:26.025 --> 00:20:27.255 Again, kind of squishy 411 00:20:27.995 --> 00:20:30.455 and acceptance must be formally documented. 412 00:20:30.755 --> 00:20:33.175 So not much guidance there and, 413 00:20:33.355 --> 00:20:36.335 and no criteria on what it takes to get accepted. 414 00:20:37.195 --> 00:20:40.215 So I want to clarify, uh, what oversight looks like, 415 00:20:40.245 --> 00:20:42.135 what the benefits are to the applicant of, 416 00:20:42.195 --> 00:20:44.815 of getting this FAA accepted risk management process 417 00:20:45.765 --> 00:20:47.485 applicability to ODAs. 418 00:20:47.485 --> 00:20:48.845 That's been a question all along.

419 00:20:49.985 --> 00:20:51.845 And, uh, requirements for acceptance. 420 00:20:51.945 --> 00:20:55.565 So let's look at, um, what it gives you. 421 00:20:55.785 --> 00:20:58.605 So if you have an FAA accepted risk management process, 422 00:20:59.425 --> 00:21:02.525 it allows you to conduct your risk management review, 423 00:21:02.595 --> 00:21:05.965 whether that takes the form of an SRBA formal meeting board 424 00:21:06.785 --> 00:21:09.965 or a desktop review where you, where you sequentially run it 425 00:21:09.965 --> 00:21:12.405 through by email or however you do it. 426 00:21:13.185 --> 00:21:14.685 Uh, you can do that process, 427 00:21:14.915 --> 00:21:17.725 that risk management review without direct FA involvement. 428 00:21:17.785 --> 00:21:20.765 So it's one or two fewer people you have to schedule around. 429 00:21:21.745 --> 00:21:26.125 Uh, and that's worth it for many folks to, to get this, 430 00:21:26.305 --> 00:21:27.645 um, acceptance. 431 00:21:29.505 --> 00:21:30.805 Uh, we maybe choose to, 432 00:21:30.905 --> 00:21:33.325

to be involved in the RN process for any project. 433 00:21:34.145 --> 00:21:37.805 Um, but, uh, most, with most applicants who have this, 434 00:21:37.805 --> 00:21:39.725 we get an rhythm and we know which ones we want 435 00:21:39.725 --> 00:21:41.165 to be involved in and which ones we don't. 436 00:21:42.465 --> 00:21:45.765 Uh, the FAA accepted risk management process does not allow 437 00:21:45.765 --> 00:21:48.925 an applicant to sign the risk management block on a TIA. 438 00:21:48.985 --> 00:21:51.805 So remember, there's a, there's a TIA acceptance, 439 00:21:51.805 --> 00:21:52.925 and then there's the risk management 440 00:21:52.925 --> 00:21:54.205 acceptance on a different page. 441 00:21:55.065 --> 00:21:57.125 Um, and just, just 442 00:21:57.125 --> 00:21:58.805 because you have the accepted RM process, 443 00:21:59.795 --> 00:22:03.245 that doesn't mean you can accept the risk on the TIA. 444 00:22:03.265 --> 00:22:05.645 That's still an FAA function. 445 00:22:05.875 --> 00:22:07.925 However, it could allow o ds

446 00:22:07.925 --> 00:22:11.285 to sign the risk management block that happens today, uh, 447 00:22:11.425 --> 00:22:12.845 on a TIA, that if 448 00:22:12.845 --> 00:22:15.285 that authority is granted in the ODA procedures manual, 449 00:22:15.795 --> 00:22:17.445 this only applies to TIA flying. 450 00:22:17.545 --> 00:22:21.525 So, um, just kind of making it clear what, 4.51 00:22:21.715 --> 00:22:23.405 what the accepted process gives you. 452 00:22:25.745 --> 00:22:27.605 And here's the criteria for acceptance. 453 00:22:27.635 --> 00:22:28.765 It's a, it's a long list. 454 00:22:28.765 --> 00:22:31.525 There's 12 here, and they've changed a little bit, um, 455 00:22:31.815 --> 00:22:33.205 since I presented this last year. 456 00:22:33.305 --> 00:22:37.565 So, um, first one is, um, an RM process that complies 457 00:22:37.565 --> 00:22:38.725 with the order, kind of the, 458 00:22:38.905 --> 00:22:40.845 the original paragraph that we started with. 459 00:22:41.785 --> 00:22:44.525

And you must define, uh, the equivalence 460 00:22:44.545 --> 00:22:46.925 to the required RM review participants. 461 00:22:46.985 --> 00:22:49.805 So when you do an SRB, you should tell us 462 00:22:49.805 --> 00:22:52.365 who your required SRB attendees are 463 00:22:53.065 --> 00:22:55.125 or who's required in that desktop review process. 464 00:22:56.585 --> 00:22:58.245 Uh, FAA will be able to review 465 00:22:58.245 --> 00:22:59.845 and audit the applicant's RM process, 466 00:23:01.045 --> 00:23:02.085 demonstrated company history 467 00:23:02.085 --> 00:23:05.045 of TIA flying high quality risk management documentation, 468 00:23:05.795 --> 00:23:09.765 appropriate risk level assignment, um, high level of trust, 469 00:23:10.025 --> 00:23:12.045 as evidenced by open and productive communication 470 00:23:12.045 --> 00:23:13.405 between the FAA and the applicant. 471 00:23:14.075 --> 00:23:16.445 Applicant should not be reluctant to share problems, 472 00:23:16.445 --> 00:23:18.205 lessons learned, or setbacks with a project.

