

1

00:00:00,000 --> 00:00:14,160

Tonight, one of the most chilling aviation mysteries in modern day.

2

00:00:14,160 --> 00:00:20,920

239 people vanish over the Indian Ocean without a trace.

3

00:00:20,920 --> 00:00:25,360

With not enough oxygen feeding the brain, people can't do the simplest things, let alone

4

00:00:25,360 --> 00:00:29,520

something as complicated as piloting a commercial aircraft.

5

00:00:29,520 --> 00:00:35,680

Now we'll uncover the top theories surrounding the world's most infamous missing aircraft.

6

00:00:35,680 --> 00:00:40,320

The officials and most of the media convinced themselves that the satellite data could only

7

00:00:40,320 --> 00:00:42,440

mean one thing, that the plane went south.

8

00:00:42,440 --> 00:00:45,240

But they were wrong.

9

00:00:45,240 --> 00:00:48,120

Was it potentially a murder suicide?

10

00:00:48,120 --> 00:00:50,720

There's 227 passengers on board.

11

00:00:50,720 --> 00:00:53,360

Any of them could be responsible.

12

00:00:53,360 --> 00:00:57,000

Can new clues bring us closer to answers?

13

00:00:57,000 --> 00:01:00,680

If the plane isn't flying itself, was it something more sinister?

14

00:01:00,680 --> 00:01:03,360

Because planes don't just disappear.

15

00:01:03,360 --> 00:01:25,400

What really happened to Malaysia Flight 370?

16

00:01:25,400 --> 00:01:27,800

March 8th, 2014.

17

00:01:27,800 --> 00:01:30,840

Kuala Lumpur International Airport.

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00:01:30,840 --> 00:01:37,720

Malaysia Flight 370 sits on the runway awaiting clearance for takeoff.

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00:01:37,720 --> 00:01:39,240

The cabin has been secured.

20

00:01:39,240 --> 00:01:42,880

Tray tables and seat backs are in their upright and locked position.

21

00:01:42,880 --> 00:01:47,200

And the flight attendants are ready for what they hope will be a routine flight.

22

00:01:47,200 --> 00:01:51,880

On board we have 239 people, 227 passengers.

23

00:01:51,880 --> 00:01:53,880

We have 12 crew members.

24

00:01:53,880 --> 00:01:57,000

The 12 crew members are all Malaysian citizens.

25

00:01:57,000 --> 00:02:00,160

And up front we have Captain Shah.

26

00:02:00,160 --> 00:02:02,080

Their head is a Beijing International Airport.

27

00:02:02,080 --> 00:02:03,080

It's a routine flight.

28

00:02:03,080 --> 00:02:04,720

They make it twice a day.

29

00:02:04,720 --> 00:02:08,000

March 8th is no exception.

30

00:02:08,000 --> 00:02:12,360

This flight was a flight that Zahari Shah, the captain of the flight, was quite familiar

31

00:02:12,360 --> 00:02:13,360

with.

32

00:02:13,360 --> 00:02:18,760

Normally, the flight takes about six hours, flying over a handful of countries and international

33

00:02:18,760 --> 00:02:20,280

waters.

34

00:02:20,280 --> 00:02:38,840

At 12.40 am, MH370 is cleared for takeoff.

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00:02:38,840 --> 00:02:42,640

Recording inside the radio chatter back and forth between the aircraft and the tower

36

00:02:42,640 --> 00:02:45,000

shows that everything is routine.

37

00:02:45,000 --> 00:02:47,000

Mundane even.

38

00:02:47,000 --> 00:02:52,720

At 106, the plane's computer sends an automated position report.

39

00:02:52,720 --> 00:02:57,800

The transponders are continuously communicating with air traffic control, relaying information

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00:02:57,800 --> 00:02:59,880

about the flight status.

41

00:02:59,880 --> 00:03:03,360

These messages show up on what's called secondary radar.

42

00:03:03,360 --> 00:03:10,360

At this point, MH370 is flying on course and has 96,000 pounds of fuel remaining.

43

00:03:10,360 --> 00:03:15,200

That's enough fuel for another six to seven hours of flight.

44

00:03:15,200 --> 00:03:21,920

A few minutes later, at 119, Captain Shah radios air traffic control as he transitions

45

00:03:21,920 --> 00:03:25,640

from Malaysian to Vietnamese airspace.

46

00:03:25,640 --> 00:03:32,320

Air traffic control in Kuala Lumpur radios MH370 and says contact Ho Chi Minh on 120

47

00:03:32,320 --> 00:03:33,320

decimal niner.

48

00:03:33,320 --> 00:03:34,800

Good night.

49

00:03:34,800 --> 00:03:41,720

That means it's time for MH370 to call the Vietnamese controllers on the frequency given.

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00:03:41,720 --> 00:03:45,080

Mr. Hari then says, good night, Malaysia 370.

51

00:03:45,080 --> 00:03:46,920

So everything seems fine.

52

00:03:46,920 --> 00:03:50,640

The next thing that should happen is that air traffic controllers in Ho Chi Minh city

53

00:03:50,640 --> 00:03:53,320

should hear from Malaysia 370.

54

00:03:53,320 --> 00:03:56,520

But that's not what happens.

55

00:03:56,520 --> 00:04:00,840

The Vietnamese air traffic controller at Ho Chi Minh never hear from that flight at the

56

00:04:00,840 --> 00:04:03,040

scheduled time.

57

00:04:03,040 --> 00:04:07,280

And all of a sudden, the flight transponders aren't responding at all and they disappear

58

00:04:07,280 --> 00:04:10,280

from the air traffic controller screen.

59

00:04:10,280 --> 00:04:17,120

But 38 minutes into the flight, Malaysia 370 simply disappears from radar.

60

00:04:17,120 --> 00:04:22,440

It's really inexplicable that this aircraft, which had been flying and transmitting the

61

00:04:22,440 --> 00:04:27,160

secondary data all along, would at this point of transition just disappear.

62

00:04:27,160 --> 00:04:29,600

The transponder was turned off.

63

00:04:29,600 --> 00:04:33,000

The power was in some way stopped to the transponder.

64

00:04:33,000 --> 00:04:35,600

We don't know why it happened.

65

00:04:35,600 --> 00:04:40,200

In modern aviation, air traffic controllers know exactly where their airplanes are through

66

00:04:40,200 --> 00:04:44,760

secondary radars and precisely scheduled communications.

67

00:04:44,760 --> 00:04:47,320

So this is something that doesn't happen.

68

00:04:47,320 --> 00:04:49,680

Planes don't just vanish.

69

00:04:49,680 --> 00:04:55,400

Alarm bells immediately ring and Vietnamese air controllers desperately attempt to contact

70

00:04:55,400 --> 00:04:56,400

the aircraft.

71

00:04:56,400 --> 00:05:00,520

It's just not the case that an airliner would be flying through some nation's airspace

72

00:05:00,520 --> 00:05:05,440

without the controllers knowing who it is, where it is, and why it's there.

73

00:05:05,440 --> 00:05:06,760

It's the way it works.

