

WEBVTT

1

00:00:01.200 --> 00:00:04.900

Thank you. Turbo Glen bill and

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00:00:04.900 --> 00:00:07.400

the flight test Safety Committee for the

3

00:00:07.400 --> 00:00:09.100

opportunity to present this morning.

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00:00:10.700 --> 00:00:13.400

After spending 15 years in the Royal Australian Air

5

00:00:13.400 --> 00:00:16.000

Force and 14 years in the airline industry.

6

00:00:16.900 --> 00:00:20.200

I am absolutely convinced that organizational culture

7

00:00:19.200 --> 00:00:22.600

plays an absolutely crucial role in

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00:00:22.600 --> 00:00:23.500

flight test safety.

9

00:00:24.900 --> 00:00:26.700

When I read about the theme for this Workshop.

10

00:00:27.600 --> 00:00:30.400

The quote culture eats strategy for breakfast

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00:00:30.400 --> 00:00:32.400

immediately sprang to mind.

12

00:00:34.300 --> 00:00:37.700

When I first heard this quote several years ago. It really resonated

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00:00:37.700 --> 00:00:38.100

with me.

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00:00:39.100 --> 00:00:43.500

It is widely attributed to Peter Drucker and austrian-american Management

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00:00:43.500 --> 00:00:46.000

Consultant educator and author.

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00:00:47.100 --> 00:00:50.700

He was implying that the culture of any organization is a

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00:00:50.700 --> 00:00:53.700

greater determinant of success or failure than

18

00:00:53.700 --> 00:00:56.200

the strategy that you employ to achieve your aims.

19

00:00:57.100 --> 00:00:57.800

culture happens

20

00:00:58.800 --> 00:01:00.100

whether or not you're aware of it.

21

00:01:01.400 --> 00:01:04.200

It is reflected in our values and our actions.

22

00:01:05.500 --> 00:01:08.800

While an effective strategy is always required

23

00:01:08.800 --> 00:01:11.100

to determine the direction and focus of your organization.

24

00:01:12.400 --> 00:01:15.400

Culture may be considered the ecosystem in which that

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00:01:15.400 --> 00:01:16.800

strategy will live or die.

26

00:01:19.400 --> 00:01:23.800

Now in the interests of sharing and collaboration,

27

00:01:22.800 --> 00:01:25.100

I've been authorized by

28

00:01:25.100 --> 00:01:28.400

the higher-ups in Australia to share some very sensitive imagery

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00:01:28.400 --> 00:01:31.100

that was taken during a recent air to air refueling trial.

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00:01:31.100 --> 00:01:34.400

I would ask that you please don't let these images go outside

31

00:01:34.400 --> 00:01:35.300

of these four walls.

32

00:01:37.200 --> 00:01:39.800

And of course the X-Wing Fighter also got certified.

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00:01:43.200 --> 00:01:46.000

We could do a separate Symposium on the organizational culture of

34

00:01:46.300 --> 00:01:46.800

the Death Star I guess.

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00:01:52.200 --> 00:01:55.300

This morning. I'll review some flight test safety risks that are specific

36

00:01:55.300 --> 00:01:57.900

to the provision of flight test training.

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00:01:58.900 --> 00:02:01.900

I'll identify some positive cultural traits that promote

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00:02:01.900 --> 00:02:03.200

a positive safety culture.

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00:02:04.500 --> 00:02:08.200

Share the results of the audit. We commissioned in late 2021.

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00:02:09.200 --> 00:02:12.300

And provide some examples of the impact that our safety

41
00:02:12.300 --> 00:02:15.100
culture is having on operations at itps.

42
00:02:19.000 --> 00:02:19.300
now

43
00:02:22.200 --> 00:02:25.700
safety policies and Safety Management systems are typically organized at

44
00:02:25.700 --> 00:02:29.000
zero knots and 1G at a desk. However, they

45
00:02:28.200 --> 00:02:31.300
should all be designed first and foremost.

46
00:02:32.200 --> 00:02:33.200
with the mission in mind

47
00:02:35.200 --> 00:02:36.100
at itps

48
00:02:37.200 --> 00:02:40.500
our mission is the safe and effective provision of world-class flight

49
00:02:40.500 --> 00:02:43.600
test training bio instructors for our

50
00:02:43.600 --> 00:02:43.700
students.

51
00:02:47.100 --> 00:02:50.500
So what are some of the unique risk factors that affect a

52
00:02:50.500 --> 00:02:51.700
flight test training organization?

53
00:02:54.700 --> 00:02:57.400
There are several that are particularly relevant. I believe

54
00:02:57.400 --> 00:02:59.200

to conducting flight test training.

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00:03:00.300 --> 00:03:03.600

Providing the level of training that's necessary to graduate

56

00:03:03.600 --> 00:03:05.200

competent flight test professionals.

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00:03:06.600 --> 00:03:09.800

Requires unique aircrafts specific flight test exercises

58

00:03:09.800 --> 00:03:12.500

to be developed and validated and delivered

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00:03:12.500 --> 00:03:13.900

on a repetitive basis.

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00:03:15.400 --> 00:03:17.400

Exercises such as spin testing.