473 00:23:18.945 --> 00:23:20.205 And here's one for y'all. 474 00:23:20.345 --> 00:23:24.045 Uh, active participation in S-E-T-P-S-F-T-E Flight Test 475 00:23:24.045 --> 00:23:25.525 Safety Workshop, A I A A 476 00:23:25.525 --> 00:23:28.405 and other industry organizations can also demonstrate 477 00:23:28.405 --> 00:23:29.885 willingness to communicate openly. 478 00:23:30.985 --> 00:23:35.845 Um, we do like to see you all here, a designated 479 00:23:35.865 --> 00:23:37.965 and trained flight test safety officer or manager. 480 00:23:38.545 --> 00:23:41.925 And the C chapter three, chapter three is the SMS chapter, 481 00:23:41.985 --> 00:23:43.085 the new SMS chapter. 482 00:23:43.785 --> 00:23:46.285 And that refers to the safety promotion 483 00:23:46.515 --> 00:23:48.485 paragraph about training. 484 00:23:48.825 --> 00:23:51.405 So there's, uh, some information there about, uh, 485 00:23:51.405 --> 00:23:52.685 flight test safety officers. 486 00:23:54.355 --> 00:23:57.325

Applicant developed briefing guide should look like the, uh, 487 00:23:57.425 --> 00:23:58.725 the one in the document. 488 00:23:58.865 --> 00:24:01.045 So Appendix B is still the flight test briefing guide. 489 00:24:02.625 --> 00:24:06.125 Um, for an ODA, you have to define 490 00:24:06.145 --> 00:24:07.925 who can sign the TIA risk management 491 00:24:07.925 --> 00:24:09.205 block for each risk level. 492 00:24:10.145 --> 00:24:11.685 Um, this should be a manager 493 00:24:11.785 --> 00:24:13.525 who oversees flight test operations 494 00:24:13.585 --> 00:24:15.045 or someone in their chain of command, 495 00:24:15.825 --> 00:24:18.285 the manager's signature in the TIA Risk management block 496 00:24:18.285 --> 00:24:20.005 means that the manager has determined 497 00:24:20.005 --> 00:24:21.965 that the RM process was done correctly. 498 00:24:22.725 --> 00:24:24.285 IE the hazards have been identified, 499 00:24:24.285 --> 00:24:26.085 the risk level is correct, and the risks have been

500 00:24:26.085 --> 00:24:27.365 mitigated to an acceptable level. 501 00:24:27.365 --> 00:24:28.965 That's what that signature means. 502 00:24:28.965 --> 00:24:31.365 On the TIA Risk acceptance block, 503 00:24:34.995 --> 00:24:37.815 um, confidential non-punitive safety reporting process. 504 00:24:38.905 --> 00:24:42.375 Again, referring to chapter three, the SMS chapter, um, 505 00:24:43.315 --> 00:24:45.135 the applicant must have a process for sharing 506 00:24:45.135 --> 00:24:47.655 with FAA flight tests, those safety reports relevant 507 00:24:47.655 --> 00:24:49.175 to TIA certification flight tests. 508 00:24:50.075 --> 00:24:52.455 For example, if an event occurred during company test 509 00:24:52.595 --> 00:24:55.135 and it could recur during certification test, share 510 00:24:55.135 --> 00:24:56.295 that event with FAA flight test. 511 00:24:56.715 --> 00:24:57.775 If an event occurred 512 00:24:57.775 --> 00:25:00.575 because of a certain way of flying a flight test technique, 513 00:25:00.705 --> 00:25:04.015

share that event with FAA flight test, all in the interest 514 00:25:04.015 --> 00:25:06.495 of making us a valuable crew member on 515 00:25:06.495 --> 00:25:07.775 your, on your aircraft. 516 00:25:09.635 --> 00:25:11.375 The applicant must have risk controls 517 00:25:11.375 --> 00:25:12.775 that address the following hazards. 518 00:25:12.775 --> 00:25:14.855 And this is straight out of the, uh, the ODA manual, 519 00:25:15.175 --> 00:25:16.255 actually lack of proficiency 520 00:25:16.355 --> 00:25:19.575 or currency, lack of fitness for duty, fatigue, 521 00:25:19.575 --> 00:25:20.775 and emergency response. 522 00:25:21.355 --> 00:25:23.095 Um, and this would normally take the form 523 00:25:23.095 --> 00:25:24.295 of a flight operations manual 524 00:25:26.075 --> 00:25:28.975 and periodic review of accidents, incidents 525 00:25:28.975 --> 00:25:31.135 and safety reports, mandatory safety meetings, 526 00:25:31.755 --> 00:25:33.335 and we strongly recommend a flight test.

