

1

00:00:00,000 --> 00:00:05,000

On this episode of Mythbusters...

2

00:00:05,000 --> 00:00:07,000

That's it, come on!

3

00:00:07,000 --> 00:00:13,000

High flyers Adam and Jamie get caught up in a tall tail from the world of physics.

4

00:00:13,000 --> 00:00:19,000

They're asking if birds in a truck take flight, does the trailer get lighter?

5

00:00:19,000 --> 00:00:21,000

They're all flying.

6

00:00:21,000 --> 00:00:28,000

And Carrie Grant and Tori get all bent out of shape on the biggest build of their mythbusting careers.

7

00:00:28,000 --> 00:00:30,000

Jamie makes it look so easy when he does it.

8

00:00:30,000 --> 00:00:37,000

If a boat traveling at 25 miles an hour crashes into a channel marker, will it split in two?

9

00:00:44,000 --> 00:00:46,000

Who are the Mythbusters?

10

00:00:46,000 --> 00:00:48,000

Adam Savage

11

00:00:48,000 --> 00:00:50,000

He's everybody ready for time.

12

00:00:50,000 --> 00:00:51,000

And Jamie Heidemann

13

00:00:51,000 --> 00:00:53,000

It's me, all worked up, just looking at it.

14

00:00:53,000 --> 00:00:54,000

That is beautiful!

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00:00:54,000 --> 00:00:59,000

Between them more than 30 years of special effects experience.

16

00:00:59,000 --> 00:01:00,000

That was heavy.

17

00:01:00,000 --> 00:01:03,000

Joining them, Grant Imahara.

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00:01:03,000 --> 00:01:04,000

Are you feeling lucky punk?

19

00:01:04,000 --> 00:01:05,000

Tori Bellachy

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00:01:05,000 --> 00:01:07,000

Somebody ordered some exploding pants.

21

00:01:07,000 --> 00:01:08,000

And Carrie Byron

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00:01:08,000 --> 00:01:10,000

High explosives and electricity.

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00:01:10,000 --> 00:01:15,000

They don't just tell the myths, they put them to the test.

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00:01:25,000 --> 00:01:27,000

Okay Adam, what have you got for us?

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00:01:27,000 --> 00:01:28,000

Here's the story.

26

00:01:28,000 --> 00:01:33,000

The guy is driving behind a big truck and every time the big truck gets to a bridge, it stops.

27

00:01:33,000 --> 00:01:37,000

The driver of the truck gets out, bangs on the side and then proceeds across the bridge.

28

00:01:37,000 --> 00:01:40,000

He runs into the truck driver to gas station and says, why are you banging on the truck?

29

00:01:40,000 --> 00:01:45,000

And the truck driver says, well, I got a load of birds and they're over the weight limit of most of these local bridges.

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00:01:45,000 --> 00:01:49,000

So whenever I get to one, I bang on the truck, they fly around and my truck is lighter.

31

00:01:49,000 --> 00:01:50,000

Clever.

32

00:01:50,000 --> 00:01:57,000

So the myth for us is, if you're driving around with a truck loaded of birds and they take flight, is your truck lighter.

33

00:01:59,000 --> 00:02:05,000

So the question is, will a container full of flapping feathery friends lighten the load?

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00:02:05,000 --> 00:02:10,000

For years, this simple concept has had big brain boffins baffle.

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00:02:10,000 --> 00:02:16,000

On campus, it's a conundrum that's frazzled physicists, not to mention the furor on the fan site.

36

00:02:17,000 --> 00:02:20,000

Sounds like a job for the myth busters.

37

00:02:20,000 --> 00:02:24,000

Should we start small or should we go for the whole enchilada all at once?

38

00:02:24,000 --> 00:02:30,000

Well, obviously eventually we're going to need a truck, but I think we can start right now by going out, catching a bird,

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00:02:30,000 --> 00:02:35,000

building a chamber and seeing if it weighs the same when the bird is sitting in it as opposed to when the bird is flying in it.

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00:02:35,000 --> 00:02:41,000

Okay, well, I got some pretty sensitive scales downstairs and I can probably dig up a net somewhere.

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00:02:41,000 --> 00:02:42,000

Let's do it.

42

00:02:42,000 --> 00:02:43,000

All right.

43

00:02:44,000 --> 00:02:49,000

For this myth to take flight, our dynamic duo have to land some pigeons.

44

00:02:49,000 --> 00:02:53,000

And in a scene straight from Hitchcock, the birds appear from nowhere.

45

00:02:58,000 --> 00:03:04,000

Pigeon whisperer Adam and accomplice Jamie use a variety of snares, nets and snacks.

46

00:03:04,000 --> 00:03:07,000

The birds will be too fat to fly.

47

00:03:08,000 --> 00:03:13,000

But their pigeon stalking comes to zero and they realize they need some help.

48

00:03:13,000 --> 00:03:16,000

Enter Kate Martin, pigeon wrangler.

49

00:03:16,000 --> 00:03:18,000

I brought you some pigeons.

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00:03:18,000 --> 00:03:19,000

Awesome.

51

00:03:19,000 --> 00:03:21,000

Come on you guys.

52

00:03:23,000 --> 00:03:25,000

Two pigeons in an official pigeon carrier.

53

00:03:25,000 --> 00:03:27,000

Look at that.

54

00:03:27,000 --> 00:03:32,000

Finally, Adam's all pigeoned up and ready to begin small scale testing.

55

00:03:32,000 --> 00:03:36,000

A clear plastic chamber will double up as a truck trailer and when activated,

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00:03:36,000 --> 00:03:40,000

a vibrating floor will encourage the pigeons to take flight.

57

00:03:40,000 --> 00:03:42,000

But this is your gig, Adam.

58

00:03:42,000 --> 00:03:44,000

Why don't you take us through it?

59

00:03:44,000 --> 00:03:45,000

I've got my bird flying chamber here.

60

00:03:45,000 --> 00:03:46,000

It's got a closed top.

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00:03:46,000 --> 00:03:49,000

The bottom is a screen which I can vibrate by plugging into this battery.

62

00:03:49,000 --> 00:03:53,000

The whole thing is standing on top of a very sensitive scale.

63

00:03:53,000 --> 00:03:56,000

First thing I'm going to do is turn on the scale which will zero it out.

64

00:03:56,000 --> 00:03:59,000

Then I'm going to put the birds in and I'm going to see the birds weigh a certain amount.

65

00:03:59,000 --> 00:04:01,000

Then I'm going to turn on the platform which will vibrate.

66

00:04:01,000 --> 00:04:04,000

Hopefully they'll fly around and we'll see if there's any difference.

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

So if the myth is true, when the pigeon gets some air,

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00:04:08,000 --> 00:04:11,000

the combined weight of the chamber and bird will come down.

69

00:04:11,000 --> 00:04:13,000

Sounds simple.

70

00:04:13,000 --> 00:04:14,000

That's it.

71

00:04:14,000 --> 00:04:15,000

Come on.

72

00:04:15,000 --> 00:04:16,000

Come on.

73

00:04:16,000 --> 00:04:17,000

Take off.

74

00:04:17,000 --> 00:04:18,000

Take off.

75

00:04:18,000 --> 00:04:19,000

Now there's your problem.

76

00:04:19,000 --> 00:04:20,000

The bird just ain't flying.

77

00:04:20,000 --> 00:04:21,000

I don't blame him.

78

00:04:21,000 --> 00:04:22,000

I mean because it's not like...

79

00:04:22,000 --> 00:04:24,000

You can barely get a full wing span in there.

80

00:04:24,000 --> 00:04:25,000

Yeah.

81

00:04:25,000 --> 00:04:27,000

You know, he's running into the sides.

82

00:04:27,000 --> 00:04:29,000

Maybe we need to build a bigger chamber.