61

00:03:18.200 --> 00:03:21.800

climbing descent performance and engine in-flight

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00:03:21.800 --> 00:03:23.100

shutdowns and relights

63

00:03:24.400 --> 00:03:28.000

will impart stresses on an aircraft that may be beyond that

64

00:03:27.200 --> 00:03:30.800

that was normally anticipated for in-service

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00:03:30.800 --> 00:03:31.100

life.

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00:03:33.300 --> 00:03:36.600

Merely following the manufacturers instructions for

67

00:03:36.600 --> 00:03:39.600

continued airworthiness may not be sufficient to

68

00:03:39.600 --> 00:03:41.400

ensure a safe operation.

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00:03:43.200 --> 00:03:47.100

Where necessary additional inspection schedules should

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00:03:46.100 --> 00:03:50.200

be should be implemented combined with

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00:03:50.200 --> 00:03:53.400

reduced inspection intervals for deeper level maintenance in order

72

00:03:53.400 --> 00:03:55.300

to assure continue to awareness.

73

00:03:57.500 --> 00:04:00.700

conducting Sawtooth climbs and descents as an example of

74

00:04:00.700 --> 00:04:02.300

a flight test exercise where

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00:04:03.700 --> 00:04:07.200

imposing more restrictive engine limitations may

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00:04:06.200 --> 00:04:09.500

be necessary in order to reduce wear

77

00:04:09.500 --> 00:04:11.000

and tear on critical engine components.

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00:04:11.900 --> 00:04:14.400

So leveling out between the Sawtooth climb

79

00:04:14.400 --> 00:04:17.900

and descent allowing a multi-engine propeller

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00:04:17.900 --> 00:04:20.700

aircraft to have critical engine components cool

81

00:04:20.700 --> 00:04:23.300

is definitely consideration for doing this type

82

00:04:23.300 --> 00:04:23.600
of training.

83

00:04:25.500 --> 00:04:28.500
Simulation allows students to be exposed

84

00:04:28.500 --> 00:04:31.800
to safety critical flight test regimes

85

00:04:31.800 --> 00:04:34.400
such as vmu and vmcg testing

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00:04:34.400 --> 00:04:37.300
that would typically require several months of buildup.

87

00:04:38.200 --> 00:04:41.400
And an inherent high level of risk, we can expose our

88

00:04:41.400 --> 00:04:45.200
students to these profiles using simulation in

89

00:04:44.200 --> 00:04:47.300
a safe and effective build-up manner.

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00:04:48.500 --> 00:04:51.700
The use of simulation to support flight test training could

91

00:04:51.700 --> 00:04:54.000
be the topic of a separate Workshop.

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00:04:55.900 --> 00:04:58.400
Our students and instructors come from a wide variety of

93

00:04:58.400 --> 00:05:01.800
countries backgrounds and

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00:05:01.800 --> 00:05:03.800
levels of English language proficiency.

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00:05:04.900 --> 00:05:07.200

It is not unusual for itps to

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00:05:07.200 --> 00:05:10.400

have students from 10 different countries. Undertaking courses

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00:05:10.400 --> 00:05:11.600

simultaneously.

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00:05:13.600 --> 00:05:16.900

A particular risk that we have noted at itps is

99

00:05:16.900 --> 00:05:20.100

having students with a fastjet background being

100

00:05:19.100 --> 00:05:22.600

exposed to flight test exercises on

101

00:05:22.600 --> 00:05:25.800

single-engine and multi-engine propeller aircraft. And

102

00:05:25.800 --> 00:05:28.400

this is a risk that needs to be actively managed.

103

00:05:30.500 --> 00:05:33.800

Managing the training environment to balance the learning objectives.

104

00:05:34.700 --> 00:05:37.800

Against maintaining adequate safety margins requires an

105

00:05:37.800 --> 00:05:41.200

intimate understanding of each student's competencies skills

106

00:05:40.200 --> 00:05:41.800

and background.

107

00:05:43.700 --> 00:05:46.400

The airspace we use for flight test training around

108

00:05:46.400 --> 00:05:48.200

our home Port of London, Ontario.

109

00:05:49.600 --> 00:05:52.400

Particularly within the five nautical mile control zone is

110

00:05:52.400 --> 00:05:53.300

extremely busy.

111

00:05:54.900 --> 00:05:57.500

We lack the luxury of exclusive use airspace

112

00:05:57.500 --> 00:06:00.300

and often find ourselves undergoing flight test

113

00:06:00.300 --> 00:06:03.300

exercises and sharing airspace with light

114

00:06:03.300 --> 00:06:06.700

aircraft without adsb or transponder capability.

115

00:06:08.400 --> 00:06:11.600

London Airport apart from being our homes home to

116

00:06:11.600 --> 00:06:14.500

our school is also home to a diamond aircraft

117

00:06:14.500 --> 00:06:18.100

Factory a civil aircraft light aircraft

118

00:06:17.100 --> 00:06:20.600

training school and executive Aviation

119

00:06:20.600 --> 00:06:23.700

Hangar and regular public transport and

120

00:06:23.700 --> 00:06:24.800

Aero Medical Services.

121

00:06:26.500 --> 00:06:29.700

London ITC staff are not necessarily well versed

122
00:06:29.700 --> 00:06:32.400
in fast jet operations particularly fast jet

123
00:06:32.400 --> 00:06:34.500
formation operations more on this later.