527 00:25:33.495 --> 00:25:37.095 SMS, uh, periodic self audits of the risk management process 528 00:25:37.315 --> 00:25:38.495 and high level CRM 529 00:25:38.495 --> 00:25:41.615 and aeronautical decision making, uh, the flight test. 530 00:25:41.815 --> 00:25:45.535 SMS one is, is, seems like it might be overcome by events, 531 00:25:45.535 --> 00:25:47.055 especially for TCPC holders. 532 00:25:47.055 --> 00:25:50.175 You're required to have an SMS for manufacturing. 533 00:25:50.475 --> 00:25:53.975 And I consider flight test a critical part of manufacturing. 534 00:25:54.275 --> 00:25:55.895 And so that probably means 535 00:25:55.895 --> 00:25:57.335 you're required to have a flight test. 536 00:25:57.575 --> 00:25:59.175 SMS, um, 537 00:26:02.495 --> 00:26:05.465 onto the SMS chapter that I've mentioned a couple times. 538 00:26:05.965 --> 00:26:08.865 So the, the chapter is, is basically guidelines. 539 00:26:08.865 --> 00:26:11.465 It's not requirements, um, for, 540 00:26:11.565 --> 00:26:13.105

for anybody interested in implementing 541 00:26:13.105 --> 00:26:14.185 or improving a flight test. 542 00:26:14.625 --> 00:26:19.505 SMS, again, uh, we're trying to get that NTSB uh, 543 00:26:19.825 --> 00:26:21.505 recommend safety recommendation addressed 544 00:26:22.405 --> 00:26:24.105 the C version didn't make them happy, 545 00:26:24.125 --> 00:26:25.545 and they called that unacceptable. 546 00:26:26.165 --> 00:26:27.345 Um, I'm not happy with that. 547 00:26:27.405 --> 00:26:28.905 So I want to get it to, uh, 548 00:26:28.965 --> 00:26:30.705 to a different answer from the NTSB. 549 00:26:30.725 --> 00:26:33.025 So we've added a whole chapter on SMS. 550 00:26:33.615 --> 00:26:35.985 It's arranged obviously around the other three pillars. 551 00:26:35.985 --> 00:26:37.745 There's a whole chapter on risk management, 552 00:26:38.245 --> 00:26:40.945 and then the SMS chapter covers safety policy, 553 00:26:41.005 -> 00:26:42.825safety promotion, and safety assurance.

554 00:26:43.745 --> 00:26:46.685 Um, and it's all flight test specific stuff. 555 00:26:46.905 --> 00:26:49.045 So we're not telling you how to do an SMS we're telling you 556 00:26:49.045 --> 00:26:52.285 how to do or suggestions for a flight test. 557 00:26:52.525 --> 00:26:56.085 SMS for example, in the safety policy part, we say 558 00:26:57.305 --> 00:27:00.285 you may want to talk about a no vote in your safety policy. 559 00:27:00.385 --> 00:27:03.165 If that's something that you advocate for 560 00:27:03.345 --> 00:27:05.565 or you have in your company, maybe mention 561 00:27:05.565 --> 00:27:08.765 that in the safety policy so that it's part of your, 562 00:27:09.465 --> 00:27:12.805 you know, part of your culture that your leadership is, is, 563 00:27:12.865 --> 00:27:14.965 um, describing to its folks. 564 00:27:15.825 --> 00:27:18.405 Uh, other tidbits. This is a flow chart for, um, 565 00:27:20.345 --> 00:27:22.645 for the risk management review and acceptance process. 566 00:27:22.985 --> 00:27:24.125 I'm not gonna go through this here, 567 00:27:24.185 --> 00:27:28.445

but, um, we, we, as, as, as we ourselves, the, the team was, 568 00:27:28.945 --> 00:27:31.125 was working on the document, we kind of needed to, 569 00:27:31.745 --> 00:27:33.605 to di diagram this out for ourselves. 570 00:27:33.625 --> 00:27:35.965 So we thought we'd, we'd throw the flow flow chart in here 571 00:27:35.965 --> 00:27:37.605 to help other folks understand the process. 572 00:27:38.435 --> 00:27:39.725 This helps you understand 573 00:27:39.825 --> 00:27:42.285 who signs which block on the TIA 574 00:27:42.285 --> 00:27:43.645 basically is what it comes down to. 575 00:27:47.945 --> 00:27:51.805 Um, the two examples of tpha in the, 576 00:27:52.025 --> 00:27:53.845 in the document have been there for a long time. 577 00:27:54.585 --> 00:27:58.405 Um, I decided to make a bow tie out of the one 578 00:27:58.405 --> 00:28:01.245 that's been in there for your, for a decade or two. 579 00:28:01.985 --> 00:28:04.965 Um, so this is a bow tie of the low altitude stall, 580 00:28:05.165 --> 00:28:07.405 THA example, um, just so