83

00:04:29,000 --> 00:04:35,000

So plan B is a bigger chamber and better motivation to fly than a vibrating floor.

84

00:04:35,000 --> 00:04:37,000

What have you got, Jamie?

85

00:04:37,000 --> 00:04:42,000

My current favorite is thinking about setting up a weed whacker like a fair

86

00:04:42,000 --> 00:04:46,000

and we could put like a half a dozen motors so that there's just a...

87

00:04:46,000 --> 00:04:48,000

It's just kind of whizzing around.

88

00:04:48,000 --> 00:04:50,000

I mean, I can't imagine this would hurt him.

89

00:04:50,000 --> 00:04:53,000

I mean, it doesn't hurt you, right?

90

00:04:53,000 --> 00:04:54,000

No.

91

00:04:54,000 --> 00:04:59,000

For our animal loving viewers, let's be clear.

92

00:04:59,000 --> 00:05:02,000

Adam's pain threshold is way below the pigeons.

93

00:05:02,000 --> 00:05:05,000

So if Adam's okay, the bird will be too.

94

00:05:05,000 --> 00:05:07,000

All right, so if you haven't been paying attention,

95

00:05:07,000 --> 00:05:09,000

my first attempt at the small scale pigeon experiment did not work

96

00:05:09,000 --> 00:05:12,000

because the chamber was too small and the pigeon didn't want to fly.

97

00:05:12,000 --> 00:05:14,000

I have fixed those problems.

98

00:05:14,000 --> 00:05:17,000

I believe I'm going to hang this, use a different pigeon annoying technique,

99

00:05:17,000 --> 00:05:20,000

and I'm using a bigger tank so he can actually fly around.

100

00:05:20,000 --> 00:05:24,000

I feel like calling this guy Jackson for some reason.

101

00:05:24,000 --> 00:05:26,000

I have a nephew whose name is Jackson

102

00:05:26,000 --> 00:05:29,000

and I have another nephew whose middle name is Jackson.

103

00:05:29,000 --> 00:05:31,000

He doesn't remind me of either of them.

104

00:05:31,000 --> 00:05:33,000

Okay, Jackson, you're up.

105

00:05:33,000 --> 00:05:37,000

Now remember, all you got to do is what you were born to do.

106

00:05:37,000 --> 00:05:38,000

Fly.

107

00:05:41,000 --> 00:05:44,000

It freaked me out, but it's not doing anything to him.

108

00:05:44,000 --> 00:05:48,000

Come on, come on, come on, come on, come on, come on.

109

00:05:48,000 --> 00:05:50,000

That's pigeon for a fly.

110

00:05:50,000 --> 00:05:54,000

It's also desperate because if they can't get Jackson to take off

111

00:05:54,000 --> 00:05:57,000

and stay airborne, this myth is grounded.

112

00:06:06,000 --> 00:06:09,000

Okay guys, check this out. I found it on the internet.

113

00:06:09,000 --> 00:06:10,000

Whoa.

114

00:06:10,000 --> 00:06:11,000

Is that Photoshopped?

115

00:06:11,000 --> 00:06:12,000

Apparently not.

116

00:06:12,000 --> 00:06:16,000

And supposedly the boat hit the channel marker at 25 miles per hour.

117

00:06:16,000 --> 00:06:19,000

Seriously? That split up the middle like what, 15 feet?

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00:06:19,000 --> 00:06:20,000

17 feet, actually.

119

00:06:20,000 --> 00:06:23,000

Haha, you know what I see in our near future.

120

00:06:23,000 --> 00:06:25,000

Yeah, crashing boats.

121

00:06:25,000 --> 00:06:26,000

Absolutely.

122

00:06:28,000 --> 00:06:33,000

This tall tale of hijinks on the high seas has two halves,

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00:06:33,000 --> 00:06:34,000

literal.

124

00:06:34,000 --> 00:06:37,000

We know it happened because it's been well documented,

125

00:06:37,000 --> 00:06:40,000

but the myth is in the details.

126

00:06:40,000 --> 00:06:43,000

Apparently in this watery fender bender,

127

00:06:43,000 --> 00:06:47,000

the boat bifurcation occurred at 25 miles per hour.

128

00:06:47,000 --> 00:06:51,000

Fact? Or has someone got their facts bent out of shape?

129

00:06:51,000 --> 00:06:53,000

So what's planned?

130

00:06:53,000 --> 00:06:54,000

Alright, this is what we do.

131

00:06:54,000 --> 00:06:56,000

We rent one of these speed boats, we take some insurance out,

132

00:06:56,000 --> 00:06:58,000

and we crash it into a channel marker.

133

00:06:58,000 --> 00:07:00,000

And we tell them we're going 25 miles an hour.

134

00:07:00,000 --> 00:07:01,000

Exactly.

135

00:07:01,000 --> 00:07:02,000

Okay, why not?

136

00:07:02,000 --> 00:07:07,000

Well, the \$350,000 price tag and a bad rep with insurance companies

137

00:07:07,000 --> 00:07:08,000

is why not.

138

00:07:08,000 --> 00:07:10,000

But all is not lost.

139

00:07:10,000 --> 00:07:13,000

Down at John Beery Yachts, our trio of thrill seekers

140

00:07:13,000 --> 00:07:18,000

get the opportunity to experience the power behind the power boat.

141

00:07:18,000 --> 00:07:21,000

And Sean, their high speed chauffeur for the day,

142

00:07:21,000 --> 00:07:23,000

has even heard of the myth.

143

00:07:23,000 --> 00:07:24,000

So the myth that we're working on here today

144

00:07:24,000 --> 00:07:25,000

actually came from the internet.

145

00:07:25,000 --> 00:07:29,000

There's this photo going all over of a sports performance boat,

146

00:07:29,000 --> 00:07:31,000

not yours, but one sort of like that,

147

00:07:31,000 --> 00:07:34,000

that apparently was going 25 miles an hour

148

00:07:34,000 --> 00:07:38,000

and bifurcated itself on a channel marker, 17 feet deep.

149

00:07:38,000 --> 00:07:41,000

Do you think that's possible at that kind of speed?

150

00:07:41,000 --> 00:07:42,000

In my opinion, no.

151

00:07:42,000 --> 00:07:47,000

The photograph that I viewed, that boat had to have been traveling

152

00:07:47,000 --> 00:07:50,000

at a much greater rate of speed to get the damage that I saw.

153

00:07:50,000 --> 00:07:55,000

Well, with a top speed of 150 miles per hour, faster we can do.

154

00:07:55,000 --> 00:08:00,000

But unfortunately, someone is going to quite literally miss the boat.

155

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

Rose, Sam, Bo.

156

00:08:02,000 --> 00:08:03,000

Odd man out.

157

00:08:03,000 --> 00:08:04,000

No!

158

00:08:04,000 --> 00:08:06,000

Here is a chase boat!

159

00:08:06,000 --> 00:08:09,000

You've got to be kidding me!

160

00:08:09,000 --> 00:08:13,000

With just room for two, it's all but one aboard.

161

00:08:13,000 --> 00:08:15,000

That is loud!

162

00:08:15,000 --> 00:08:16,000

It's really loud.

163

00:08:16,000 --> 00:08:18,000

It's not like a quiet sport, is it?

164

00:08:18,000 --> 00:08:20,000

With engines and hearts racing,

165

00:08:20,000 --> 00:08:23,000

Grant discovers his voice hasn't broken.

166

00:08:23,000 --> 00:08:24,000

Okay.

167

00:08:24,000 --> 00:08:27,000

Ha ha ha ha ha!

168

00:08:28,000 --> 00:08:30,000

There aren't any seatbelts in this thing, are there?