124
00:06:35.600 --> 00:06:37.200
One of the unresolved issues we face.

125
00:06:38.400 --> 00:06:40.600
In Canada is our school's regulatory status.

126
00:06:41.400 --> 00:06:42.800
in the eyes of Transport, Canada

127
00:06:43.500 --> 00:06:46.500
The question really boils down to this does Transport

128
00:06:46.500 --> 00:06:49.200
Canada consider flight test training to be

129
00:06:49.200 --> 00:06:50.000
flight testing.

130
00:06:51.200 --> 00:06:53.700
The answer at the moment is a resounding Maybe.

131
00:06:56.400 --> 00:06:57.600
If the answer was yes.

132
00:06:58.300 --> 00:07:01.600
Then our operations would fall under regulations pertaining to type
design

133
00:07:01.600 --> 00:07:03.200
and approval modification activities.

134
00:07:05.600 --> 00:07:05.900
however

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00:07:06.800 --> 00:07:09.400

In the absence of a regulatory framework specific to

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00:07:09.400 --> 00:07:12.500

flight test training. We are currently considered a private operation

137

00:07:12.500 --> 00:07:15.400

under cr604 with work underway

138

00:07:15.400 --> 00:07:18.800

to reclassify us as a car 702 operation

139

00:07:18.800 --> 00:07:20.600

which pertains to Aerial Work

140

00:07:22.200 --> 00:07:25.600

now neither classification adequately addresses the unique aspects

141

00:07:25.600 --> 00:07:28.200

of our operation and our inappropriate in our

142

00:07:28.200 --> 00:07:28.600

opinion.

143

00:07:29.400 --> 00:07:32.500

To further the money of the waters. We're also in ASA

144

00:07:32.500 --> 00:07:33.500

approved training organization.

145

00:07:34.700 --> 00:07:37.300

He asked it does consider flight test training as being

146

00:07:37.300 --> 00:07:38.300

equivalent to flight test.

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00:07:39.300 --> 00:07:42.300

We fully agree and our safety management system has

148

00:07:42.300 --> 00:07:45.100

been designed with this principle first and foremost in mind.

149

00:07:46.200 --> 00:07:49.700

Nevertheless the fundamental conflict between Transport Canada

150

00:07:49.700 --> 00:07:52.500

and diaspora regarding the rules governing

151

00:07:52.500 --> 00:07:55.300

our school remain largely unresolved.

152

00:08:01.500 --> 00:08:04.800

So in a hypothetical perfect organization what cultural

153

00:08:04.800 --> 00:08:07.100

traits would help ensure the safe and

154

00:08:07.100 --> 00:08:09.000

effective delivery of flight test training.

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00:08:10.700 --> 00:08:13.300

What I'll talk about the list is not by no means exhaustive.

156

00:08:14.200 --> 00:08:17.100

Rather it should be considered an aspirational list that would

157

00:08:17.100 --> 00:08:18.800

engender a positive safety culture.

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00:08:20.400 --> 00:08:23.100

Accountability at the very top of the organization is a

159

00:08:23.100 --> 00:08:26.200

fundamental prerequisite for any positive safety culture.

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00:08:27.100 --> 00:08:30.400

The CEO or equivalent must own the safety management system

161

00:08:30.400 --> 00:08:31.900

as accountable manager.

162

00:08:32.600 --> 00:08:35.500

It is inappropriate to delegate this accountability

163

00:08:35.500 --> 00:08:37.300

to the safety manager post-holder.

164

00:08:38.200 --> 00:08:42.600

Responsibility and accountability must be clearly distinguished delineated

165

00:08:41.600 --> 00:08:44.300

and defined within the organization.

166

00:08:46.500 --> 00:08:49.600

Each member of the organization must understand and abide

167

00:08:49.600 --> 00:08:52.900

by the safety management system policies and procedures in

168

00:08:52.900 --> 00:08:54.200

order for them to be truly effective.

169

00:08:55.600 --> 00:08:59.300

For a test pilot school an environment must be fostered where

170

00:08:58.300 --> 00:09:01.400

staff and students alike. A keenly

171

00:09:01.400 --> 00:09:04.600

aware that they are integral to the safety of the

172

00:09:04.600 --> 00:09:05.000

organization.

173

00:09:06.300 --> 00:09:08.200

Whilst the leadership team sets the standard.

174

00:09:09.100 --> 00:09:12.500

Each person within the organization must understand and own their

175

00:09:12.500 --> 00:09:15.500

responsibilities within the safety management system for

176

00:09:15.500 --> 00:09:16.400

it to be truly effective.

177

00:09:18.900 --> 00:09:21.300

Adjust reporting culture empowers team

178

00:09:21.300 --> 00:09:25.500

members to openly share honest mistakes lapses deviations

179

00:09:24.500 --> 00:09:27.100

and errors that are made

180

00:09:27.100 --> 00:09:27.900

in day-to-day operations.

181

00:09:29.200 --> 00:09:31.900

In the interests of preventing others from relearning the same lessons.

182

00:09:33.300 --> 00:09:35.900

All members of your flight test organization need to be confident.