581 00:28:07.405 --> 00:28:09.605 that folks can see a different way of doing it. 582 00:28:09.605 --> 00:28:13.645 Another way of doing a THA, um, there's text that goes along 583 00:28:13.645 --> 00:28:17.875 with this, but, um, uh, uh, so 584 00:28:17.895 --> 00:28:19.035 that's in, in there. 585 00:28:19.335 --> 00:28:23.315 Um, we advocate that you, uh, you know, the, 586 00:28:23.335 --> 00:28:25.675 the document is all about flight test risk management. 587 00:28:26.335 --> 00:28:29.395 Of course, there are risks that we expose ourselves 588 00:28:29.395 --> 00:28:31.675 to simply by operating airplanes, aircraft. 589 00:28:32.375 --> 00:28:35.755 Um, and we should also be addressing those risks when we 590 00:28:35.755 --> 00:28:36.795 go operate an aircraft. 591 00:28:37.375 --> 00:28:41.955 So we advocate for, uh, an ORM process to, to address that. 592 00:28:41.975 --> 00:28:45.115 And, and we throw our ORM worksheet in, uh, 593 00:28:45.255 --> 00:28:46.795 as an appendix, as an example. 594 00:28:50.535 --> 00:28:52.795

One of the things I'm interested in hearing from you all 595 00:28:52.795 --> 00:28:55.435 about, we're still on the, well, we think we know 596 00:28:55.435 --> 00:28:56.475 what we wanna say about this. 597 00:28:57.855 --> 00:29:00.395 We know that there are, um, some organizations 598 00:29:00.425 --> 00:29:04.235 that accept risk based on post mitigated risk level. 599 00:29:05.095 --> 00:29:07.195 We don't want to say anything about that 600 00:29:07.195 --> 00:29:08.435 because we think, well, 601 00:29:08.435 --> 00:29:10.595 the fourth principle stated in the document is right there. 602 00:29:10.615 --> 00:29:13.675 The risk management acceptance should be made 603 00:29:13.775 --> 00:29:14.835 at the appropriate level. 604 00:29:15.285 --> 00:29:17.635 Acceptance of residual risk should be made at a level 605 00:29:17.635 --> 00:29:19.955 commensurate with the pre mitigate level of risk. 606 00:29:20.195 --> 00:29:22.955 IE the higher the pred risk, the higher the level 607 00:29:22.955 --> 00:29:24.035 of management acceptance.

608 00:29:24.665 --> 00:29:26.635 Some other presenter here today said the same thing. 609 00:29:27.495 --> 00:29:29.635 Uh, the risk accepter should be a flight test manager 610 00:29:29.655 --> 00:29:31.075 or someone in their chain of command. 611 00:29:31.935 --> 00:29:35.755 Um, so in the, in, if anyone has any comments on this, uh, 612 00:29:35.935 --> 00:29:37.835 I'm interested in hearing, um, 613 00:29:38.575 --> 00:29:42.925 why you might use post mitigated risk to determine the level 614 00:29:42.945 --> 00:29:44.205 of your risk acceptor. 615 00:29:45.665 --> 00:29:48.725 Um, so at, at comments time, please, 616 00:29:48.785 --> 00:29:50.125 please chip in with that. 617 00:29:50.955 --> 00:29:54.925 Also, interested if anyone, um, how, how folks handle their, 618 00:29:55.105 --> 00:29:58.805 uh, if you require safety reports for certain events. 619 00:29:59.065 --> 00:30:03.845 For instance, if you have a 49 CFR 8 38 accident 62.0 00:30:03.865 --> 00:30:06.965 or incident, IE you have to report it to the NTSB. 621 00:30:07.585 --> 00:30:09.245

Do you require your folks 622 00:30:09.245 --> 00:30:11.165 to do an internal safety report on those? 62.3 00:30:12.065 --> 00:30:14.405 Um, and I also wanted to mention that, uh, 624 00:30:15.235 --> 00:30:19.485 that we've been trying to craft a document, um, 625 00:30:19.825 --> 00:30:23.805 called the right stuff just about test plan writing, um, 62.6 00:30:24.925 --> 00:30:25.965 guidance on, on that. 627 00:30:27.585 --> 00:30:30.645 And that's, uh, close to publication, right? Yeah. 628 00:30:30.945 --> 00:30:33.925 So probably come out about the same time or, 629 00:30:33.985 --> 00:30:35.485 or sooner than this document does. 630 00:30:35.685 --> 00:30:37.165 'cause this document has some, 631 00:30:37.235 --> 00:30:38.805 some more, oops to jump through. 632 00:30:39.505 --> 00:30:44.205 Um, so the next steps 633 00:30:44.205 --> 00:30:46.885 with the document, um, I gotta work with the, uh, 634 00:30:47.545 -> 00:30:51.285the certificate management folks to determine, um,