74

00:05:06,760 --> 00:05:08,960

It doesn't happen otherwise.

75

00:05:08,960 --> 00:05:14,880

They tried to contact a cockpit through the satellite phone several times, but there was

76

00:05:14,880 --> 00:05:17,200

no answer.

77

00:05:17,200 --> 00:05:26,560

Then it was clear to them that the aircraft crashed into the sea.

78

00:05:26,560 --> 00:05:28,120

How could this happen so suddenly?

79

00:05:28,120 --> 00:05:30,080

Why was there no warning from the pilot?

80

00:05:30,080 --> 00:05:31,080

No Mayday?

81

00:05:31,080 --> 00:05:32,720

Nothing.

82

00:05:32,720 --> 00:05:38,440

This kicks off what will eventually become the most expensive search in aviation history.

83

00:05:38,440 --> 00:05:44,360

Everyone, dozens of governments, hundreds of families all want to know what happened

84

00:05:44,360 --> 00:05:52,720

to MH370.

85

00:05:52,720 --> 00:05:58,640

By 5.30 a.m. a massive search and rescue mission is underway.

86

00:05:58,640 --> 00:06:07,520

Together 26 countries to help with the search by sending 50 ships and about 60 aircraft.

87

00:06:07,520 --> 00:06:10,480

They're looking for anything on the water.

88

00:06:10,480 --> 00:06:12,720

wreckage, oil slag.

89

00:06:12,720 --> 00:06:18,600

The search starts naturally where the last transmission from the aircraft occurred and

90

00:06:18,600 --> 00:06:22,280

last radar trace was found.

91

00:06:22,280 --> 00:06:27,400

It was right on the border between the Gulf of Thailand and South China Sea.

92

00:06:27,400 --> 00:06:29,400

So they do find some oil slick.

93

00:06:29,400 --> 00:06:34,640

They test it to see if it's aviation fuel, but it's not.

94

00:06:34,640 --> 00:06:36,320

They look at satellite imagery.

95

00:06:36,320 --> 00:06:40,720

They see what they think is debris, but they physically go out there and there's nothing

96

00:06:40,720 --> 00:06:41,960

there.

97

00:06:41,960 --> 00:06:49,880

If the aircraft had crashed in that area initially, they'd be debris and oil slick and plastic

98

00:06:49,880 --> 00:06:53,000

and stuff all over the China Sea.

99

00:06:53,000 --> 00:06:57,320

Makes no sense that there's no sign of this airplane anywhere.

100

00:06:57,320 --> 00:07:04,200

After two days of searching, investigators turn to military radar records.

101

00:07:04,200 --> 00:07:10,000

Radar on military bases are constantly tracking to see if there's anything in range.

102

00:07:10,000 --> 00:07:17,160

Malaysia Flight 370 would have been in radar range for bases in Thailand, Malaysia and Vietnam.

103

00:07:17,160 --> 00:07:20,560

So their radar records track the plane as well.

104

00:07:20,560 --> 00:07:23,040

And they do it slightly differently.

105

00:07:23,040 --> 00:07:28,520

Radars rely on secondary radar, which requires a signal from the airplane's transponder.

106

00:07:28,520 --> 00:07:32,880

And that's what they've been using to search for MH370 so far.

107

00:07:32,880 --> 00:07:37,240

But the military uses what's called primary radar.

108

00:07:37,240 --> 00:07:41,520

Primary radar doesn't require a special signal from an airplane.

109

00:07:41,520 --> 00:07:46,760

It sends out radio waves where it bounces off any object that might be in the sky.

110

00:07:46,760 --> 00:07:49,200

And it reflects that radio signal back.

111

00:07:49,200 --> 00:07:54,360

It's kind of like echolocation, like a bat would use, but on a large scale.

112

00:07:54,360 --> 00:07:57,720

A Boeing 777 has two transponders.

113

00:07:57,720 --> 00:08:02,280

Specifically in case one fails, the other one is still going to be fine.

114

00:08:02,280 --> 00:08:08,760

So when MH370 vanishes from all the radar, that means both transponders are dead at the

115

00:08:08,760 --> 00:08:10,400

same time.

116

00:08:10,400 --> 00:08:16,000

After the transponder is turned off, the secondary radar can't see the airplane anymore.

117

00:08:16,000 --> 00:08:17,000

But guess what?

118

00:08:17,000 --> 00:08:21,560

The primary radar can still see the airplane and continues to track it.

119

00:08:21,560 --> 00:08:24,360

It shows the airplane keeps flying.

120

00:08:24,360 --> 00:08:29,440

Not only does it keep flying, it makes drastic course changes, just as it's supposed to

121

00:08:29,440 --> 00:08:33,560

cross into Vietnamese airspace.

122

00:08:33,560 --> 00:08:38,880

So MH370 turns a little bit to the east, then kind of loops back around.

123

00:08:38,880 --> 00:08:42,200

It's almost like it's turning back, back towards Malaysia.

124

00:08:42,200 --> 00:08:49,160

But then MH370 approaches the isle of Penang and flies near the Strait of Malacca.

125

00:08:49,160 --> 00:08:56,200

Military radar tracks MH370 for another 230 miles into the Andaman Sea, until the aircraft

126

00:08:56,200 --> 00:08:59,240

finally goes out of range.

127

00:08:59,240 --> 00:09:02,360

So in other words, they're looking in the wrong place.

128

00:09:02,360 --> 00:09:05,560

The searchers move their search to the Andaman Sea.

129

00:09:05,560 --> 00:09:07,800

But once again, there's nothing there.

130

00:09:07,800 --> 00:09:12,960

So the investigators are closer, but they're clearly not close enough.

131

00:09:12,960 --> 00:09:17,640

Keep in mind, military radar doesn't pinpoint where this airplane stops flying.

132

00:09:17,640 --> 00:09:22,920

As far as we know, it's still in the air, all the way until it goes out of range.

133

00:09:22,920 --> 00:09:26,440

After that, it could have gone in a lot of different directions.

134

00:09:26,440 --> 00:09:29,880

The radar records raise an important question.

135

00:09:29,880 --> 00:09:32,480

Why does the plane fly off course?

136

00:09:33,480 --> 00:09:46,480

Before Malaysia flight 370 vanishes on March 8, 2014, investigators are shocked to learn

137

00:09:46,480 --> 00:09:50,200

that the plane deviated from its route.

138

00:09:50,200 --> 00:09:55,360

The MH370 planned flight path would have had it flying over the South China Sea towards

139

00:09:55,360 --> 00:09:56,720

Beijing.

140

00:09:56,720 --> 00:10:01,920

But the radar tracking shows it made a series of turns going towards the west.

141

00:10:01,920 --> 00:10:06,760

And it just keeps flying until it goes out of radar range.

142

00:10:06,760 --> 00:10:13,120

Once investigators realized the airplane kept flying, every possible theory was out there.

143

00:10:13,120 --> 00:10:14,520

Was it a bomb?

144

00:10:14,520 --> 00:10:15,880

Was it terrorism?