183

00:09:36.700 --> 00:09:39.800

That safety reports may be submitted accepted.

184

00:09:40.600 --> 00:09:43.500

And shared in the spirit without fear of judgment or

185

00:09:43.500 --> 00:09:44.100

repercussion.

186

00:09:46.200 --> 00:09:49.500

Whilst it just reporting culture is fundamental to a

187

00:09:49.500 --> 00:09:52.300

positive safety culture. It is equally important to Define what

188

00:09:52.300 --> 00:09:52.800

it is not.

189

00:09:53.700 --> 00:09:56.200

It is not a get out of jail free card.

190

00:09:57.100 --> 00:10:00.900

Whilst an organization safety policy must be considered an aspirational statement.

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00:10:01.800 --> 00:10:04.200

The organization's culture the way the leadership

192

00:10:04.200 --> 00:10:07.900

team accepts an acts on safety reports. We'll define

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00:10:07.900 --> 00:10:10.900

whether or not the reporting culture is indeed. Just

194

00:10:12.500 --> 00:10:15.600

Walking the talk refers to the fact that it's insufficient

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00:10:15.600 --> 00:10:18.200

to Safe simply state in a frame on a

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00:10:18.200 --> 00:10:21.500

wall that safety is Paramount to your organization meaningful action

197

00:10:21.500 --> 00:10:24.200

must be taken to demonstrate your commitment.

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00:10:25.200 --> 00:10:28.200

The fact that I'm here today presenting at this Workshop.

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00:10:29.300 --> 00:10:32.900

Is clear evidence that our leadership team values workshops such

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00:10:32.900 --> 00:10:33.300

as these?

201

00:10:34.400 --> 00:10:37.500

I've been taken out of a week of instructional duties

202

00:10:37.500 --> 00:10:40.500
lectures simulators at a

203
00:10:40.500 --> 00:10:43.700
time. That's extremely busy for the flight tests training organization as

204
00:10:43.700 --> 00:10:44.900
others here would attest.

205
00:10:45.900 --> 00:10:48.700
my organization of value values

206
00:10:49.300 --> 00:10:50.500
workshops such as these

207
00:10:51.500 --> 00:10:54.300
positive safety culture requires a meaningful commitment

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00:10:54.300 --> 00:10:56.900
of time money and resources

209
00:10:58.400 --> 00:11:01.300
a growth mindset requires the willingness to

210
00:11:01.300 --> 00:11:04.700
own and learn from your mistakes both individually and

211
00:11:04.700 --> 00:11:05.300
collectively

212
00:11:06.200 --> 00:11:09.100
new ideas must be actively sought and encouraged from

213
00:11:09.100 --> 00:11:09.800
the leadership team.

214
00:11:11.100 --> 00:11:14.800
So, how can you determine objectively whether you're organization
exhibits?

215
00:11:15.600 --> 00:11:17.500

And you're all of these positive cultural traits.

216

00:11:18.600 --> 00:11:21.400

Asking ourselves is very question itbs decided

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00:11:21.400 --> 00:11:23.900

to commission an audit in late 2021.

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00:11:27.700 --> 00:11:30.300

One of the drivers between behind our safety initiative was

219

00:11:30.300 --> 00:11:33.900

the recognition that SMS has implemented under Transport

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00:11:33.900 --> 00:11:36.800

Canada, and he asked regulations was essentially

221

00:11:36.800 --> 00:11:39.300

aimed at organizations like Airlines and flying schools.

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00:11:40.300 --> 00:11:43.600

Audits are mostly conducted by non-flight test agency personnel.

223

00:11:44.500 --> 00:11:47.300

As a flight test organization and school of flight testing.

224

00:11:48.200 --> 00:11:52.300

Having successfully passed a number of audits by both organizations it

225

00:11:51.300 --> 00:11:54.600

became apparent that specific issues pertaining

226

00:11:54.600 --> 00:11:57.500

to flight test operations and training were not adequately captured or

227

00:11:57.500 --> 00:11:58.000

scrutinized.

228

00:11:59.200 --> 00:12:02.100

At leadership team felt that outside flight test expertise.

229

00:12:02.800 --> 00:12:05.600

With a focus on Safety Management was required in

230

00:12:05.600 --> 00:12:07.600

order to have a meaningful external audit.

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00:12:09.500 --> 00:12:11.900

over one week in November 2021

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00:12:12.800 --> 00:12:14.900

19 interviews were conducted across the school

233

00:12:15.800 --> 00:12:18.400

By an audit team several members of whom are

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00:12:18.400 --> 00:12:21.400

sitting in this room and we're facilitating yesterday. Right and Terry they

235

00:12:21.400 --> 00:12:21.900

were down there.

236

00:12:22.500 --> 00:12:25.400

For five days in November. So if I say anything that's untrue.

237

00:12:25.400 --> 00:12:27.300

I'm sure they'll debrief me appropriately afterwards.

238

00:12:28.400 --> 00:12:31.700

19 interviews were conducted day-to-day procedures

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00:12:31.700 --> 00:12:34.800

were observed including lectures simulated sessions

240

00:12:34.800 --> 00:12:37.300

and Flight Training briefs and

241

00:12:37.300 --> 00:12:37.800

debriefs.