635 00:30:51.825 --> 00:30:54.245 how involved we're gonna be in the design and manufacturing. 636 00:30:54.525 --> 00:30:57.045 SMS. This was a topic that we talked about last year, 637 00:30:57.745 --> 00:30:59.005 and it's still unclear. 638 00:30:59.425 --> 00:31:02.485 And, uh, the certificate management folks are still kind 639 00:31:02.485 --> 00:31:04.525 of rolling along thinking, you know, 640 00:31:04.525 --> 00:31:06.725 they're just gonna oversee these SMSs. 641 00:31:06.825 --> 00:31:09.645 And, and I keep telling them, I keep raising my hand 642 00:31:09.645 --> 00:31:10.925 and I'm on some of the committees. 643 00:31:10.925 --> 00:31:14.325 So I'm, my voice is being heard that, you know, 644 00:31:14.325 --> 00:31:17.725 when you manage, when you manufacturing inspectors go 645 00:31:17.725 --> 00:31:21.685 to look at a flight test part of, of a manufacturing SMS, 646 00:31:21.825 --> 00:31:24.565 you may want our input, you may want our help. 647 00:31:24.665 --> 00:31:26.765 You may want to, you know, I think it's gonna be a little 648 00:31:26.765 --> 00:31:27.885

different than what you're thinking. 649 00:31:27.945 --> 00:31:32.605 So, um, so there's progress on that. 650 00:31:32.995 --> 00:31:37.805 There's, uh, as far as the work by the committee of, um, 651 00:31:38.305 --> 00:31:41.885 uh, uh, a self-audit sort of document, 652 00:31:42.775 --> 00:31:45.325 we're not anywhere near knowing what 653 00:31:45.325 --> 00:31:47.285 that should look like from an FA, a point of view. 654 00:31:47.385 --> 00:31:51.085 So, uh, I'm happy to work with that, that subcommittee when, 655 00:31:51.225 --> 00:31:53.605 uh, if, when they get, uh, reinvigorated. 656 00:31:54.185 --> 00:31:56.365 So please, uh, contact me when that happens 657 00:31:56.665 --> 00:31:59.485 and I'll get your questions answered. 658 00:32:00.185 --> 00:32:05.035 Um, so 659 00:32:05.035 --> 00:32:06.035 that's the second bullet there. 660 00:32:06.455 --> 00:32:09.075 Um, we need to get the document through internal review. 661 00:32:09.075 --> 00:32:11.075 It's through one hoop. We, we need one more.

662 00:32:11.575 --> 00:32:13.715 And then we'll send a comment matrix out 663 00:32:13.715 --> 00:32:15.315 to stakeholders including you. 664 00:32:15.735 --> 00:32:17.755 And again, if you want to be one of the people 665 00:32:17.895 --> 00:32:21.395 who provides feedback on this document, identify yourself 666 00:32:21.395 --> 00:32:23.035 to me and, uh, let me know. 667 00:32:23.855 --> 00:32:26.795 And, uh, we'll, uh, try to get it to you for the, 668 00:32:26.975 --> 00:32:28.115 the, that review. 669 00:32:28.705 --> 00:32:31.715 It's not a rule make, it's not a rule, so it doesn't go 670 00:32:31.715 --> 00:32:32.875 through the rulemaking process, 671 00:32:33.575 --> 00:32:35.675 but we recognize that all of you 672 00:32:36.265 --> 00:32:38.955 have a stake in this document, so we want your feedback. 673 00:32:40.145 --> 00:32:41.245 Uh, so we're keeping the lines 674 00:32:41.245 --> 00:32:44.325 of communication open with that. 675 00:32:44.745 --> 00:32:47.725

Um, oh, and, uh, we're trying 676 00:32:47.725 --> 00:32:51.125 to get your feedback from applicants DERs, foreign eaas, 677 00:32:51.485 --> 00:32:54.565 military NTSB, anybody who feels like they, uh, 678 00:32:54.565 --> 00:32:58.085 they use this document and, and want an input on its future. 679 00:33:00.925 --> 00:33:03.265 Any questions? I'm way over. 680 00:33:04.335 --> 00:33:04.625 Yeah, 681 00:33:09.045 --> 00:33:10.185 I'm getting this back on time. 682 00:33:20.595 --> 00:33:23.505 Thank you. So I have a question for you. 683 00:33:23.605 --> 00:33:24.945 One of your slides, you talked about 684 00:33:25.055 --> 00:33:26.345 risk of lack of currency. 685 00:33:27.045 --> 00:33:30.145 Yes. And you have an interface with Air 800. Yes. 686 00:33:30.165 --> 00:33:32.745 So when you're talking to them, can you request 687 00:33:32.745 --> 00:33:35.425 that we're allowed to use our flight test vehicles 688 00:33:35.485 --> 00:33:36.545 for currency?