145

00:10:15,880 --> 00:10:17,640

Was it a crime?

146

00:10:17,640 --> 00:10:19,640

Was it something more sinister?

147

00:10:19,640 --> 00:10:23,240

Because planes don't just disappear.

148

00:10:23,240 --> 00:10:28,360

The internet went crazy and so did every global government agency.

149

00:10:28,360 --> 00:10:31,520

To some, there's an obvious explanation.

150

00:10:31,520 --> 00:10:37,320

Right away, we know that the aircraft continues flying after the transponders go offline.

151

00:10:37,320 --> 00:10:42,040

The aircraft continues on its path and drops off of military radar.

152

00:10:42,040 --> 00:10:47,640

We know that because it's recorded on the military radar until 2.22 a.m.

153

00:10:47,640 --> 00:10:52,320

Take this radar information and combine it with the fact that the transponder was cut

154

00:10:52,320 --> 00:10:58,080

off, just prior to the aircraft veering off course.

155

00:10:58,080 --> 00:11:05,120

And that with the fact that there is no emergency distress call made and it creates a truly terrifying

156

00:11:05,120 --> 00:11:06,640

possibility.

157

00:11:06,640 --> 00:11:12,840

Was it potentially a murder suicide?

158

00:11:12,840 --> 00:11:17,760

Early in the investigation, they thought they should look very deep into the two men in

159

00:11:17,760 --> 00:11:19,680

the cockpit.

160

00:11:19,680 --> 00:11:22,800

Which is natural with this type of investigation.

161

00:11:22,800 --> 00:11:28,280

The question is, would anything motivate these two men to bring that aircraft down?

162

00:11:28,280 --> 00:11:36,560

In the cockpit, we have Captain Zahari Shah and First Officer Farikh Abdul Hamid.

163

00:11:36,560 --> 00:11:40,160

Farikh is not fully qualified yet on the 777.

164

00:11:40,160 --> 00:11:45,200

However, this is his last flight to qualify on the 777.

165

00:11:45,200 --> 00:11:46,600

This is a big deal.

166

00:11:46,600 --> 00:11:50,080

The realization of a lot of hard work.

167

00:11:50,080 --> 00:11:52,280

He's been with the airline for seven years.

168

00:11:52,280 --> 00:11:54,000

He's 27 years old.

169

00:11:54,000 --> 00:11:55,720

He's getting married soon.

170

00:11:55,720 --> 00:11:58,440

He has a long career in front of him.

171

00:11:58,440 --> 00:12:03,000

And as a result of that, the investigative bodies rule him out pretty quickly.

172

00:12:03,000 --> 00:12:04,840

They don't think he did it.

173

00:12:04,840 --> 00:12:10,200

Leaving only one other suspect in the cockpit.

174

00:12:10,200 --> 00:12:17,400

People who subscribe to the murder suicide theory believe that the Captain Zahari Shah

175

00:12:17,400 --> 00:12:23,080

deviated from the flight plan and intentionally crashed that airplane into the Indian Ocean.

176

00:12:23,080 --> 00:12:26,560

Sadly, taking everyone with him.

177

00:12:26,560 --> 00:12:31,640

Investigators dig deeper into Captain Shah and a search of his home turns up a disturbing

178

00:12:31,640 --> 00:12:32,640

clue.

179

00:12:32,640 --> 00:12:40,160

Zahari Shah had a very sophisticated simulator, an actual 777 simulator in his house.

180

00:12:40,160 --> 00:12:46,760

When the investigative bodies pull the data from it, it shows a variety of flight paths.

181

00:12:46,760 --> 00:12:50,120

We see that they run out over the Indian Ocean.

182

00:12:50,120 --> 00:12:52,000

They just stop.

183

00:12:52,000 --> 00:12:57,400

And ultimately, this is the path that MH370 takes.

184

00:12:57,400 --> 00:13:01,480

It seems as though Captain Shah had rehearsed this.

185

00:13:01,480 --> 00:13:05,040

So the flight path is somewhat telling in itself.

186

00:13:05,040 --> 00:13:07,560

Captain Shah is from the island of Penang.

187

00:13:07,560 --> 00:13:14,200

The final maneuver recorded by the military radar was northwest of Penang.

188

00:13:14,200 --> 00:13:15,340

Very close to it.

189

00:13:15,340 --> 00:13:18,500

It was a clear night, perfect visibility.

190

00:13:18,500 --> 00:13:27,580

And this turn gives him a perfect view, a final view of his home in Penang.

191

00:13:27,580 --> 00:13:34,100

Some people believe that when you finally decide to commit suicide, that person has a

192

00:13:34,100 --> 00:13:36,420

level of serenity.

193

00:13:36,420 --> 00:13:45,420

So some people believe that this final turn towards Penang was him waving goodbye to his

194

00:13:45,420 --> 00:13:49,540

home.

195

00:13:49,540 --> 00:13:54,380

While all of this evidence paints a damning picture for the pilot, it is not enough to

196

00:13:54,380 --> 00:13:57,300

close the case.

197

00:13:57,300 --> 00:14:02,460

So officially, MH370 is not ruled suicide by pilot.

198

00:14:02,460 --> 00:14:07,300

Because there's no suicide note, and they determined it's impossible to know what's

199

00:14:07,300 --> 00:14:09,300

in his mind.

200

00:14:09,300 --> 00:14:14,860

If the plane wasn't brought down by the pilot or co-pilot, could it be someone else on

201

00:14:14,860 --> 00:14:17,300

the inside?

202

00:14:17,300 --> 00:14:22,300

Investigators turn their attention to the crew.

203

00:14:22,300 --> 00:14:29,540

There's always another possibility that one of the cabin crew was trained and familiar

204

00:14:29,540 --> 00:14:33,620

with the aircraft and how to get into the cockpit.

205

00:14:33,620 --> 00:14:39,740

So the investigators looked into every one of these crew members.

206

00:14:39,740 --> 00:14:48,860

170 interviews looked into their bank accounts, social media accounts, their love life, everything

207

00:14:48,860 --> 00:14:54,220

that they could possibly look into, and they didn't find anything.

208

00:14:54,220 --> 00:15:01,460

Ultimately, there is no substantial evidence to tie the pilot or crew members to any wrong

209

00:15:01,460 --> 00:15:02,460

doing.

210

00:15:02,460 --> 00:15:07,060

There's absolutely no proof that this was a murder suicide.

211

00:15:07,060 --> 00:15:11,540

But authorities have this nagging problem.

212

00:15:11,540 --> 00:15:13,660

Why is there no stress call?

213

00:15:13,660 --> 00:15:19,220

What could have happened?

214

00:15:19,220 --> 00:15:25,140

After disappearing, the public is desperate for investigators to find Flight 370.

215

00:15:25,140 --> 00:15:31,140

But with so little evidence, they have their work cut out for them.

216

00:15:31,140 --> 00:15:35,380

One of the most common things that investigators can use to determine the cause of the crash

217

00:15:35,380 --> 00:15:36,380

is radio chatter.