242

00:12:38.700 --> 00:12:41.500

and Anonymous safety culture questionnaire was

243

00:12:42.600 --> 00:12:45.800

disseminated by the audit team and they received

244

00:12:45.800 --> 00:12:48.700

74 responses from our school which in

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00:12:48.700 --> 00:12:50.500

itself was considered an extremely positive result.

246

00:12:52.300 --> 00:12:55.800

The audit team members each told relevant qualifications competencies and

247

00:12:55.800 --> 00:12:58.600

distinguished backgrounds in flight test and were

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00:12:58.600 --> 00:13:01.100

considered to be subject matter experts in the field.

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00:13:05.900 --> 00:13:08.500

The audit was conducted in accordance with internationally recognized

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00:13:08.500 --> 00:13:11.300

standards and FAA order 4040 and

251

00:13:11.300 --> 00:13:15.100

we use 26b which was current at the time was pertaining

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00:13:14.100 --> 00:13:17.100

specifically to flight test organizations.

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00:13:20.800 --> 00:13:23.400

The order was focused on the provision of flight test training across

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00:13:23.400 --> 00:13:24.100

all departments.

255

00:13:25.100 --> 00:13:28.300

The objectives were to evaluate the itps safety program

256

00:13:28.300 --> 00:13:29.800
against known standards.

257

00:13:30.500 --> 00:13:33.200
Observe and upset our observe and

258

00:13:33.200 --> 00:13:36.400
assess our adherence to recommended practices and internal requirements.

259

00:13:38.100 --> 00:13:41.100
cyst and identify any deficiencies via a

260

00:13:41.100 --> 00:13:41.600
gap analysis

261

00:13:42.600 --> 00:13:45.200
assess the appropriateness and effectiveness of our safety

262

00:13:45.200 --> 00:13:48.300
management system and to recommend improvements to

263

00:13:48.300 --> 00:13:49.100
the safety program.

264

00:13:51.100 --> 00:13:52.300
So, how do we do?

265

00:13:53.300 --> 00:13:54.300
I'll start with the goods.

266

00:13:55.200 --> 00:13:58.700
I have focused on some of the positive cultural aspects that were
identified

267

00:13:58.700 --> 00:13:59.600
by the audit team.

268

00:14:00.200 --> 00:14:03.500
There were other positive findings that were in the executive out brief

269

00:14:03.500 --> 00:14:06.300

that were outside the scope of culture, so I haven't included them

270

00:14:06.300 --> 00:14:06.900

in this brief.

271

00:14:08.200 --> 00:14:11.700

The audit team observed a strong management commitment to safety as evidenced

272

00:14:11.700 --> 00:14:14.300

by our willingness to request an undergo an

273

00:14:14.300 --> 00:14:15.000

external audit.

274

00:14:16.100 --> 00:14:19.600

And that was in addition to the regulatory scheduled audits with Transport,

275

00:14:19.600 --> 00:14:19.800

Canada.

276

00:14:21.200 --> 00:14:24.300

I'll touch on the safety culture quite questionnaire in

277

00:14:24.300 --> 00:14:24.600

a little moment.

278

00:14:25.400 --> 00:14:28.400

It was also apparent that staff and students acknowledge their role as

279

00:14:28.400 --> 00:14:30.500

stakeholders in the overall safety of the organization.

280

00:14:31.800 --> 00:14:34.400

So so much for the goods in the interest of full

281

00:14:34.400 --> 00:14:37.700

disclosure. I'd like to share some of the learning lessons

282

00:14:37.700 --> 00:14:40.400

and areas where it was identified that we required

283

00:14:40.400 --> 00:14:42.200

Improvement and what we did about it.

284

00:14:43.400 --> 00:14:46.400

So partial compliance for safety assurance was related to

285

00:14:46.400 --> 00:14:49.400

our rollout last year of SMS software

286

00:14:49.400 --> 00:14:50.200

called Focus.

287

00:14:51.700 --> 00:14:54.400

Based on the audit findings. We were informed

288

00:14:54.400 --> 00:14:57.300

and and found out through some demonstrations that

289

00:14:57.300 --> 00:15:00.700

some features of our previous safety management system needed to

290

00:15:00.700 --> 00:15:03.100

be reinstated particularly our

291

00:15:04.100 --> 00:15:07.400

Legacy Safety performance record as Focus did

292

00:15:07.400 --> 00:15:12.100

not have a way of documenting And archiving erca

293

00:15:10.100 --> 00:15:13.700

compliance safety performance indicators

294

00:15:14.500 --> 00:15:16.200

So that action was taken as a priority.

295

00:15:17.300 --> 00:15:20.000

Since the audit results were shared there were many other findings. I'm not going

296

00:15:20.200 --> 00:15:24.000

to go in the details. I don't have the time but we did have several non-conformities

297

00:15:23.300 --> 00:15:26.900

and over 60% of those non-conformities have

298

00:15:26.900 --> 00:15:27.800

since been resolved.