689 00:33:37.545 --> 00:33:39.225 'cause as it is right now, the, the, 690 00:33:39.725 --> 00:33:43.585 the experimental tickets do not allow us 691 00:33:43.585 --> 00:33:45.345 to fly over densely populated areas, 692 00:33:45.765 --> 00:33:47.825 nor does it allow us to do multiple takeoffs 693 00:33:47.825 --> 00:33:50.785 and landings if you read it black and white. 694 00:33:51.205 --> 00:33:55.065 And so it would be super helpful if we had that capability, 695 00:33:55.235 --> 00:33:57.105 especially if it's covered by our, uh, 696 00:33:57.105 --> 00:33:58.505 experimental operating procedures. 697 00:34:00.175 --> 00:34:03.625 Okay. Is that area 800, or is that flight standards? 698 00:34:04.545 --> 00:34:06.465 I thought it was a item. Okay. 699 00:34:11.985 --> 00:34:13.985 A second. He's right. Yeah, that's, 700 00:34:14.065 --> 00:34:17.185 I I can't chew bubble gum and walk either. So, yeah. 701 00:34:17.815 --> 00:34:21.825 Next, yeah, Addison, um, uh, the intent of the rev d 702 00:34:21.825 --> 00:34:24.665

of the, the, uh, the policy that's, it seems 703 00:34:24.665 --> 00:34:27.025 to be pretty clear on TIA specific testing 704 00:34:28.125 --> 00:34:32.665 and a formal process for the SSE event, um, to do that. 705 00:34:32.845 --> 00:34:35.785 Um, later in your presentation, you had one 706 00:34:35.785 --> 00:34:38.985 that was any other company flight testing and 707 00:34:39.205 --> 00:34:42.705 or anything leading up to CERT testing or TIA testing? 708 00:34:43.585 --> 00:34:47.705 I, I guess my question is around the intent in the, in the, 709 00:34:47.705 --> 00:34:48.985 uh, revision to the policy, 710 00:34:49.485 --> 00:34:53.065 is it you would use the formal process for those 711 00:34:53.685 --> 00:34:55.865 non TIA tests that lead up to it? 712 00:34:56.925 --> 00:34:59.145 Or would you leverage your relationship? 713 00:34:59.295 --> 00:35:00.745 Well, I mean, we're fortunate, uh, 714 00:35:00.745 --> 00:35:04.185 where we are Textron Aviation, we have, we have local, um, 715 00:35:04.915 --> 00:35:07.505 pilot FA representative close relationship.

716 00:35:07.905 --> 00:35:09.705 I think they, they may tell me we don't, 717 00:35:09.765 --> 00:35:11.225 but, uh, they, uh, 718 00:35:11.345 --> 00:35:13.345 I think we have a pretty good relationship with them. 719 00:35:14.485 --> 00:35:17.865 So we do an informal, um, uh, disclosure, 720 00:35:17.865 --> 00:35:19.225 definitely if we have issues. 721 00:35:19.845 --> 00:35:22.265 But do you think the intent is to capture 722 00:35:23.005 --> 00:35:26.825 all the events leading up to TIA with this formal process? 723 00:35:27.605 --> 00:35:29.425 You mean the safety events? Yeah. 724 00:35:30.575 --> 00:35:34.145 Well, um, the intent is to inform your, 725 00:35:34.335 --> 00:35:37.205 your FAA crew members that are gonna be on the aircraft 726 00:35:37.275 --> 00:35:41.685 with you of things that they may need to know 727 00:35:42.225 --> 00:35:45.045 in order to ensure a safe outcome of the flight. 728 00:35:45.265 --> 00:35:49.405 So if you've been having an issue with, you know, 729 00:35:50.115 --> 00:35:51.445

hydraulic leak or something, 730 00:35:51.545 --> 00:35:53.685 and you think that it may happen again on a, 731 00:35:53.685 --> 00:35:57.005 on the cert flight, let us know if 732 00:35:57.825 --> 00:36:00.445 you think you've got that thing taken care of 733 00:36:00.625 --> 00:36:02.325 and you don't think you're ever gonna see it again. 7.34 00:36:03.895 --> 00:36:06.125 Funny things happen on certification flights 735 00:36:06.125 --> 00:36:07.165 with the FAM board. 736 00:36:07.785 --> 00:36:10.685 Um, we, I can't tell you how many times we've heard, 737 00:36:10.995 --> 00:36:12.205 I've never seen it do that before. 738 00:36:13.345 --> 00:36:16.685 Um, and we understand that it's, it is, 739 00:36:16.685 --> 00:36:18.365 you're still in the infant mortality stage 740 00:36:18.365 --> 00:36:19.645 and weird things still happen. 741 00:36:19.745 --> 00:36:23.005 But I would say that if you think something has happened 742 00:36:23.065 -> 00:36:25.005and you think it can happen again, let us know.