218

00:15:36,380 --> 00:15:44,620

The 402 is radar contact at 18 miles, take speed 250, final brand is 23-0.

219

00:15:44,620 --> 00:15:48,140

When there's something unusual happening on the airplane, the flight crew usually gets

220

00:15:48,140 --> 00:15:50,260

on the radio about it.

221

00:15:50,260 --> 00:15:55,900

Whether there's an emergency, they see something out the window, or there's a passenger acting

222

00:15:55,900 --> 00:15:58,500

up, they usually radio that in.

223

00:15:58,500 --> 00:16:01,780

And in this case, there's no radio distress calls.

224

00:16:01,780 --> 00:16:04,300

We don't have that clue to help us.

225

00:16:04,300 --> 00:16:08,820

Unless the lack of a distress call is the clue.

226

00:16:08,820 --> 00:16:15,860

Based on what we know, I think the most logical explanation is that the airplane depressurized,

227

00:16:15,860 --> 00:16:19,980

causing everyone on board the aircraft to become unconscious and die from a lack of

228

00:16:19,980 --> 00:16:25,260

oxygen.

229

00:16:25,260 --> 00:16:31,660

The reason this airplane is flying off course and on an unusual path is because the pilot

230

00:16:31,660 --> 00:16:34,060

is not thinking clearly.

231

00:16:34,060 --> 00:16:38,780

This theory says that a terrible accident happened on board, disabling the crew and

232

00:16:38,780 --> 00:16:41,260

probably the passengers as well.

233

00:16:41,260 --> 00:16:47,500

So the problem with MH370 could have actually started before it left the ground.

234

00:16:47,500 --> 00:16:54,780

Just before takeoff, maintenance logs show that work was performed on MH370's oxygen

235

00:16:54,780 --> 00:16:56,500

system.

236

00:16:56,500 --> 00:17:02,540

The pressurization system in a 777 handles all the air that everyone breathes on board.

237

00:17:02,540 --> 00:17:04,540

And it also handles the cabin pressure.

238

00:17:05,260 --> 00:17:11,660

At a high altitude, the pressure outside the aircraft is very low, too low to sustain

239

00:17:11,660 --> 00:17:13,060

life.

240

00:17:13,060 --> 00:17:17,180

Inside the aircraft, it's pressurized and it's comfortable.

241

00:17:17,180 --> 00:17:22,260

So it's possible that maintenance fault could have resulted from the work they did on the

242

00:17:22,260 --> 00:17:28,820

pressurization system, essentially causing the aircraft not to pressurize properly.

243

00:17:28,820 --> 00:17:34,180

It's not terribly uncommon, but if it does happen, someone has to pressurize the aircraft

244

00:17:34,180 --> 00:17:37,140

typically using an emergency procedure.

245

00:17:37,140 --> 00:17:41,700

But what if they didn't?

246

00:17:41,700 --> 00:17:47,260

The last communication with air traffic control was made by Captain Zahari, good night, Malaysia

247

00:17:47,260 --> 00:17:48,420

370.

248

00:17:48,420 --> 00:17:51,940

And that means that he was not flying the aircraft.

249

00:17:51,940 --> 00:17:56,380

On a commercial airliner, there are two pilots, one who is doing the flying and the other

250

00:17:56,380 --> 00:17:57,940

who's doing the monitoring.

251

00:17:57,940 --> 00:18:01,140

The pilot who is making the radio calls is not the pilot flying.

252

00:18:01,140 --> 00:18:03,060

That's just the way it works.

253

00:18:03,060 --> 00:18:07,700

Every radio call from the time that Malaysia Flight 370 took off was made by the first

254

00:18:07,700 --> 00:18:10,620

officer, Farik Abdul Hamid.

255

00:18:10,620 --> 00:18:15,980

Captain Shah was handling the takeoff, getting out of Kuala Lumpur airspace, sort of the

256

00:18:15,980 --> 00:18:18,260

more difficult parts of the flight.

257

00:18:18,260 --> 00:18:21,460

Captain Shah was a highly experienced airline captain.

258

00:18:21,460 --> 00:18:25,780

He had 18,000 flight hours and he was only 53 years old.

259

00:18:25,780 --> 00:18:31,500

That's just 1,500 hours less than Captain Sully Sullenberger had when he famously landed

260

00:18:31,500 --> 00:18:34,300

his airliner in the Hudson River.

261

00:18:34,300 --> 00:18:39,420

After takeoff, we can assume that 38 minutes into the flight, when Captain Shah's voice

262

00:18:39,420 --> 00:18:44,140

is on the radio, he has handed control of the aircraft to the first officer.

263

00:18:44,140 --> 00:18:50,540

Remember, this was his last flight before becoming qualified on the aircraft.

264

00:18:50,540 --> 00:18:54,940

Now we have the first officer who's operating an aircraft for which he's not yet fully

265

00:18:54,940 --> 00:18:55,940

qualified.

266

00:18:56,300 --> 00:19:02,980

We have 227 passengers on board, 12 crew members, and the aircraft is climbing.

267

00:19:02,980 --> 00:19:06,460

And we may have a maintenance problem, a pressurization issue.

268

00:19:06,460 --> 00:19:08,380

This is a dangerous situation.

269

00:19:08,380 --> 00:19:11,860

It can lead to hypoxia.

270

00:19:11,860 --> 00:19:18,380

Hypoxia is a lack of oxygen in the body tissue and brain, which can occur in any aircraft

271

00:19:18,380 --> 00:19:21,580

flying over 16,000 feet.

272

00:19:21,580 --> 00:19:26,260

With not enough oxygen feeding the brain, people can't do the simplest things, let

273

00:19:26,260 --> 00:19:28,620

alone command an airliner.

274

00:19:28,620 --> 00:19:34,380

To be blunt, hypoxia makes you stupid, makes you unable to have rational thoughts.

275

00:19:34,380 --> 00:19:41,300

At a cruising altitude of 35,000 feet, incapacitation due to hypoxia can occur in less than a minute.

276

00:19:41,300 --> 00:19:46,300

The statistics indicate that for pilots, the time of useful consciousness could be as low

277

00:19:46,300 --> 00:19:49,980

as 15 seconds.

278

00:19:49,980 --> 00:19:56,060

Gradual onset hypoxia has caused numerous airline crashes over the years.

279

00:19:56,060 --> 00:20:00,660

It's a deadly scenario with very little time to react.

280

00:20:00,660 --> 00:20:05,380

There are a number of cases in which an airplane takes off and the pilots have failed to pressurize

281

00:20:05,380 --> 00:20:10,420

the aircraft, or the aircraft simply doesn't pressurize.

282

00:20:10,420 --> 00:20:16,180

And because of the nature of hypoxia, there are cases in which pilots got a cabin altitude

283

00:20:16,180 --> 00:20:20,220

warning horn, a warning that the aircraft was not properly pressurized, and they may

284

00:20:20,220 --> 00:20:26,300

not respond to it correctly if their brains are already lacking oxygen.

285

00:20:26,300 --> 00:20:30,420

Could this have happened aboard MH370?