299

00:15:29.200 --> 00:15:32.100

What findings were compiled by our safety manager into a gap

300

00:15:32.100 --> 00:15:35.500

analysis and they are tracked during our monthly safety meetings

301

00:15:35.500 --> 00:15:38.800

with responsible personnel and expected completion

302

00:15:38.800 --> 00:15:41.600

dates and actions required logged via

303

00:15:41.600 --> 00:15:43.500

a table and reviewed on a monthly basis.

304

00:15:45.100 --> 00:15:49.000

Another audit finding which was very helpful for us was feedback

305

00:15:48.400 --> 00:15:51.600

regarding the inadequacy of our emergency response plan.

306

00:15:52.700 --> 00:15:55.800

It was not fully compliance with information contained within

307

00:15:55.800 --> 00:15:57.600

the gain handbook which was discussed yesterday.

308

00:15:58.800 --> 00:16:01.500

Our Erp was subsequently updated in order

309

00:16:01.500 --> 00:16:04.100

to comply with the guidance within the

310

00:16:04.100 --> 00:16:07.700

gain handbook specifically our emergency response

311

00:16:07.700 --> 00:16:10.600

plan was divided into two parts Part One

312

00:16:10.600 --> 00:16:13.800

containing policy and procedures and part two containing

313

00:16:13.800 --> 00:16:16.400

a bench level instruction or checklist.

314

00:16:16.400 --> 00:16:19.300

That was to be used step by step in the event of

315

00:16:19.300 --> 00:16:19.700

an emergency.

316

00:16:20.600 --> 00:16:23.600

A drill was conducted in January using the new Erp.

317

00:16:24.900 --> 00:16:27.500

Along with that critical incident response training

318

00:16:27.500 --> 00:16:31.400

was recommended for us. Now. It's satp

319

00:16:30.400 --> 00:16:33.500

is conducting critical incident response training

320

00:16:33.500 --> 00:16:36.600

in June in Ottawa and my wife Becky and

321

00:16:36.600 --> 00:16:40.200

I have been allocated to go and attend that training. It's extremely

322

00:16:39.200 --> 00:16:42.400

important that it's done not just for the school, but

323

00:16:42.400 --> 00:16:45.500

for the families of the school members the

324

00:16:45.500 --> 00:16:48.100

staff and students alike who are often away from their

325

00:16:48.100 --> 00:16:51.000

home countries and may not have the support network. They're used to

326

00:16:51.200 --> 00:16:51.200

at home.

327

00:16:55.200 --> 00:16:58.600

So for the safety culture in terms of the questionnaire,

328

00:16:58.600 --> 00:17:01.300

we were really happy with the high

329

00:17:01.300 --> 00:17:04.200

return rate on the safety culture audit that

330

00:17:04.200 --> 00:17:05.200

was distributed by the team.

331

00:17:06.700 --> 00:17:08.000

So 74 completed surveys were submitted.

332

00:17:08.700 --> 00:17:11.600

By our team and every Department was surveyed

333

00:17:11.600 --> 00:17:14.600

and they all exhibited a high relative proportional

334

00:17:14.600 --> 00:17:15.600

survey return rate.

335

00:17:16.200 --> 00:17:17.200

So we received four.

336

00:17:18.100 --> 00:17:20.500

completed cultures from surveys from management

337

00:17:21.400 --> 00:17:24.400

student body submitted 13 14 from

338

00:17:24.400 --> 00:17:27.400

instructors 11 from maintenance and 10 from

339

00:17:27.400 --> 00:17:31.200

engineering the consistently High completion rate indicated

340

00:17:30.200 --> 00:17:33.200

strong employee and

341

00:17:33.200 --> 00:17:35.300

student engagement and a commitment to flight test safety.

342

00:17:39.900 --> 00:17:42.300

So to illustrate how culture can have a positive impact

343

00:17:42.300 --> 00:17:45.200

on an organization. I'd like to share a recent example

344

00:17:45.200 --> 00:17:47.400

from our school where we turn to negative into a positive.

345

00:17:48.700 --> 00:17:51.600

So kateaus are the civil aviation daily occurrence reporting

346

00:17:51.600 --> 00:17:51.900

system.

347

00:17:52.800 --> 00:17:55.600

And they're used by Transport Canada to report and

348

00:17:55.600 --> 00:17:58.800

track actual or potential safety incidents in the

349

00:17:58.800 --> 00:18:01.400
fourth quarter of 2021. We noticed an

350

00:18:01.400 --> 00:18:04.300
uptake tick in Kate or submitted

351

00:18:04.300 --> 00:18:07.300
for operations within our five nautical mile control

352

00:18:07.300 --> 00:18:07.700
Zone.

353

00:18:08.200 --> 00:18:11.700
Now some of those reports were submitted solely

354

00:18:11.700 --> 00:18:14.500
by Transport Canada, but on another positive note about our reporting

355

00:18:14.500 --> 00:18:17.400
culture more often than not the same incident was

356

00:18:17.400 --> 00:18:20.200
submitted by both the staff or student involved as well

357

00:18:20.200 --> 00:18:23.400
as London ATC, but it was quick clear to

358

00:18:23.400 --> 00:18:26.200
us that something needed to be done to address this issue.

359

00:18:27.500 --> 00:18:30.600
The uptick coincided with a period of intense flying that

360

00:18:30.600 --> 00:18:33.400
was trying to make up for covid related delays as well

361

00:18:33.400 --> 00:18:35.900
as the introduction of new staff myself included.