169

00:08:30,000 --> 00:08:33,000

With the speedo approaching 100 miles an hour,

170

00:08:33,000 --> 00:08:35,000

no wonder Grant's nervous.

171

00:08:36,000 --> 00:08:37,000

Wow!

172

00:08:37,000 --> 00:08:39,000

Ha ha ha!

173

00:08:39,000 --> 00:08:40,000

Great!

174

00:08:40,000 --> 00:08:42,000

Are you trying to hold my hand?

175

00:08:42,000 --> 00:08:45,000

No, I just tried to hold on to something!

176

00:08:45,000 --> 00:08:50,000

By now, the guys at Donzie Performance Boats have realized

177

00:08:50,000 --> 00:08:53,000

Cary and Grant can't afford the fuel for this trip.

178

00:08:53,000 --> 00:08:54,000

Never mind the boat.

179

00:08:54,000 --> 00:08:58,000

And this myth investigation is anchored at Square One.

180

00:09:00,000 --> 00:09:01,000

Next on Myth Busters.

181

00:09:01,000 --> 00:09:02,000

Shimbucks.

182

00:09:02,000 --> 00:09:05,000

Tori takes the crash tests into his own hands,

183

00:09:05,000 --> 00:09:08,000

and then things get out of hand.

184

00:09:15,000 --> 00:09:18,000

The Myth Busters are trying out for CSI.

185

00:09:18,000 --> 00:09:20,000

That's Crash Scene Investigation.

186

00:09:20,000 --> 00:09:23,000

They're asking, can you bifurcate your boat

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00:09:23,000 --> 00:09:25,000

in a collision with a channel marker?

188

00:09:26,000 --> 00:09:29,000

The only evidence they have is this photo

189

00:09:29,000 --> 00:09:33,000

and accompanying reports that the boat was traveling at 25 miles per hour.

190

00:09:35,000 --> 00:09:37,000

To find out if this is possible,

191

00:09:37,000 --> 00:09:41,000

our team want to replicate myth conditions and impale their own boat.

192

00:09:41,000 --> 00:09:44,000

But with a brand new boat way out of their price range,

193

00:09:44,000 --> 00:09:48,000

our crack team of researchers has found the bargain of a lifetime.

194

00:09:49,000 --> 00:09:50,000

Not too many holes?

195

00:09:50,000 --> 00:09:52,000

No, this is going to be great.

196

00:09:52,000 --> 00:09:53,000

I think it's perfect.

197

00:09:53,000 --> 00:09:54,000

Yeah.

198

00:09:54,000 --> 00:09:55,000

You think it's seaworthy?

199

00:09:55,000 --> 00:09:57,000

I don't know if it's seaworthy, but...

200

00:09:57,000 --> 00:10:00,000

It's definitely crash worthy.

201

00:10:00,000 --> 00:10:02,000

We got this boat for a bargain.

202

00:10:02,000 --> 00:10:03,000

It was only \$1500.

203

00:10:03,000 --> 00:10:07,000

We're talking about boats that can be up to \$350,000.

204

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

So we were a little apprehensive about when it showed up,

205

00:10:10,000 --> 00:10:11,000

what it was going to look like.

206

00:10:11,000 --> 00:10:13,000

It turns out it's amazing.

207

00:10:13,000 --> 00:10:14,000

The structure is perfect.

208

00:10:14,000 --> 00:10:16,000

It may not have an engine,

209

00:10:16,000 --> 00:10:18,000

but we'd have to take that out anyway.

210

00:10:18,000 --> 00:10:20,000

So we're really, really excited.

211

00:10:21,000 --> 00:10:22,000

No wonder Carrie is excited,

212

00:10:22,000 --> 00:10:26,000

because with the full-scale boat dry docked in the Myth Busters marina,

213

00:10:26,000 --> 00:10:28,000

the team can move on.

214

00:10:28,000 --> 00:10:31,000

And first up are some small-scale crash tests.

215

00:10:31,000 --> 00:10:35,000

And this one-tenth model is a great starting point.

216

00:10:35,000 --> 00:10:37,000

Oh, I love this boat.

217

00:10:37,000 --> 00:10:39,000

It's my favorite boat.

218

00:10:39,000 --> 00:10:41,000

I don't want to crash it.

219

00:10:43,000 --> 00:10:46,000

Okay, we need to crash these boats over and over.

220

00:10:46,000 --> 00:10:48,000

I need to make several of them.

221

00:10:48,000 --> 00:10:51,000

So I need to make a mold of this particular model boat.

222

00:10:51,000 --> 00:10:53,000

I'll make a silicone mold.

223

00:10:53,000 --> 00:10:56,000

I'll paint silicone over this in two halves.

224

00:10:56,000 --> 00:10:58,000

Make another mold on top of that.

225

00:10:58,000 --> 00:11:03,000

Then I'll be able to pull it apart and lay up any material I want inside the mold.

226

00:11:03,000 --> 00:11:04,000

Done.

227

00:11:04,000 --> 00:11:05,000

Okay.

228

00:11:06,000 --> 00:11:08,000

And to match the motor boat in the Myth,

229

00:11:08,000 --> 00:11:11,000

Tari's material of choice is fiberglass.

230

00:11:11,000 --> 00:11:13,000

It's nasty and noxious,

231

00:11:13,000 --> 00:11:16,000

so Tari is banished outside to finish up,

232

00:11:16,000 --> 00:11:19,000

which he does by gluing the hardened halves together.

233

00:11:19,000 --> 00:11:21,000

And before you can say,

234

00:11:21,000 --> 00:11:23,000

it's a purification,

235

00:11:23,000 --> 00:11:26,000

Tari's got himself some mighty fine toy boats.

236

00:11:26,000 --> 00:11:28,000

He's pretty.

237

00:11:28,000 --> 00:11:29,000

Meanwhile,

238

00:11:29,000 --> 00:11:33,000

Grad has been working on a rig to tow the models into a replica channel marker,

239

00:11:33,000 --> 00:11:36,000

simulating the mythical impalement impact.

240

00:11:36,000 --> 00:11:39,000

His remote-controlled winch and trolley is calibrated,

241

00:11:39,000 --> 00:11:41,000

so the boat crashes into the steel pole

242

00:11:41,000 --> 00:11:44,000

in exactly the same place as the Myth,

243

00:11:44,000 --> 00:11:46,000

just to the left of the bow.

244

00:11:46,000 --> 00:11:47,000

But hold on.

245

00:11:47,000 --> 00:11:49,000

Where'd the H₂O go?

246

00:11:49,000 --> 00:11:53,000

I might be wondering why we're doing our small-scale experiments on land

247

00:11:53,000 --> 00:11:55,000

as opposed to water,

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00:11:55,000 --> 00:11:57,000

since ostensibly the Myth is about a boat on water.

249

00:11:57,000 --> 00:11:59,000

Well, there are two reasons.

250

00:11:59,000 --> 00:12:03,000

First, water, not unlike many primal forces,

251

00:12:03,000 --> 00:12:05,000

doesn't scale correctly in miniature.

252

00:12:05,000 --> 00:12:09,000

It has a different response than it does in full scale.

253

00:12:09,000 --> 00:12:12,000

Now, the second reason, and I think more importantly,

254

00:12:12,000 --> 00:12:15,000

is that this Myth is about kinetic energy,

255

00:12:15,000 --> 00:12:19,000

a mass at a certain velocity hitting an object.

256

00:12:19,000 --> 00:12:22,000

And that we can certainly do on land.

257

00:12:22,000 --> 00:12:25,000

So this is a dry run in more ways than one.

258

00:12:25,000 --> 00:12:27,000

Take us through it, Carrie.

259

00:12:27,000 --> 00:12:29,000

This is the setup for the small-scale experiment.