743 00:36:25.025 --> 00:36:26.885 That's kind of the bottom line is to, 744 00:36:27.225 --> 00:36:30.405 to make us a more prepared, uh, more informed 745 00:36:30.995 --> 00:36:32.725 crew member who's going 746 00:36:32.945 --> 00:36:35.485 to be involved in the safety of that operation. 747 00:36:35.585 --> 00:36:39.245 So that's the intent. Yeah. Chris? 748 00:36:39.355 --> 00:36:41.445 Yeah. Uh, good presentation. Thank you. 749 00:36:42.025 --> 00:36:46.685 Um, one thing I kind of a dream world, uh, request here, 750 00:36:46.745 --> 00:36:48.365 but if the first paragraph 751 00:36:48.365 --> 00:36:52.365 of 40 40 26 says this, compliance 752 00:36:52.365 --> 00:36:55.605 with this document is an alternate means of compliance 753 00:36:55.605 --> 00:36:57.805 with part five SMS requirements 754 00:36:57.805 --> 00:36:59.245 for flight test organizations. 755 00:37:00.185 --> 00:37:02.165 If you don't ask for it, you don't get it, that 756 00:37:02.195 --> 00:37:03.325

that would be a request. 757 00:37:03.325 --> 00:37:07.645 Because there, there, it putting in a sms in a corporate, 758 00:37:07.795 --> 00:37:11.405 there's a lot of different organizations that have pieces 759 00:37:11.545 --> 00:37:14.685 of SMS approvals, uh, the CMS for example, 760 00:37:14.905 --> 00:37:16.045 for the whole organization. 761 00:37:16.545 --> 00:37:21.325 Uh, if that's not possible, then I would, uh, request 762 00:37:21.325 --> 00:37:25.885 that you consider mapping 40 40 26 to part five. 763 00:37:26.665 --> 00:37:29.325 It says this paragraph meets the requirements 764 00:37:29.325 --> 00:37:31.165 of 5.71 or whatever. 765 00:37:31.835 --> 00:37:33.325 That would be my, my second choice. 766 00:37:33.345 --> 00:37:36.565 But I think making an an AMOC would be the, the, 767 00:37:36.585 --> 00:37:37.725 the ideal solution. 768 00:37:38.525 --> 00:37:39.685 I, it's a, a big ask. 769 00:37:40.115 --> 00:37:43.365 Yeah. And it would need more to be an amoc that the,

770 00:37:43.425 --> 00:37:47.485 the other three, um, pillars of, uh, 771 00:37:47.485 --> 00:37:50.885 of an SMS are, are kind of addressed in 772 00:37:50.885 --> 00:37:52.165 that new SMS chapter three. 773 00:37:52.185 --> 00:37:55.405 But there's nothing, there's no regulatory like, hook 774 00:37:55.425 --> 00:37:57.405 or anything that, that does that. But 775 00:37:57.795 --> 00:37:58.845 Yeah, there's, there's six you 776 00:37:58.845 --> 00:37:59.845 Could evolve to that. There's 777 00:37:59.845 --> 00:38:01.885 six parts of the, um, part five, 778 00:38:01.885 --> 00:38:04.005 there's six sub parts of part five. 779 00:38:04.505 --> 00:38:07.605 And the way we're doing it at Cirrus right now is we're 780 00:38:07.605 --> 00:38:10.685 taking the safety risk management part, subpart three 781 00:38:11.065 --> 00:38:14.765 and safety Assurance, and integrating that into flight test. 782 00:38:15.105 --> 00:38:16.805 And everything else is at the corporate level, 783 00:38:16.805 --> 00:38:18.125

safety policy, et cetera. 784 00:38:18.125 --> 00:38:20.605 Mm-hmm. Record. But those two parts were 785 00:38:21.605 --> 00:38:26.205 specifically identifying using 40 40 26 to comply with it. 786 00:38:26.265 --> 00:38:29.205 For those two parts, it maybe just go, this will meet the, 787 00:38:29.425 --> 00:38:30.485 uh, SRM 788 00:38:30.485 --> 00:38:33.245 and S safety assurance parts of part five, 789 00:38:33.755 --> 00:38:36.805 that would be a dramatic reduction in the complexity 790 00:38:37.225 --> 00:38:40.045 of oversight and give great clarity 791 00:38:40.065 --> 00:38:41.445 and focus to what really needs 792 00:38:41.445 --> 00:38:43.005 to be focused on in the flight test. 793 00:38:43.245 --> 00:38:44.245 SMS 794 00:38:44.905 --> 00:38:45.905 Thanks. 795 00:38:47.905 --> 00:38:50.605 Hey Edison. Uh, one question on the, the 796 00:38:51.565 --> 00:38:53.845 signature authority on the, on the TIA form