362

00:18:36.800 --> 00:18:39.200

So rather than attempt to minimize or ignore this

363

00:18:39.200 --> 00:18:41.300

trend we addressed it head-on.

364

00:18:42.600 --> 00:18:45.200

We got together in a room had a safety stand

365

00:18:45.200 --> 00:18:48.700

down and discussed the details of each incident not

366

00:18:48.700 --> 00:18:51.300

to assign blame but to get some more context and

367

00:18:51.300 --> 00:18:54.500

learn about if there were any underlying causal factors towards these

368

00:18:54.500 --> 00:18:55.000

incidents.

369

00:18:56.300 --> 00:18:59.200

It turned out that London ATC were also extremely

370

00:18:59.200 --> 00:19:03.200

busy at this time with their own covid related issues. And everyone

371

00:19:02.200 --> 00:19:05.100

else was also trying to make up for lost time

372

00:19:05.100 --> 00:19:05.500

at the school.

373

00:19:06.400 --> 00:19:09.600

So ATC were rushing instructions providing multiple

374

00:19:09.600 --> 00:19:12.800

instructions at in one transmission and for

375

00:19:12.800 --> 00:19:15.600

a lot of our students with English as a second language. It was

376
00:19:15.600 --> 00:19:18.900
simply too much for them. They are the misinterpreted the instructions

377
00:19:18.900 --> 00:19:22.200
or miss the instructional together. So based

378
00:19:21.200 --> 00:19:24.500
on the information gathered we developed a strategy to

379
00:19:24.500 --> 00:19:25.200
address the issue.

380
00:19:27.100 --> 00:19:30.800
After our meeting we engage with London ATC and we organized

381
00:19:30.800 --> 00:19:33.600
a school visit and then an informal meeting with

382
00:19:33.600 --> 00:19:36.400
our safety manager and some of our senior staff to discuss

383
00:19:36.400 --> 00:19:39.400
the details of the incident and try and work out and agreed way

384
00:19:39.400 --> 00:19:40.500
forward to resolve these issues.

385
00:19:42.300 --> 00:19:45.700
We assign priority to finishing jet operations

386
00:19:45.700 --> 00:19:48.500
procedures agreement that had been in draft for a number of months, which

387
00:19:48.500 --> 00:19:52.300
was a joint document between London ATC and itps defining

388
00:19:51.300 --> 00:19:54.000
the ways in which

389
00:19:54.100 --> 00:19:57.300

we would conduct fastjet formation operations, and that was completed in

390

00:19:57.300 --> 00:19:58.700

December 2021.

391

00:20:00.400 --> 00:20:04.100

We also provided additional training in VFR radio phraseology and

392

00:20:03.100 --> 00:20:06.300

we included that in our initial training package for our

393

00:20:06.300 --> 00:20:09.500

new students as well as ensuring that they all completed a

394

00:20:09.500 --> 00:20:12.300

Transport Canada radio telephony exam prior to

395

00:20:12.300 --> 00:20:13.400

commencing flight operations.

396

00:20:15.300 --> 00:20:18.500

London ATC has also undertaken to provide induction training

397

00:20:18.500 --> 00:20:20.000

to new students to

398

00:20:21.500 --> 00:20:24.200

educate them on the unique aspects of operations within our home Port.

399

00:20:26.300 --> 00:20:29.400

It wouldn't be a flight test presentation if I didn't provide some

400

00:20:29.400 --> 00:20:32.200

data, so one of

401

00:20:32.200 --> 00:20:32.300

the

402

00:20:33.600 --> 00:20:35.100

positives in terms of

403

00:20:36.300 --> 00:20:39.300

the impact that those actions had has been seen

404

00:20:39.300 --> 00:20:42.000

by the the rate of incidents submitted by

405

00:20:42.300 --> 00:20:45.300

either London ATC or by our students or staff

406

00:20:45.300 --> 00:20:47.000

dropping dramatically.

407

00:20:48.100 --> 00:20:51.400

So by way of context we flew about

408

00:20:51.400 --> 00:20:52.900

117 hours in

409

00:20:54.300 --> 00:20:57.700

was 125.9 hours in January 141 in

410

00:20:57.700 --> 00:21:01.000

February 177 in March and 146

411

00:21:00.300 --> 00:21:03.600

in April. So the actual incident rate per flying

412

00:21:03.600 --> 00:21:05.500

hour has also noticeably decreased.

413

00:21:06.300 --> 00:21:09.500

This is continually monitored during our monthly safety meetings.

414

00:21:10.400 --> 00:21:14.000

So through a culture of actively seeking feedback accountability at

415

00:21:13.300 --> 00:21:16.200

the highest level responsibility at all

416

00:21:16.200 --> 00:21:19.400

levels and engaging with stakeholders. We were able to turn a

417

00:21:19.400 --> 00:21:20.400

negative into a positive.

418

00:21:26.200 --> 00:21:29.300

Now spin testing in Southwest Ontario is not like spin testing

419

00:21:29.300 --> 00:21:32.500

in Australia. It's flat but the white stuff

420

00:21:32.500 --> 00:21:35.500

is snow not sand and it's pretty difficult to

421

00:21:35.500 --> 00:21:38.700

find Visual features to allow you to keep track

422

00:21:38.700 --> 00:21:39.500

of your spin rate.