260

00:12:29,000 --> 00:12:31,000

We have a fiberglass boat,

261

00:12:31,000 --> 00:12:34,000

which is one-tenth the scale of our real life boat.

262

00:12:34,000 --> 00:12:36,000

It's also weighted to one-tenth the scale.

263

00:12:36,000 --> 00:12:39,000

It's sitting atop a trolley that grants created with a smart wheel

264

00:12:39,000 --> 00:12:42,000

so that it can correct itself all the way down a long cable,

265

00:12:42,000 --> 00:12:46,000

which is being pulled through a pulley into a channel marker,

266

00:12:46,000 --> 00:12:48,000

which is set stably into the ground.

267

00:12:48,000 --> 00:12:50,000

The entire thing is being controlled by a winch,

268

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

which Grant can remote control from this end,

269

00:12:52,000 --> 00:12:54,000

and hopefully in the end,

270

00:12:54,000 --> 00:12:56,000

we'll have a perfect bifurcation

271

00:12:56,000 --> 00:12:58,000

as it crashes into that end of the shop.

272

00:12:58,000 --> 00:13:02,000

Three, two, one, go.

273

00:13:06,000 --> 00:13:09,000

No mythical split, just a glancing blow.

274

00:13:09,000 --> 00:13:11,000

Well, the boat's intact.

275

00:13:11,000 --> 00:13:14,000

And with everything to scale, there's only one thing for it.

276

00:13:14,000 --> 00:13:16,000

More speed.

277

00:13:16,000 --> 00:13:17,000

Should we ramp it up?

278

00:13:17,000 --> 00:13:18,000

Sure.

279

00:13:18,000 --> 00:13:22,000

Unfortunately, the only thing ramping up is the frustration level,

280

00:13:22,000 --> 00:13:26,000

as the kinks and glitches in their system work themselves out.

281

00:13:28,000 --> 00:13:30,000

Well, that's not gonna work.

282

00:13:30,000 --> 00:13:32,000

I see one problem.

283

00:13:33,000 --> 00:13:37,000

It's one of those days everything that can go wrong...

284

00:13:37,000 --> 00:13:40,000

Oh, we've biofocated the trolley.

285

00:13:40,000 --> 00:13:42,000

Goes wrong.

286

00:13:49,000 --> 00:13:51,000

But as Edison nearly said,

287

00:13:51,000 --> 00:13:56,000

myth-busting is 1% genius and 99% perseverance.

288

00:13:56,000 --> 00:13:58,000

And their patience is rewarded

289

00:13:58,000 --> 00:14:01,000

when they get some realistic collisions with the channel marker.

290

00:14:03,000 --> 00:14:05,000

Oh!

291

00:14:05,000 --> 00:14:07,000

That was cool.

292

00:14:07,000 --> 00:14:09,000

But despite increasing the speed,

293

00:14:09,000 --> 00:14:13,000

the impact and resulting damage peaks at glancing blow.

294

00:14:13,000 --> 00:14:16,000

Oh, that was cool.

295

00:14:16,000 --> 00:14:19,000

But Grant's frustrated, and his OCD kicks in.

296

00:14:19,000 --> 00:14:21,000

That's obsessive crash disorder.

297

00:14:21,000 --> 00:14:25,000

He wants to see some damage, and hence Tari a challenge.

298

00:14:25,000 --> 00:14:27,000

I will give you five bucks,

299

00:14:27,000 --> 00:14:31,000

and if you can ram this into the channel marker and break it.

300

00:14:31,000 --> 00:14:33,000

Ooh, five dollars?

301

00:14:33,000 --> 00:14:35,000

I'll give you ten bucks.

302

00:14:35,000 --> 00:14:38,000

That's a whole week's salary, but Tari can't resist.

303

00:14:38,000 --> 00:14:40,000

Ten bucks.

304

00:14:40,000 --> 00:14:42,000

Okay, so it can be done.

305

00:14:42,000 --> 00:14:45,000

And the team suspect the angle of attack was key.

306

00:14:45,000 --> 00:14:48,000

Like in the myth, Tari was aiming to the left of the bow,

307

00:14:48,000 --> 00:14:50,000

and he adds a turn into the pole.

308

00:14:50,000 --> 00:14:52,000

If it can do it like that,

309

00:14:52,000 --> 00:14:55,000

that shows me maybe the turn is the way to go.

310

00:14:55,000 --> 00:14:58,000

Let me try it again, just going straight,

311

00:14:58,000 --> 00:15:00,000

and see what happens.

312

00:15:00,000 --> 00:15:02,000

With an attempted head-on collision,

313

00:15:02,000 --> 00:15:04,000

it's back to glancing blow.

314

00:15:04,000 --> 00:15:07,000

And with that discovery, the small-scale tests are back on track.

315

00:15:07,000 --> 00:15:11,000

To be sure, Tari once again adds that last-minute twist.

316

00:15:11,000 --> 00:15:13,000

And, why do you know?

317

00:15:13,000 --> 00:15:15,000

Well, that tells us a lot.

318

00:15:15,000 --> 00:15:19,000

It tells us it's better to hit the marker at a turn

319

00:15:19,000 --> 00:15:21,000

as opposed to just going straight into it.

320

00:15:21,000 --> 00:15:23,000

Finally, a result.

321

00:15:23,000 --> 00:15:25,000

But it's been a long and frustrating day,

322

00:15:25,000 --> 00:15:29,000

and Tari and Grant feel the need to let off some steam.

323

00:15:29,000 --> 00:15:39,000

I am so sick doing small-scale experiments!

324

00:15:48,000 --> 00:15:51,000

Beat towns and eat your heart out.

325

00:15:51,000 --> 00:15:53,000

Okay, so how crazy was that?

326

00:15:53,000 --> 00:15:56,000

That it took Tari smashing that boat by hand into the pole

327

00:15:56,000 --> 00:16:00,000

before we could find out that we need to turn at the last minute to split it.

328

00:16:00,000 --> 00:16:03,000

You know, I think that these variables are just too tough to scale down.

329

00:16:03,000 --> 00:16:06,000

I think if we're going to test this for real, we need to go to full-scale.

330

00:16:06,000 --> 00:16:08,000

I propose we do this on land,

331

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

because the Smith is really about kinetic energy.

332

00:16:10,000 --> 00:16:15,000

It's a mass, which is the boat, hitting the channel marker with a certain velocity.

333

00:16:15,000 --> 00:16:18,000

And doing it on water doesn't buy us anything extra.

334

00:16:18,000 --> 00:16:21,000

Yeah, and I think it would be a lot easier to control on land.

335

00:16:21,000 --> 00:16:24,000

Coming up, the bird in a truck story.

336

00:16:25,000 --> 00:16:27,000

Finally gets off the ground.

337

00:16:27,000 --> 00:16:29,000

Look at that!

338

00:16:39,000 --> 00:16:45,000

Among top-level physicists, it's a fundamental question with a hotly debated answer.

339

00:16:45,000 --> 00:16:48,000

If the weight of a truck full of birds is X ,

340

00:16:48,000 --> 00:16:52,000

when the birds take flight, is it now X minus the weight of the birds?

341

00:16:52,000 --> 00:16:55,000

That is, does the truck get lighter?

342

00:16:56,000 --> 00:17:00,000

Adam and Jamie's first foray in the Smith fell flat,

343

00:17:00,000 --> 00:17:03,000

so it's time to look outside the box.

344

00:17:03,000 --> 00:17:06,000

Cue the aerodynamicist to speak some geek.

345

00:17:06,000 --> 00:17:09,000

We need your help. We've got a story that's come up that we're testing right now.

346

00:17:09,000 --> 00:17:13,000

It is a question that is all over the fansites.

347

00:17:13,000 --> 00:17:18,000

If you're driving with a truck load full of birds and they take flight inside your truck,

348

00:17:18,000 --> 00:17:21,000

is your truck actually lighter while they're flying around?