286

00:20:30,420 --> 00:20:34,140

So at first it makes sense there is a lack of a Mayday call.

287

00:20:34,140 --> 00:20:39,340

There's no call for help, but under hypoxic conditions, they might not even think they're

288

00:20:39,340 --> 00:20:41,020

in danger.

289

00:20:41,020 --> 00:20:45,380

The erratic flight also speaks to a hypoxic event.

290

00:20:45,380 --> 00:20:50,780

The pilot turned the aircraft around, heading back to Kuala Lumpur as part of a response

291

00:20:50,780 --> 00:20:52,780

to the emergency.

292

00:20:52,780 --> 00:20:58,900

According to radar, the plane makes one last turn.

293

00:20:58,900 --> 00:21:03,660

So the final move made by the first officer could have been to turn the aircraft toward

294

00:21:03,660 --> 00:21:05,740

the runway that he knows.

295

00:21:05,740 --> 00:21:12,260

That airport is Langkawi International, set on an island just west of the Malaysian

296

00:21:12,260 --> 00:21:13,700

peninsula.

297

00:21:13,700 --> 00:21:15,740

This is where he did his flight training.

298

00:21:15,740 --> 00:21:17,420

He's familiar with the terrain.

299

00:21:17,420 --> 00:21:22,460

He knows that the runway is long enough to land a fully loaded 777.

300

00:21:22,460 --> 00:21:28,420

Instead of landing, the plane continues to fly for 230 miles.

301

00:21:28,420 --> 00:21:33,340

So at this point, we think that both crew are incapacitated by hypoxia.

302

00:21:33,340 --> 00:21:36,780

They've passed out, then the autopilot takes over.

303

00:21:36,780 --> 00:21:42,020

The aircraft is carrying 239 people, who are most likely dead.

304

00:21:42,020 --> 00:21:47,620

And they are flying until that airplane runs out of fuel.

305

00:21:47,620 --> 00:21:51,380

Not everyone is convinced the cabin depressurized.

306

00:21:51,380 --> 00:21:57,380

Could it be something more sinister?

307

00:21:57,380 --> 00:22:02,780

When Malaysia Flight 370 goes missing, investigators from nine countries join the search, including

308

00:22:02,780 --> 00:22:04,540

the United States.

309

00:22:04,540 --> 00:22:11,220

Their biggest challenge is the lack of evidence, almost all of which lies on that missing airplane.

310

00:22:11,220 --> 00:22:16,700

Several months into their search, authorities get a treasure trove of new data.

311

00:22:16,700 --> 00:22:20,620

And it changes the course of the investigation.

312

00:22:20,620 --> 00:22:23,340

They hear from a company called MRSAT.

313

00:22:23,340 --> 00:22:26,540

They handle satellite data for commercial airlines.

314

00:22:26,540 --> 00:22:31,380

Things like satellite phones in the back of your seat to make calls, TV and entertainment

315

00:22:31,380 --> 00:22:32,620

systems.

316

00:22:32,620 --> 00:22:37,100

These systems are in constant communication back and forth with the satellite system.

317

00:22:37,100 --> 00:22:41,180

It's pretty much just checking in.

318

00:22:41,180 --> 00:22:46,260

While MRSAT has records of this communication, first thing that happens is the airplane logs

319

00:22:46,260 --> 00:22:52,900

in to the MRSAT system at midnight Malaysia time, which is expected right before takeoff.

320

00:22:52,900 --> 00:22:58,260

Then the satellite system checks in with the airplane on an hourly basis, using automatic

321

00:22:58,260 --> 00:23:00,180

pings.

322

00:23:00,180 --> 00:23:03,540

It checks in to see, hey, are you there?

323

00:23:03,540 --> 00:23:06,540

And we call that a handshake.

324

00:23:06,540 --> 00:23:12,780

While the aircraft transponder is offline, the MRSAT communication system keeps going.

325

00:23:12,780 --> 00:23:16,660

It takes months to analyze the data, and at the time they didn't have the technology to

326

00:23:16,660 --> 00:23:18,420

make full sense of it.

327

00:23:18,420 --> 00:23:23,020

But then when they finally figure out the MRSAT data, guess what?

328

00:23:23,020 --> 00:23:26,260

It shows something incredible.

329

00:23:26,260 --> 00:23:31,540

Previously, the last known contact of the airplane was 2.22 a.m., when it disappears

330

00:23:31,540 --> 00:23:33,740

from military radar.

331

00:23:33,740 --> 00:23:38,580

And investigators assume that the plane crashed not too long after.

332

00:23:38,580 --> 00:23:44,060

The MRSAT data shows seven automated pings after 2.22 a.m.

333

00:23:44,060 --> 00:23:48,580

And those pings go all the way until 8.19 a.m.

334

00:23:48,580 --> 00:23:55,540

If the plane continues flying for six more hours, where did it go?

335

00:23:55,540 --> 00:24:00,500

So the technology at the time didn't allow them to get a specific location using the

336

00:24:00,500 --> 00:24:02,220

MRSAT ping.

337

00:24:02,220 --> 00:24:07,780

All they know is that the plane is within a range of a certain satellite.

338

00:24:07,780 --> 00:24:14,900

So they calculate that to cover a large area off the western coast of Australia, which

339

00:24:14,900 --> 00:24:20,300

is way farther south than anywhere they'd previously looked.

340

00:24:20,300 --> 00:24:28,620

This means that MH370 turned south and flew for six hours into the middle of nowhere.

341

00:24:28,620 --> 00:24:32,380

Some theorists say that it's not on autopilot.

342

00:24:32,380 --> 00:24:36,900

And why fly around for so long if you intend to kill yourself?

343

00:24:36,900 --> 00:24:42,660

So if the plane isn't flying itself and the pilots are not committing suicide, that leaves

344

00:24:42,660 --> 00:24:45,100

one other option.

345

00:24:45,100 --> 00:24:50,660

A passenger took control of the aircraft.

346

00:24:50,660 --> 00:24:53,540

There are 227 passengers on board.

347

00:24:53,540 --> 00:24:56,140

Any of them could be responsible.

348

00:24:56,140 --> 00:25:02,300

In the world post-September 11th, we look very carefully at who's on a plane.

349

00:25:02,300 --> 00:25:07,980

As they dig deeper, investigators realize not all of the passengers are who they claim

350

00:25:07,980 --> 00:25:10,300

to be.

351

00:25:10,300 --> 00:25:15,900

So they checked everybody's info and then there was this red flag.

352

00:25:15,900 --> 00:25:21,340

Two people had boarded using stolen passports.

353

00:25:21,340 --> 00:25:23,860

One Italian and one Australian.

354

00:25:23,940 --> 00:25:25,660

These two guys checked in.

355

00:25:25,660 --> 00:25:30,540

For some reason, the passports were not discovered by Interpol.

356

00:25:30,540 --> 00:25:36,220

So we have two men on board this airplane that are trying to hide something clearly

357

00:25:36,220 --> 00:25:38,300

and we didn't know about it.