797 00:38:53.865 --> 00:38:55.165 for the, uh, RM approval. 798 00:38:55.415 --> 00:38:58.245 You'd mentioned Otis can sign them when they're ODA manual. 799 00:38:58.305 --> 00:39:01.125 Has it, is that equally applicable if there's gonna be FA, 800 00:39:01.165 --> 00:39:03.525 a crew members on board, or if it's an FA witness 801 00:39:03.625 --> 00:39:05.445 or an FAA participated test? 802 00:39:05.915 --> 00:39:08.245 Does the FAA flight test branch manager still have 803 00:39:08.245 --> 00:39:12.205 to ultimately be the risk accepter when your, uh, uh, 804 00:39:12.315 --> 00:39:15.125 your people are on the aircraft as well? We 805 00:39:15.125 --> 00:39:17.125 Have, we have an alternate means 806 00:39:17.225 --> 00:39:18.925 of accepting the risk for our people. 807 00:39:18.985 --> 00:39:22.245 We have our, our flight authorization is our, our vehicle 808 00:39:22.425 --> 00:39:26.165 for actually accepting for a manager accepting the risk of 809 00:39:26.165 --> 00:39:27.765 that person getting on that aircraft. 810 00:39:28.665 --> 00:39:32.605

So if you, if an ODA signs the risk acceptance block, 811 00:39:33.875 --> 00:39:36.685 then we would, uh, talk about 812 00:39:36.685 --> 00:39:37.965 that in our flight authorization 813 00:39:38.225 --> 00:39:40.325 and make sure that that risk is being accepted there. 814 00:39:41.105 --> 00:39:42.805 So yes, there's a way to do that. Okay. 815 00:39:43.075 --> 00:39:45.045 It's in that flow chart. Yes. 816 00:39:45.075 --> 00:39:47.445 It's in the flow chart that I should showed for a second. 817 00:39:54.105 --> 00:39:55.525 Uh, question from ignorance. 818 00:39:56.025 --> 00:39:59.405 How does this apply to unmanned remotely piloted vehicles 819 00:39:59.405 --> 00:40:00.445 or autonomous vehicles? 820 00:40:02.145 --> 00:40:06.405 Um, if you're not 821 00:40:06.815 --> 00:40:11.605 under part, I'm, I'm, uh, 822 00:40:11.945 --> 00:40:16.005 I'm interpreting part five from not as an expert level. 823 00:40:16.665 --> 00:40:18.765 So anybody in the room, correct me if I'm wrong,

824 00:40:18.985 --> 00:40:20.125 but if you're not gonna be, 825 00:40:20.785 --> 00:40:23.565 if you're not gonna have a production C certificate 826 00:40:23.565 --> 00:40:25.485 and a type certificate under part 21, 827 00:40:25.665 --> 00:40:26.845 it doesn't apply to you. 828 00:40:30.635 --> 00:40:32.605 Anybody understand that differently? 829 00:40:34.635 --> 00:40:36.525 Okay. Yeah. 830 00:40:37.785 --> 00:40:39.365 Thanks for the update. Sure. 831 00:40:39.385 --> 00:40:40.965 Always welcome, uh, to hear the latest. 832 00:40:41.705 --> 00:40:44.965 Hey, um, on the acceptance of the rm, uh, bullet three, 833 00:40:44.985 --> 00:40:46.685 it talked about, uh, there was a requirement 8.34 00:40:46.685 --> 00:40:48.445 to have the history of TIA, 835 00:40:49.265 --> 00:40:50.265 Uh, Yeah. Engagement with 836 00:40:50.265 --> 00:40:51.725 RM before we can get the 837 00:40:51.775 --> 00:40:53.605

acceptance. So is there a, 838 00:40:53.805 --> 00:40:57.045 A way to, so we'd wanna, we'd wanna see you run 839 00:40:57.045 --> 00:40:58.285 through the whole process, 840 00:40:58.425 --> 00:41:01.605 the whole risk management process, a, a, a number of times 841 00:41:01.865 --> 00:41:05.285 before we would accept your RM process. 842 00:41:05.505 --> 00:41:08.085 We can't just out of the gate, you know, 843 00:41:08.855 --> 00:41:11.285 blind not having seen you do it at all. 844 00:41:12.465 --> 00:41:13.965 That's, we don't really have a basis 845 00:41:14.065 --> 00:41:15.725 for accepting your process at that point. 846 00:41:16.065 --> 00:41:17.005 So we'll work with you and then 847 00:41:17.005 --> 00:41:17.845 we'll work on getting accepted. 848 00:41:17.895 --> 00:41:18.895 Right. Got it. 849 00:41:23.025 --> 00:41:26.125 All right. I think I'm, uh, being ushered off here. 850 00:41:26.785 --> 00:41:30.165 Thanks everybody. And, uh, watch out for those snowblowers. 851 00:41:39.665 --> 00:41:42.005 All right. We'll just, uh, give a chance for the, just 852 00:41:42.005 --> 00:41:43.725 to get, kind of get bathroom break, fill up your drinks. 853 00:41:43.775 --> 00:41:47.165 Let's start at right at 1240. Okay. So 1240, we'll still.