349

00:17:21,000 --> 00:17:25,000

That's actually a very often told physics urban legend.

350

00:17:25,000 --> 00:17:30,000

Can you tell us something about the mechanics of flight that would apply to this?

351

00:17:30,000 --> 00:17:35,000

I mean, we know birds flap their wings and there's lift involved, there's downward pressures.

352

00:17:35,000 --> 00:17:39,000

What's going on here that we need to be focusing on?

353

00:17:39,000 --> 00:17:45,000

Well, the basic premise of all flight, whether it be a helicopter or a plane

354

00:17:45,000 --> 00:17:48,000

or a bird flapping its wings or just even gliding,

355

00:17:48,000 --> 00:17:53,000

is that it takes air and deflects it downward

356

00:17:53,000 --> 00:17:59,000

and the downwards force on the air will in turn cause a reaction force upward

357

00:17:59,000 --> 00:18:04,000

that will help lift whatever the object is against the force of gravity.

358

00:18:04,000 --> 00:18:09,000

Wait, a helicopter and a bird are actually using the same physical principles to fly?

359

00:18:09,000 --> 00:18:13,000

Absolutely. It all comes down to Newton's laws.

360

00:18:13,000 --> 00:18:15,000

So let's get this straight.

361

00:18:15,000 --> 00:18:20,000

To get airborne, you push down on the air beneath you hard enough to lift your own weight

362

00:18:20,000 --> 00:18:24,000

and because the principle works for birds and helicopters alike,

363

00:18:24,000 --> 00:18:29,000

Jamie and Adam have an idea, which means the pigeons get a break.

364

00:18:29,000 --> 00:18:35,000

Pigeons are what the myth is about, but pigeons sometimes don't do exactly what you want them to do.

365

00:18:35,000 --> 00:18:41,000

So we figure that a similar sort of a thing that might show the same phenomenon

366

00:18:41,000 --> 00:18:45,000

if there is one would be a little helicopter that we can control.

367

00:18:45,000 --> 00:18:51,000

But it's not as simple as that. Flying a chopper in an enclosed space creates turbulence,

368

00:18:51,000 --> 00:18:53,000

making it hard to hover.

369

00:18:53,000 --> 00:18:58,000

So to run the bench test, Adam's built this rig, which will allow it to lift

370

00:18:58,000 --> 00:19:01,000

but keep it centrally tethered at the same time.

371

00:19:01,000 --> 00:19:07,000

Excellent. 52.0. 52.6.

372

00:19:08,000 --> 00:19:12,000

Adam has measured the weight difference of the container with and without the chopper.

373

00:19:12,000 --> 00:19:17,000

Now the question is, when the helicopter takes off, will the chamber get lighter?

374

00:19:21,000 --> 00:19:26,000

Hey, look, lift off! We've got to lift off! Look at that!

375

00:19:26,000 --> 00:19:29,000

The scale is not changing.

376

00:19:32,000 --> 00:19:35,000

52.6. 52.6.

377

00:19:38,000 --> 00:19:42,000

Dude! That's lift off!

378

00:19:42,000 --> 00:19:46,000

I so did not expect this rig to work.

379

00:19:49,000 --> 00:19:51,000

All right.

380

00:19:57,000 --> 00:20:02,000

In a break from myth-buster tradition, Adam has success with a scale test.

381

00:20:03,000 --> 00:20:06,000

I know that my helicopter weighs 6 tenths of a pound.

382

00:20:06,000 --> 00:20:13,000

So if the myth was true, I should have seen that meter go from 52.5 or 6 to 52 flat.

383

00:20:13,000 --> 00:20:17,000

But that's not the whole story. This myth is about birds,

384

00:20:17,000 --> 00:20:20,000

and trust Jamie to get straight to the heart of the problem.

385

00:20:20,000 --> 00:20:24,000

We've got to try it in a truck or something close to it with the birds.

386

00:20:24,000 --> 00:20:28,000

So it's full scale ahead, and after a myth-buster makeover,

387

00:20:28,000 --> 00:20:31,000

this trailer, standing in for the truck and the myth,

388

00:20:31,000 --> 00:20:35,000

will be full of flying birds for the final test weigh-in.

389

00:20:35,000 --> 00:20:39,000

That's cool. He looks like a little animal in a circus game.

390

00:20:41,000 --> 00:20:44,000

With the front fitted with clear plastic, Jess and Jamie are done,

391

00:20:44,000 --> 00:20:46,000

and it's time for a flight test.

392

00:20:46,000 --> 00:20:52,000

There are no scales yet, so this test is simply to confirm the birds are comfortable spreading their wings.

393

00:20:52,000 --> 00:20:55,000

If they don't, Adam and Jamie are back to square one.

394

00:20:55,000 --> 00:20:57,000

Hey!

395

00:20:57,000 --> 00:21:00,000

But it's immediately obvious there's plenty of room.

396

00:21:00,000 --> 00:21:03,000

So final prep on the big rig begins.

397

00:21:03,000 --> 00:21:05,000

The flight motivators go in first.

398

00:21:05,000 --> 00:21:10,000

These rotating foam tubes are supposed to keep the pigeons in the air.

399

00:21:17,000 --> 00:21:18,000

There we go.

400

00:21:18,000 --> 00:21:19,000

We have liftoff.

401

00:21:19,000 --> 00:21:25,000

Next, the team makes sure there are no nooks or crannies where the pigeons can land and take a rest.

402

00:21:25,000 --> 00:21:27,000

It works for myth-busters,

403

00:21:30,000 --> 00:21:32,000

but how about the pigeons?

404

00:21:32,000 --> 00:21:33,000

You ready?

405

00:21:33,000 --> 00:21:36,000

I have no idea what's going to happen here.

406

00:21:37,000 --> 00:21:42,000

So Adam and Jamie have finally got Jackson and friend to fly in an enclosed space.

407

00:21:45,000 --> 00:21:48,000

Now comes the tricky bit, catching a flock more birds,

408

00:21:48,000 --> 00:21:52,000

letting them loosen the trailer and accurately weighing them.

409

00:21:56,000 --> 00:22:02,000

The story of the bifurcated boat has brought Carrie Grant and Tori close to breaking point.

410

00:22:05,000 --> 00:22:12,000

And to prevent this parable of split personality from sinking without a trace, it's land ahoy.

411

00:22:13,000 --> 00:22:17,000

With the decision to move on to terra firma, the team is on firmer footing,

412

00:22:17,000 --> 00:22:22,000

because by supersizing their crash test rig, they have a ready-made plan.

413

00:22:23,000 --> 00:22:26,000

As before, the reinforced channel marker is at ground zero.

414

00:22:27,000 --> 00:22:30,000

Grant's winch system will be replaced by a tow truck,

415

00:22:30,000 --> 00:22:37,000

and the boat trailer, modified with a smart wheel, will steer accurately towards its date with disaster.

416

00:22:37,000 --> 00:22:42,000

But there's one final piece of the plan, how to get that last-minute turn.

417

00:22:43,000 --> 00:22:50,000

If we learn anything from our small-scale test, I think the turn is probably one of the most critical things.

418

00:22:50,000 --> 00:22:58,000

So there has to be some way for us to steer it into the channel marker at the last second.

419

00:22:58,000 --> 00:23:05,000

To get the boat to turn where we want it, maybe we could do is make a set of smart wheels at the front of the boat,

420

00:23:05,000 --> 00:23:08,000

and this will steer the boat wherever we want it to go.

421

00:23:09,000 --> 00:23:14,000

And then what we could do is put like a crossbar here, and you know, we'll put a post in the ground.

422

00:23:14,000 --> 00:23:20,000

So when this bar hits that post, it'll turn the wheels into the marker.