358

00:25:38,300 --> 00:25:40,060

We don't know who they are.

359

00:25:40,060 --> 00:25:42,300

Fake names, fake passports.

360

00:25:42,300 --> 00:25:44,700

These guys could be anybody.

361

00:25:44,700 --> 00:25:48,100

So fortunately, it's not 1950.

362

00:25:48,100 --> 00:25:49,820

It's 2014.

363

00:25:49,820 --> 00:25:53,340

And there's a large number of surveillance everywhere.

364

00:25:53,340 --> 00:25:56,260

We can trace these guys' steps.

365

00:25:56,260 --> 00:26:00,700

The police found out these are two friends using stolen passports.

366

00:26:00,700 --> 00:26:06,220

Turns out these two passports were stolen in Thailand about two years before.

367

00:26:06,220 --> 00:26:10,100

They bought a one-way ticket through a pay phone in Thailand.

368

00:26:10,100 --> 00:26:14,940

From Thailand, they entered Malaysia using their real passport.

369

00:26:14,940 --> 00:26:17,300

So now we know who they are.

370

00:26:17,300 --> 00:26:20,980

The men have a valid reason to hide their identities.

371

00:26:20,980 --> 00:26:27,780

These are two Iranian refugees, 19 and 29, seeking asylum in Beijing.

372

00:26:27,780 --> 00:26:30,540

They don't have any knowledge about airplanes.

373

00:26:30,540 --> 00:26:36,460

So with those maneuvers that MH370 went through, whoever was doing it knew what they were doing

374

00:26:36,460 --> 00:26:37,460

in that cockpit.

375

00:26:37,460 --> 00:26:40,140

So it turns out these guys were not really suspects.

376

00:26:41,900 --> 00:26:48,340

Investigators also believe the culprit knows how to work the plane's internal systems,

377

00:26:48,340 --> 00:26:49,980

like the transponders.

378

00:26:49,980 --> 00:26:52,820

There's a passenger on board who might fit the bill.

379

00:26:52,820 --> 00:26:56,660

He's a flight engineer from Switzerland.

380

00:26:56,660 --> 00:27:04,540

The Boeing 777-200 has access to the avionics bay, which is under the cockpit.

381

00:27:04,540 --> 00:27:08,260

That's in the forward first-class cabin.

382

00:27:08,260 --> 00:27:11,860

And it's a small lock to get there.

383

00:27:11,860 --> 00:27:13,220

This is where the flight computers are.

384

00:27:13,220 --> 00:27:16,300

This is where the pressurization and everything is.

385

00:27:16,300 --> 00:27:20,460

So if you could get access to this room, you could cause serious harm to an aircraft in

386

00:27:20,460 --> 00:27:21,620

flight.

387

00:27:21,620 --> 00:27:24,180

Would a flight engineer know about this?

388

00:27:24,180 --> 00:27:25,260

Possibly.

389

00:27:26,620 --> 00:27:29,980

But does the flight engineer have a motive?

390

00:27:29,980 --> 00:27:34,740

When we look into this person, we find that he has a clean background.

391

00:27:34,740 --> 00:27:37,180

He works on completely different type of aircraft.

392

00:27:37,180 --> 00:27:39,340

He works on corporate jets.

393

00:27:39,340 --> 00:27:41,740

He's probably not a suspect.

394

00:27:41,740 --> 00:27:48,020

With no evidence to implicate any passengers, the search goes cold for three years.

395

00:27:48,020 --> 00:27:52,020

Remember that proving what happened is all about the evidence.

396

00:27:52,020 --> 00:27:56,740

And there is none until suddenly something washes up.

397

00:27:56,740 --> 00:27:58,820

It's 2017.

398

00:27:58,820 --> 00:28:02,940

There's been almost no lead from MH370.

399

00:28:02,940 --> 00:28:08,180

But one day, somebody's walking on the beach and makes an incredible discovery.

400

00:28:08,180 --> 00:28:16,220

Over 6,500 miles from the Malaysian airport, wreckage appears on several remote islands.

401

00:28:16,220 --> 00:28:21,820

So now we finally have some hard evidence that we could look at that are, that were

402

00:28:21,820 --> 00:28:24,940

the pieces of that airplane.

403

00:28:24,940 --> 00:28:32,700

For three years, after Malaysia flight 370 disappears, there's no sign of the actual

404

00:28:32,700 --> 00:28:34,940

aircraft.

405

00:28:34,940 --> 00:28:41,180

Until 2017, when debris begins to surface.

406

00:28:41,180 --> 00:28:46,860

So now we're getting some of these chunks that are washed ashore over the East Coast

407

00:28:46,860 --> 00:28:51,340

of Africa, Mozambique and Reuni Island.

408

00:28:51,340 --> 00:28:57,260

In all, 33 pieces are found in six different countries.

409

00:28:57,260 --> 00:29:00,300

They even found this big piece.

410

00:29:00,300 --> 00:29:06,820

It's a flapper on unique to the triple seven that had a serial number on it that matches

411

00:29:06,820 --> 00:29:08,380

MH370.

412

00:29:08,380 --> 00:29:10,340

So it's got to be from that airplane.

413

00:29:10,340 --> 00:29:13,940

The parts also hold an important clue.

414

00:29:13,940 --> 00:29:17,820

There was some scorch marks on the debris.

415

00:29:17,820 --> 00:29:24,500

And that tells me that they may have been a fire.

416

00:29:24,500 --> 00:29:30,820

What we know for sure is that the transponder went off 38 minutes into the flight.

417

00:29:30,820 --> 00:29:35,420

Maybe it is caused by the fire on board.

418

00:29:35,420 --> 00:29:37,620

Fires happen for a variety of reasons.

419

00:29:37,620 --> 00:29:43,780

Electrical, mechanical, maybe something in the cargo hold or something in the cabin.

420

00:29:43,780 --> 00:29:52,180

MH370 was carrying about 500 pounds of lithium ion batteries in the forward cargo hold.

421

00:29:52,180 --> 00:30:01,420

And we know this is more than enough to possibly bring down an aircraft, as has happened before.

422

00:30:01,420 --> 00:30:08,420

On September 3rd, 2010, UPS Flight 6 takes off from Dubai International Airport.

423

00:30:08,420 --> 00:30:16,900

This was a massive 747-400 freighter UPS piloted by Captain Lampy and First Officer Matthew

424

00:30:16,900 --> 00:30:17,900

Bell.

425

00:30:18,340 --> 00:30:23,900

138 miles into that flight, the cockpit fills with smoke.

426

00:30:23,900 --> 00:30:25,940

At this point it's chaos.

427

00:30:25,940 --> 00:30:28,900

It's not smoke like from a campfire.

428

00:30:28,900 --> 00:30:32,940

This is thick smoke, so thick you can't see through it.

429

00:30:32,940 --> 00:30:35,700

They had no chance.

430

00:30:35,700 --> 00:30:42,420

First Officer Lampy disconnected the autopilot, perhaps trying to make a quick turn towards

431

00:30:42,420 --> 00:30:43,720

Dubai.