423

00:21:40.500 --> 00:21:43.300

But if you substitute the snow for the sand you could be mistaken for

424

00:21:43.300 --> 00:21:46.200

thinking this is the warmer air weapons range down in South

425

00:21:46.200 --> 00:21:46.500

Australia.

426

00:21:48.100 --> 00:21:51.800

So spin testing spin Chase. These are two of the higher risk

427

00:21:51.800 --> 00:21:54.200

flight test exercises that we run our students

428

00:21:54.200 --> 00:21:55.600

through at itps.

429

00:21:56.700 --> 00:21:58.800

It's fundamental to any flight test program.

430

00:21:59.800 --> 00:22:02.500

And conducting this training on a regular basis places a

431

00:22:02.500 --> 00:22:04.600

strain on our aircraft Fleet that needs to be actively monitored.

432

00:22:05.600 --> 00:22:08.300

Furthermore the flights themselves must be developed and

433

00:22:08.300 --> 00:22:11.000

validated and provided to

434

00:22:11.100 --> 00:22:13.300

the students to balance safety.

435

00:22:14.500 --> 00:22:17.400

And exposure to various entry

436

00:22:17.400 --> 00:22:20.700

and Recovery techniques as well as honoring relevant AFM

437

00:22:20.700 --> 00:22:21.100

limitations.

438

00:22:23.200 --> 00:22:26.600

Incorrect or excessive control inputs during entry or

439

00:22:26.600 --> 00:22:29.000

recovery can have a severe strain on our aircraft Fleet.

440

00:22:30.500 --> 00:22:33.500

Our spin syllabus is currently conducted using our 129 and

441

00:22:33.500 --> 00:22:36.700

139 Fleet with specific risk management processes in

442

00:22:36.700 --> 00:22:36.800

place.

443

00:22:38.100 --> 00:22:41.600

Prior to conducting instruction on these events all

444

00:22:41.600 --> 00:22:44.400

the instructors undergo a standardized grounded flight test

445

00:22:44.400 --> 00:22:45.400

training syllabus.

446

00:22:46.700 --> 00:22:50.100

We've also managed to obtain the spin

447

00:22:49.100 --> 00:22:52.700

test reports from aerody who are

448

00:22:52.700 --> 00:22:55.600

the manufacturers of these aircraft and that's proven invaluable in allowing

449

00:22:55.600 --> 00:22:58.500

us to develop a safe and effective spin testing

450

00:22:58.500 --> 00:23:01.500

program. Our maintenance team was also consulted as

451

00:23:01.500 --> 00:23:03.300

essential stakeholders in this process.

452

00:23:04.500 --> 00:23:07.500

They have mandated some reduced inspection

453

00:23:07.500 --> 00:23:09.000

intervals particularly for the detail.

454

00:23:09.900 --> 00:23:12.500

On the 129 you can see how

455

00:23:12.500 --> 00:23:16.000

large that detail is. It can be subjected to specific stresses

456

00:23:15.500 --> 00:23:18.700

and everyone had 100 hours that elevator

457
00:23:18.700 --> 00:23:21.500
and stabilize a detail is completely removed from the aircraft

458
00:23:21.500 --> 00:23:24.500
deep level maintenance inspections are completed and Eddy

459
00:23:24.500 --> 00:23:27.500
current testing is completed in order to ensure continue their

460
00:23:27.500 --> 00:23:27.900
worthiness.

461
00:23:30.400 --> 00:23:31.300
so in conclusion

462
00:23:32.400 --> 00:23:35.800
organizational culture does and will always play a

463
00:23:35.800 --> 00:23:38.000
crucial factor in flight test safety.

464
00:23:39.800 --> 00:23:42.400
As a flight test training organization, we must act

465
00:23:42.400 --> 00:23:45.100
as custodians of the safety culture that we

466
00:23:45.100 --> 00:23:47.600
expect our graduates to take back to Industry.

467
00:23:48.900 --> 00:23:51.200
At itps we consider flight test training to

468
00:23:51.200 --> 00:23:52.300
be flight test.

469
00:23:53.500 --> 00:23:55.800
And this assumption drives our safety management system.

470

00:23:56.500 --> 00:23:59.200

Our risk assessment processes and the philosophy that

471

00:23:59.200 --> 00:24:00.200

we instill in our students.

472

00:24:01.200 --> 00:24:02.000

culture happens

473

00:24:02.800 --> 00:24:05.500

whether or not you realize it or nurture it.

474

00:24:06.700 --> 00:24:09.300

while strategy defines the direction and focus of your organization

475

00:24:11.400 --> 00:24:14.500

culture is the ecosystem in which that strategy will live

476

00:24:14.500 --> 00:24:14.700

or die.

477

00:24:15.600 --> 00:24:19.200

So to put another way culture eats

478

00:24:18.200 --> 00:24:19.900

strategy for breakfast.

479

00:24:21.900 --> 00:24:24.100

I'll open the floor to any questions. I think I've got

480

00:24:24.100 --> 00:24:26.000

30 seconds to go so they better be quick ones.