423

00:23:20,000 --> 00:23:22,000

Cool. Sounds good.

424

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

So it's a done deal, and the newly named Mythity Split ups anchor and ships out.

425

00:23:29,000 --> 00:23:31,000

Say goodbye to the Mythity Split!

426

00:23:31,000 --> 00:23:37,000

It's port of call, a familiar dockside destination with an impeccable mythbuster pedigree.

427

00:23:37,000 --> 00:23:39,000

We're back here at the Alameda runway.

428

00:23:39,000 --> 00:23:42,000

This is the site of some of our more famous myths.

429

00:23:42,000 --> 00:23:47,000

And in fact, I'm sitting on the X right here, which is going to be our channel marker.

430

00:23:47,000 --> 00:23:53,000

It's also the spot where our compact compact in the end smashed into each other.

431

00:23:55,000 --> 00:23:59,000

Hoping to match that spectacular smash with a big bang of their own,

432

00:23:59,000 --> 00:24:03,000

the team embark on what's to become their toughest build effort.

433

00:24:03,000 --> 00:24:06,000

Why no? That's Spanish for good.

434

00:24:07,000 --> 00:24:11,000

Carrie and Grant begin by raising the channel marker into position.

435

00:24:11,000 --> 00:24:19,000

Now that we have the pole in place, the next step is to weld around the bottom of the pole to hold it in place to the plate.

436

00:24:19,000 --> 00:24:27,000

Then we're going to lay that heavy, heavy girder to the back of this pole and then triangulate railroad track to it.

437

00:24:27,000 --> 00:24:33,000

So it's going to be completely stationary and not going to move when we smash the boat into it.

438

00:24:33,000 --> 00:24:38,000

I'm just excited we got the pole in place. I'm going to do my pole dance.

439

00:24:38,000 --> 00:24:41,000

Not what you expected, huh?

440

00:24:41,000 --> 00:24:45,000

While Grant and Carrie have been cranking up the heavy metal,

441

00:24:45,000 --> 00:24:50,000

Tori has been trashing his trailer and adding the smart wheels.

442

00:24:50,000 --> 00:24:59,000

Now they can steer with a single cable tow and when the hull of the myth that he split hits the channel marker, the trailer won't be in the way.

443

00:25:00,000 --> 00:25:07,000

Finally, he adds these 55 gallon drums, which when filled with water will weigh the same as the missing engines.

444

00:25:07,000 --> 00:25:11,000

This whole myth is about mass moving at speed.

445

00:25:11,000 --> 00:25:15,000

So it's important that we have the correct mass as we're moving at the speeds that we're going to test.

446

00:25:15,000 --> 00:25:23,000

Meanwhile, Carrie and Grant are making triple sure the channel marker stays put when the myth that he split hits.

447

00:25:23,000 --> 00:25:32,000

The next step we have, or at least the next really big step we have, is that we're going to drill holes in various places all around this giant structure here

448

00:25:32,000 --> 00:25:40,000

so that we can implant foot long pieces of rebar into those holes, weld them to this structure.

449

00:25:40,000 --> 00:25:47,000

So not only is this going to be the heaviest thing you've ever seen, but it's also going to be clawed into the ground.

450

00:25:47,000 --> 00:25:51,000

Things are going so well, Grant finds time to hang around.

451

00:25:51,000 --> 00:25:59,000

The prep for the boat myth is going great so far. I just hope that the weather holds out.

452

00:25:59,000 --> 00:26:10,000

Just had to mention the weather, didn't you? And as the rain gets heavier, the problems mount and the work on the final stages slows to a crawl.

453

00:26:10,000 --> 00:26:15,000

I'm so over this one. I'm pretty much over this one.

454

00:26:15,000 --> 00:26:20,000

With Old Testament style flooding, maybe they could rename their boat the Ark.

455

00:26:20,000 --> 00:26:26,000

Yeah, I think we were a little bit worried that the fans might be upset that we weren't doing this on the water. Well, now we are.

456

00:26:26,000 --> 00:26:29,000

Despite the tough conditions, they pull through.

457

00:26:29,000 --> 00:26:32,000

Jamie makes it look so easy when he does it.

458

00:26:32,000 --> 00:26:35,000

And push on for a toe test of the trailer.

459

00:26:35,000 --> 00:26:41,000

I'm so excited. It works. It looks really cool. We got a boat car, or a car boat. I'm not sure which one.

460

00:26:41,000 --> 00:26:46,000

And with just the trigger to rig for the critical last minute turn, it's all hands on deck.

461

00:26:46,000 --> 00:26:50,000

We've mapped out exactly where the bow should hit the channel marker.

462

00:26:50,000 --> 00:27:01,000

And this, I'm drilling a hole right here for the trigger, which will turn the wheels, slam the boat into the channel marker, therein bifurcating the boat, or not.

463

00:27:01,000 --> 00:27:07,000

So the build is finally complete and Carriantori is celebrating.

464

00:27:07,000 --> 00:27:12,000

The boat has moved into position gently. No one wants the wheels to come off now.

465

00:27:12,000 --> 00:27:15,000

Right. Now for the moment of truth.

466

00:27:15,000 --> 00:27:21,000

At the opposite end of the track, Grant has the truck all hooked up and ready to tow.

467

00:27:21,000 --> 00:27:32,000

So these are chains connected to the tow truck. We've got our shackle. This is a breakaway rope for safety. And then the cable. I think we're ready to take up slack.

468

00:27:32,000 --> 00:27:39,000

And as Twilight descends, they're wet, cold, but ready to put this tail to the test.

469

00:27:39,000 --> 00:27:45,000

Alright, take it slow and then take it up to 25 miles an hour on my count. Ready?

470

00:27:45,000 --> 00:27:47,000

Ready.

471

00:27:47,000 --> 00:27:51,000

In three, two, one, go.

472

00:27:51,000 --> 00:28:03,000

This is it. Remember, they're asking if a speed boat at 25 miles per hour plus channel marker equals this kind of boat splitting destruction. We're about to find out.

473

00:28:03,000 --> 00:28:05,000

5 miles per hour.

474

00:28:05,000 --> 00:28:07,000

Can you guys go faster?

475

00:28:07,000 --> 00:28:09,000

10 miles per hour.

476

00:28:09,000 --> 00:28:11,000

But suddenly, disaster.

477

00:28:11,000 --> 00:28:13,000

Can we lose the cable?

478

00:28:13,000 --> 00:28:15,000

Cable broke.

479

00:28:15,000 --> 00:28:29,000

As Tarry said, that's not good. The breakaway rope that's designed to break on impact snapped under the strain of the tow. And with this last minute failure in the fading light, team unity is the first casualty.

480

00:28:29,000 --> 00:28:44,000

So for all the other things where we tow something big into something else and it crashes, we use a breakaway rope. And there's a standard one that we've been using, which is a blue marine rope. We know its breaking strength is 6,000.

481

00:28:44,000 --> 00:28:51,000

But on this particular one, Tori really didn't want to use that. He wanted to use this.

482

00:28:51,000 --> 00:29:00,000

So, but tomorrow, I think what we're going to do is go back to what we used to use that was working.

483

00:29:00,000 --> 00:29:03,000

Dude, we've never used the blue rope.

484

00:29:03,000 --> 00:29:05,000

We always use the blue rope.

485

00:29:05,000 --> 00:29:07,000

No, we haven't.

486

00:29:07,000 --> 00:29:09,000

Yes, we do.

487

00:29:09,000 --> 00:29:19,000

Seeing as Grant and Tori are rejecting each other's reality and substituting their own, this argument is on a road to nowhere. Let's come back tomorrow.

488

00:29:19,000 --> 00:29:26,000

After the break, our crash scene investigators get the crash they've been waiting for.