432

00:30:43,720 --> 00:30:50,040

And when he did that, he realized the primary flight control system had failed because of

433

00:30:50,040 --> 00:30:51,240

the fire.

434

00:30:51,240 --> 00:30:54,080

And now he couldn't quite fly it properly.

435

00:30:54,080 --> 00:31:01,660

The captain got out of his seat to get a fire extinguisher, unfortunately succumbed by the

436

00:31:01,660 --> 00:31:06,960

fumes and smoke and fire immediately.

437

00:31:06,960 --> 00:31:13,560

Bell couldn't see his instruments, but he was given a heading towards Dubai Airport,

438

00:31:13,560 --> 00:31:16,240

runway 12 left.

439

00:31:16,240 --> 00:31:20,400

Sadly he crashes a few miles on the other side of the runway.

440

00:31:20,400 --> 00:31:23,760

Both pilots were killed.

441

00:31:23,760 --> 00:31:31,640

The subsequent investigation discovered that there was a pallet with 81,000 lithium ion

442

00:31:31,640 --> 00:31:34,800

batteries on board that freighter.

443

00:31:34,800 --> 00:31:37,840

Lithium ion batteries are extremely volatile.

444

00:31:37,840 --> 00:31:42,960

Even the ones that you have in your phone, they have high amount of charge in them, but

445

00:31:42,960 --> 00:31:44,840

very thin walls.

446

00:31:44,840 --> 00:31:49,560

Because of the thin walls on these batteries, if one of them catches fire, it's very easy

447

00:31:49,560 --> 00:31:54,520

to propagate into the other batteries adjacent to it.

448

00:31:54,520 --> 00:32:02,960

In rare cases, lithium ion batteries actually combust and almost like a mini explosion.

449

00:32:02,960 --> 00:32:09,120

The FAA has recorded 340 airplane incidents involving lithium batteries.

450

00:32:09,120 --> 00:32:14,480

In 2019, regulations were put in place to safeguard passenger planes.

451

00:32:14,480 --> 00:32:20,560

It is now prohibited to carry lithium ion batteries in passenger airliners and in the

452

00:32:20,560 --> 00:32:26,080

cargo compartment of an airliner and very limited amount on freighters.

453

00:32:26,080 --> 00:32:32,880

But that was years after pieces of MH370 began to wash up on remote shores.

454

00:32:32,880 --> 00:32:37,640

So in the case of MH370, you have some charred wreckage.

455

00:32:37,640 --> 00:32:43,360

You also have a large amount of fuel in the form of lithium batteries on board.

456

00:32:43,360 --> 00:32:48,000

What about the unusual flight path and erratic maneuvers?

457

00:32:48,000 --> 00:32:53,520

A lot of people are questioning that sharp left turn that could also be explained by

458

00:32:53,520 --> 00:32:54,520

the fire.

459

00:32:54,520 --> 00:33:01,200

We're trained that in case of a fire, what you do is you immediately get off the airway.

460

00:33:01,200 --> 00:33:05,000

And at first, that's what it appears that MH370 does.

461

00:33:05,000 --> 00:33:08,280

Your next step is to find an airport to land.

462

00:33:08,280 --> 00:33:13,120

Some of these sporadic turns could be possible by trying to figure out where are they going

463

00:33:13,120 --> 00:33:17,960

to land this airplane as soon as possible.

464

00:33:17,960 --> 00:33:22,880

You have to either put out this fire or get that airplane on the ground as fast as you

465

00:33:22,880 --> 00:33:26,280

can.

466

00:33:26,280 --> 00:33:32,760

Usually they say it's between 12 to 14 minutes to get that airplane from altitude down to

467

00:33:32,760 --> 00:33:34,400

the ground.

468

00:33:34,400 --> 00:33:41,480

And airplane that is designed to basically glide, it is very hard to get it on the ground

469

00:33:41,480 --> 00:33:43,800

that quickly.

470

00:33:43,800 --> 00:33:50,000

Unless if you literally nose dive.

471

00:33:50,000 --> 00:33:55,560

People always ask why there was no Mayday call, why they didn't call on a radio.

472

00:33:55,920 --> 00:34:01,800

Well, first of all, the aircraft may not have been capable at that point of calling for

473

00:34:01,800 --> 00:34:02,800

help.

474

00:34:02,800 --> 00:34:06,240

The radios or the communication systems could have been knocked out.

475

00:34:06,240 --> 00:34:12,600

Additionally, you need to understand what it's like to fly in a cockpit or a cabin that

476

00:34:12,600 --> 00:34:15,200

is full of dense smoke.

477

00:34:15,200 --> 00:34:21,200

If your car is on fire or your truck or your boat, you can step out and jump out.

478

00:34:21,200 --> 00:34:24,080

Unfortunately, you can't do that out of an aircraft.

479

00:34:24,080 --> 00:34:25,080

There's no help.

480

00:34:25,120 --> 00:34:28,680

The fire department is not coming.

481

00:34:28,680 --> 00:34:30,520

The crew is on their own.

482

00:34:30,520 --> 00:34:36,080

So what they would be doing is working to put out the fire.

483

00:34:36,080 --> 00:34:42,840

Triple seven has a very sophisticated onboard fire detection and fire suppression system.

484

00:34:42,840 --> 00:34:49,320

But unfortunately, it was not designed to fight a lithium ion battery.

485

00:34:49,320 --> 00:34:57,400

So when there's nothing else to do, the other choice is to climb the aircraft and starve

486

00:34:57,400 --> 00:34:59,680

the fire of the oxygen.

487

00:34:59,680 --> 00:35:04,200

But the problem with that is the fire needs oxygen to breathe.

488

00:35:04,200 --> 00:35:07,000

And so do the folks in the back.

489

00:35:07,000 --> 00:35:09,960

It's a gamble.

490

00:35:09,960 --> 00:35:13,240

With the fire run out of oxygen first or the people.

491

00:35:13,240 --> 00:35:17,280

If you don't climb, everyone is going to burn alive.

492

00:35:17,280 --> 00:35:23,600

It's very possible that everybody was dead long before it crashed into the water.

493

00:35:23,600 --> 00:35:29,000

And perhaps that was the autopilot flying the airplane and no one was in control till

494

00:35:29,000 --> 00:35:31,600

eventually runs out of fuel.

495

00:35:31,600 --> 00:35:37,440

But this evidence doesn't close the case on Malaysia Flight 370.

496

00:35:37,440 --> 00:35:42,880

We have only a few pieces of this airplane that weighs almost a million pounds.

497

00:35:42,880 --> 00:35:45,240

So we can make educated guesses.

498

00:35:45,240 --> 00:35:47,000

We can keep digging.

499

00:35:47,000 --> 00:35:48,760

We can make assumptions.

500

00:35:48,760 --> 00:35:51,640

But the truth is we don't have an answer.

501

00:35:51,640 --> 00:35:57,560

In fact, some experts are highly skeptical about this physical evidence.

502

00:35:57,560 --> 00:36:02,560

Some people look at patterns and the incredible amount of time that passed before the wreckage

503

00:36:02,560 --> 00:36:04,120

washed up.