489

00:29:26,000 --> 00:29:36,000

And Burn in a Truck sees Adam and Jamie ramp up the pigeon hunt.

490

00:29:40,000 --> 00:29:46,000

Bifurcated Boat has once again brought our wet and mild mythbusters to breaking point.

491

00:29:46,000 --> 00:29:47,000

We always use the blue rope.

492

00:29:47,000 --> 00:29:48,000

No, we haven't.

493

00:29:48,000 --> 00:29:49,000

Yes, we do.

494

00:29:49,000 --> 00:29:50,000

No, we're the breakable.

495

00:29:50,000 --> 00:29:51,000

Yes, we do.

496

00:29:51,000 --> 00:29:53,000

But all that actually breaks are their voices.

497

00:29:53,000 --> 00:30:02,000

And in the cold dark of the next day, they once again prepare the good ship, Mythity Split, for its 25 mile an hour collision.

498

00:30:02,000 --> 00:30:03,000

Cool.

499

00:30:03,000 --> 00:30:10,000

Positions everyone. Jess takes her place in the tow truck and the rest of the team stand by, level with the crash zone.

500

00:30:10,000 --> 00:30:12,000

Okay, Jess, are you ready?

501

00:30:12,000 --> 00:30:14,000

Ready when you are.

502

00:30:14,000 --> 00:30:18,000

Here we go in three, two, one, drive.

503

00:30:20,000 --> 00:30:22,000

Alright, we're at five miles per hour.

504

00:30:22,000 --> 00:30:24,000

Okay, gosh.

505

00:30:24,000 --> 00:30:26,000

Now we're at 10 miles per hour.

506

00:30:28,000 --> 00:30:30,000

15 miles per hour.

507

00:30:30,000 --> 00:30:31,000

Yeah!

508

00:30:31,000 --> 00:30:33,000

It's picking up. Come on.

509

00:30:33,000 --> 00:30:35,000

Oh my god, I can't believe this is going to happen.

510

00:30:35,000 --> 00:30:36,000

20 miles per hour.

511

00:30:36,000 --> 00:30:37,000

Woo!

512

00:30:37,000 --> 00:30:38,000

It's perfect!

513

00:30:38,000 --> 00:30:39,000

That's 25.

514

00:30:39,000 --> 00:30:41,000

Here it goes, here it goes, here it goes, here it goes!

515

00:30:45,000 --> 00:30:46,000

Yeah!

516

00:30:50,000 --> 00:30:51,000

Wow!

517

00:30:51,000 --> 00:30:52,000

It's beautiful!

518

00:30:52,000 --> 00:30:53,000

It hit it right on target.

519

00:30:53,000 --> 00:30:55,000

Great job, you guys.

520

00:30:55,000 --> 00:30:56,000

Well, the rig works.

521

00:30:56,000 --> 00:31:01,000

And big things hitting big things always equals happy Mythbusters.

522

00:31:01,000 --> 00:31:05,000

Look how much damage it did to the channel markers in the family.

523

00:31:05,000 --> 00:31:08,000

But look, look at where the trailer is.

524

00:31:08,000 --> 00:31:09,000

It totally turned.

525

00:31:09,000 --> 00:31:10,000

It turned!

526

00:31:10,000 --> 00:31:11,000

It worked!

527

00:31:11,000 --> 00:31:14,000

25 miles per hour, you can see it for yourself.

528

00:31:14,000 --> 00:31:15,000

No bifurcation.

529

00:31:15,000 --> 00:31:19,000

I guess the story might not have happened exactly as it was reported.

530

00:31:19,000 --> 00:31:22,000

So we're going to say 25 miles an hour, it's busted.

531

00:31:22,000 --> 00:31:25,000

Oh, the story's busted at 25, and so is our trailer.

532

00:31:25,000 --> 00:31:27,000

Dude, it worked definitely.

533

00:31:27,000 --> 00:31:29,000

It's going to turn right into the channel, aren't it?

534

00:31:29,000 --> 00:31:30,000

Yeah, busted.

535

00:31:30,000 --> 00:31:33,000

So, busted is the unanimous verdict.

536

00:31:33,000 --> 00:31:37,000

And a closer look at the boat reveals no evidence to the contrary.

537

00:31:37,000 --> 00:31:38,000

Whoa!

538

00:31:38,000 --> 00:31:40,000

Oh my god, and some serious damage.

539

00:31:40,000 --> 00:31:43,000

This is some serious damage, but no bifurcation.

540

00:31:43,000 --> 00:31:44,000

Yeah, look at it.

541

00:31:44,000 --> 00:31:45,000

Wow, look at that, you guys.

542

00:31:45,000 --> 00:31:48,000

It definitely indented, and it did do the turn.

543

00:31:48,000 --> 00:31:51,000

It did do the turn exactly as we predicted.

544

00:31:51,000 --> 00:31:54,000

I just don't think there was enough speed behind that momentum.

545

00:31:54,000 --> 00:31:55,000

No, definitely.

546

00:31:55,000 --> 00:31:59,000

If we were going faster, though, I could definitely see it splicing through this thing.

547

00:31:59,000 --> 00:32:03,000

Considering how much damage is done here, yeah, maybe if we were going a lot faster.

548

00:32:03,000 --> 00:32:05,000

Regular viewers will guess what's coming next.

549

00:32:05,000 --> 00:32:10,000

But for the uninitiated, the mythbusters are never quite satisfied until...

550

00:32:10,000 --> 00:32:12,000

I want to see some carnage.

551

00:32:12,000 --> 00:32:17,000

So, now the big question is, how are we going to try to do another run with this trailer?

552

00:32:17,000 --> 00:32:21,000

Because we want to try to see if we can get a bifurcation at 50 miles an hour.

553

00:32:21,000 --> 00:32:24,000

That's going to be the tricky part.

554

00:32:24,000 --> 00:32:27,000

We don't got a lot of time here, and we need to fix the trailer.

555

00:32:27,000 --> 00:32:30,000

So, we're going to try some quick and dirty methods to try to get this thing rolling.

556

00:32:30,000 --> 00:32:33,000

It doesn't have to roll well, it just has to go.

557

00:32:33,000 --> 00:32:38,000

So, our first try is going to be to take that corner, chain it to the channel marker.

558

00:32:38,000 --> 00:32:42,000

And then we're going to take the other corner, and we're going to try to pull on it,

559

00:32:42,000 --> 00:32:47,000

and maybe get the trailer to sort of reshape itself almost sort of square.

560

00:32:47,000 --> 00:32:49,000

It rolls!

561

00:32:49,000 --> 00:32:52,000

You might be able to do this again.

562

00:32:52,000 --> 00:32:54,000

Then we're going to try to cut off the first two wheels,

563

00:32:54,000 --> 00:32:58,000

so that the axles that are kind of bending into each other are gone.

564

00:32:58,000 --> 00:33:01,000

And then we'll just start dragging it.

565

00:33:01,000 --> 00:33:04,000

And then it rolls at all, at all!

566

00:33:04,000 --> 00:33:06,000

We're going to stick the boat on it, and we're going to throw it back there,

567

00:33:06,000 --> 00:33:09,000

and we're going to drag it into this bad boy.

568

00:33:09,000 --> 00:33:11,000

Yeah!

569

00:33:11,000 --> 00:33:13,000

Looks good!

570

00:33:13,000 --> 00:33:15,000

I think we can do another run!

571

00:33:15,000 --> 00:33:19,000

You get one single bad run, and that's it!

572

00:33:19,000 --> 00:33:21,000

One!

573

00:33:21,000 --> 00:33:24,000

This is right. One single bad run.

574

00:33:24,000 --> 00:33:28,000

The prospect of high speed carnage does wonders for the morale.