504

00:36:04,120 --> 00:36:10,280

And they wonder, could this evidence have been planted?

505

00:36:10,280 --> 00:36:18,720

On January 17th, 2017, the official search for Malaysia Flight 370 is suspended.

506

00:36:18,720 --> 00:36:25,920

Despite a sweep of 46,000 square miles of the Indian Ocean seabed, the rest of the plane

507

00:36:25,920 --> 00:36:27,360

isn't found.

508

00:36:27,360 --> 00:36:35,640

So the official search, which took hundreds of millions of dollars and years to conduct,

509

00:36:35,640 --> 00:36:37,840

came up empty.

510

00:36:38,200 --> 00:36:42,560

According to some theorists, the search might have been in the wrong area.

511

00:36:42,560 --> 00:36:47,720

The officials and most of the media convinced themselves that the satellite data could only

512

00:36:47,720 --> 00:36:50,400

mean one thing, that the plane went south.

513

00:36:50,400 --> 00:36:51,560

But they were wrong.

514

00:36:51,560 --> 00:36:54,840

There's another possible interpretation of the data.

515

00:36:54,840 --> 00:36:58,680

The reason that search officials thought that the plane must have gone to the southern Indian

516

00:36:58,680 --> 00:37:03,800

Ocean was because of satellite metadata.

517

00:37:04,760 --> 00:37:12,120

MH370 remained visible to ground-based radar systems until about 2.30 in the morning.

518

00:37:12,120 --> 00:37:19,480

After that, until 8.19 in the morning, the only clues are these satellite data pings.

519

00:37:19,480 --> 00:37:23,960

They're able to calculate the distance of the plane from the satellite using these pings

520

00:37:23,960 --> 00:37:26,760

and how it travels through time and space.

521

00:37:26,760 --> 00:37:31,920

The time delay between the satellite sending its signal and the plane replying allows you

522

00:37:31,920 --> 00:37:35,520

to calculate how far away the plane is from the satellite.

523

00:37:35,520 --> 00:37:40,080

But that only tells you one part of the story.

524

00:37:40,080 --> 00:37:44,520

The problem with those pings is it's really challenging to identify where the airplane

525

00:37:44,520 --> 00:37:45,520

exactly flew.

526

00:37:45,520 --> 00:37:50,360

In fact, at the time of the crash, we didn't have the technology to fully analyze the data

527

00:37:50,360 --> 00:37:52,880

that was provided by MRSA.

528

00:37:52,880 --> 00:37:54,840

And then we have an airplane that's on the move.

529

00:37:54,840 --> 00:37:58,600

We don't know how fast it's going, and we don't know how high it is.

530

00:37:58,600 --> 00:38:05,960

These calculations have to be within milliseconds, or you could be off thousands of miles.

531

00:38:05,960 --> 00:38:11,520

Once they did their calculations, they came to the conclusion that this data meant unequivocally

532

00:38:11,520 --> 00:38:15,920

that the plane could only have gone to the southern Indian Ocean.

533

00:38:15,920 --> 00:38:20,720

But there's another possible route.

534

00:38:20,720 --> 00:38:27,840

It's taken years to figure out the math here, but the data also aligns with a northern arc.

535

00:38:28,040 --> 00:38:32,200

Following the northern arc, the aircraft would have passed through northern Thailand

536

00:38:32,200 --> 00:38:34,240

and then central Asia.

537

00:38:34,240 --> 00:38:41,200

If the plane did fly along the northern route, the final ping puts it over central Kazakhstan.

538

00:38:41,200 --> 00:38:53,240

If MH370 went to Kazakhstan, it opens up a frightening possibility.

539

00:38:53,240 --> 00:38:58,720

This theory says that terrorists hijacked the aircraft, taken to Kazakhstan, killed

540

00:38:58,720 --> 00:39:06,440

the passengers, and then they could have refueled and continued to anywhere within Russia.

541

00:39:06,440 --> 00:39:11,440

If the plane went north, it could have landed safely.

542

00:39:11,440 --> 00:39:16,640

It takes a lot of runway to land a big plane like the 777, and there aren't a lot of long

543

00:39:16,640 --> 00:39:20,720

runways in the remote central part of Kazakhstan.

544

00:39:20,920 --> 00:39:27,040

It turns out that there is a runway not too far away that is a suitable runway for a 777

545

00:39:27,040 --> 00:39:28,320

to land on.

546

00:39:28,320 --> 00:39:35,280

The place is called Yubilani runway, and it's part of the former Soviet military base.

547

00:39:35,280 --> 00:39:41,760

The big question is, did anyone on the plane have ties to Russia?

548

00:39:41,760 --> 00:39:47,480

In first class, there's a Russian national named Nikolai Brodsky, and he's sitting about

549

00:39:47,480 --> 00:39:54,160

15 feet from an unlocked hatch, which contains the electronic brain that controls all of

550

00:39:54,160 --> 00:39:59,440

the flight surfaces of the plane and all the communications with the ground.

551

00:39:59,440 --> 00:40:06,080

And in economy class, you have two Soviet Army veterans sitting directly under the box

552

00:40:06,080 --> 00:40:08,160

that makes the satellite ping.

553

00:40:08,160 --> 00:40:13,440

It's entirely possible that somebody took control of the plane, killed everyone on board,

554

00:40:13,440 --> 00:40:20,520

flew off into perfect safety, refueled, went and hid the plane somewhere, and got away

555

00:40:20,520 --> 00:40:22,040

scot-free.

556

00:40:22,040 --> 00:40:28,360

But if MH370 didn't crash, where did the debris come from?

557

00:40:28,360 --> 00:40:33,640

Some theorists say pieces were taken off the aircraft, thrown into the Indian Ocean to

558

00:40:33,640 --> 00:40:34,840

throw off investigators.

559

00:40:34,840 --> 00:40:41,560

The idea that these pieces might have been planted by perpetrators would explain why

560

00:40:41,920 --> 00:40:46,320

No debris was spotted from the aerial searches over the area where the plane was presumed

561

00:40:46,320 --> 00:40:47,320

to be missing.

562

00:40:47,320 --> 00:40:52,360

For months, was MH370 an accident, or was it a crime?

563

00:40:52,360 --> 00:40:58,040

A perfect crime.

564

00:40:58,040 --> 00:41:04,400

Despite the end of the official investigation in 2018, there remain countless private citizens

565

00:41:04,400 --> 00:41:07,720

dedicated to solving this mystery.

566

00:41:07,720 --> 00:41:13,160

Around the world, scientists, journalists, nonprofits, even major corporations continue

567

00:41:13,160 --> 00:41:19,080

to hunt for answers about what really happened to Malaysia Flight 370, answers that will

568

00:41:19,080 --> 00:41:23,840

hopefully bring closure to the families of those on board.

569

00:41:23,840 --> 00:41:25,640

I'm Lawrence Fishburne.

570

00:41:25,640 --> 00:41:29,040

Thank you for watching History's Greatest Mysteries.