575

00:33:29,000 --> 00:33:34,000

And even another icy shower during the reset can dampen their spirits.

576

00:33:34,000 --> 00:33:37,000

Consider your next vacation to the runway at Alameda.

577

00:33:37,000 --> 00:33:40,000

Beautiful views of San Francisco and the Bay Bridge.

578

00:33:40,000 --> 00:33:45,000

Plenty of space to stretch out and smash big things into other big things.

579

00:33:45,000 --> 00:33:48,000

Rain? We got plenty of it.

580

00:33:48,000 --> 00:33:52,000

So call your travel agent, the runway at Alameda.

581

00:33:52,000 --> 00:33:57,000

Okay, escape plan same as last time, if the boat's coming at you, run.

582

00:33:57,000 --> 00:34:00,000

Alright, so we busted the 25-mile-an-hour myth.

583

00:34:00,000 --> 00:34:02,000

So let's do this one.

584

00:34:02,000 --> 00:34:03,000

Count it down!

585

00:34:03,000 --> 00:34:04,000

Jess, you ready?

586

00:34:04,000 --> 00:34:06,000

I'm more than ready.

587

00:34:06,000 --> 00:34:10,000

Alright, on my countdown. Ready in three, two, one.

588

00:34:13,000 --> 00:34:16,000

The question is a fansite favorite.

589

00:34:16,000 --> 00:34:21,000

If the birds in a truck take flight, is the truck lighter than when the birds are at rest?

590

00:34:21,000 --> 00:34:26,000

To answer, Adam and Jamie have weight on their minds.

591

00:34:27,000 --> 00:34:30,000

The more I think about this, the more I think that not only do we need a really sensitive scale,

592

00:34:30,000 --> 00:34:32,000

but we also...

593

00:34:32,000 --> 00:34:36,000

Well, if you think about the birds moving around in this truck, they're going to be shifting the weight of it.

594

00:34:36,000 --> 00:34:38,000

It's like, you know, you or I dancing on a bathroom scale.

595

00:34:38,000 --> 00:34:40,000

It's not a consistent weight.

596

00:34:40,000 --> 00:34:44,000

So we want to be able to graph the weight of this thing as it changes.

597

00:34:44,000 --> 00:34:48,000

We want to be able to look at the final thing as, like, points on a graph over time.

598

00:34:48,000 --> 00:34:51,000

Well, you know, there are these things called load cells.

599

00:34:51,000 --> 00:34:54,000

They're an instrument that detects pressure.

600

00:34:54,000 --> 00:35:00,000

And maybe we could use those as a sensor that we put in each corner of the truck body

601

00:35:00,000 --> 00:35:02,000

and plug them into a computer.

602

00:35:02,000 --> 00:35:06,000

In fact, and now that I think about it, there was this company that approached me some time ago

603

00:35:06,000 --> 00:35:10,000

that has a computer that's made to take, like, 16 sensor inputs.

604

00:35:10,000 --> 00:35:14,000

It could easily take the load cells as inputs, and they probably could graph it any which way we want.

605

00:35:14,000 --> 00:35:15,000

Yeah.

606

00:35:15,000 --> 00:35:16,000

That's perfect.

607

00:35:16,000 --> 00:35:19,000

Why don't you call those guys and I'll get on finding us some load cells.

608

00:35:19,000 --> 00:35:20,000

Okay.

609

00:35:20,000 --> 00:35:22,000

Hey, Adam. How about this one?

610

00:35:22,000 --> 00:35:25,000

This is going to be what weighs our truck.

611

00:35:25,000 --> 00:35:26,000

This is a load cell.

612

00:35:26,000 --> 00:35:32,000

We're going to put one under each corner, and as the trailer sits on this, this piece of metal will bend a little bit.

613

00:35:32,000 --> 00:35:37,000

That bent will be registered by a crystal on the side here, which will output a change in voltage through this wire

614

00:35:37,000 --> 00:35:43,000

that will be read by our computer and output as points on a graph over time.

615

00:35:43,000 --> 00:35:47,000

It measures up to 500 pounds down to a sensitivity of, like, a tenth of an ounce.

616

00:35:47,000 --> 00:35:50,000

It is perfect for our needs.

617

00:35:50,000 --> 00:35:56,000

And with this computer collating that info while providing a real-time graph of the changing weight of the trailer,

618

00:35:56,000 --> 00:35:59,000

Grant's inner geek gets out.

619

00:35:59,000 --> 00:36:01,000

Wheeeee.

620

00:36:01,000 --> 00:36:09,000

Now, all they need is a bunch of birds, and Jamie, undaunted by their recent failure, has a cunning plan.

621

00:36:09,000 --> 00:36:13,000

I figured Jackson can be sort of a stool pigeon, I think they call it.

622

00:36:13,000 --> 00:36:16,000

That's a good solution, I think.

623

00:36:16,000 --> 00:36:19,000

If he gets a bunch of visitors, we'll have a bunch of pigeons.

624

00:36:19,000 --> 00:36:21,000

All right?

625

00:36:21,000 --> 00:36:23,000

I love it, I think it's great.

626

00:36:23,000 --> 00:36:25,000

Good luck, Jackson.

627

00:36:25,000 --> 00:36:29,000

Surrounded by bird feed, Jackson settles in for the free buffet.

628

00:36:29,000 --> 00:36:36,000

But once again, the local pigeons are just too smart, so the undaunted Jamie has been daunted.

629

00:36:36,000 --> 00:36:37,000

I'm giving up.

630

00:36:37,000 --> 00:36:40,000

And the only bird brain in a net is Adam.

631

00:36:41,000 --> 00:36:44,000

We're not defeated by the task of catching pigeons.

632

00:36:44,000 --> 00:36:49,000

Even though it's not critical to this myth, it's a point of pride.

633

00:36:49,000 --> 00:36:56,000

We're going to catch some pigeons with Mythbusters invention, and I think it's going to be a web shooter.

634

00:36:56,000 --> 00:36:59,000

It's the motto Mythbusters live by.

635

00:36:59,000 --> 00:37:02,000

If it's worth doing, it's worth overdoing.

636

00:37:02,000 --> 00:37:08,000

Jamie and I have discussed various plans, and I think we're going to build something similar to a potato cannon

637

00:37:08,000 --> 00:37:13,000

of plumbing parts made into an air chamber with an electrically operated valve

638

00:37:13,000 --> 00:37:21,000

and manifold that spreads four tennis balls with this net between them around our unsuspecting pigeons.

639

00:37:23,000 --> 00:37:24,000

You ready?

640

00:37:24,000 --> 00:37:25,000

All right.

641

00:37:25,000 --> 00:37:27,000

I'm ready.

642

00:37:27,000 --> 00:37:30,000

Three, two, one.

643

00:37:30,000 --> 00:37:37,000

Oh, wow.

644

00:37:37,000 --> 00:37:39,000

That was cool.

645

00:37:41,000 --> 00:37:42,000

That was cool.

646

00:37:42,000 --> 00:37:48,000

It works on Adam, but as we've seen, the pigeons round here are a lot smarter than the TV hosts.

647

00:37:48,000 --> 00:37:51,000

Jamie's hunting pigeon.

648

00:38:00,000 --> 00:38:06,000

Now listen, I know that there are many tried and true methods for catching pigeons that are quite simple,

649

00:38:06,000 --> 00:38:09,000

and I know that you're going to email them to us.

650

00:38:09,000 --> 00:38:12,000

The fact is we wanted to try a Mythbusters solution.

651

00:38:15,000 --> 00:38:22,000

But despite hardware Rambo would be proud of, the local pigeons remain as free as well as free as birds.

652

00:38:22,000 --> 00:38:28,000

Which means en route to the full-scale test, Kate the pigeon wrangler gets another call.

653

00:38:28,000 --> 00:38:30,000

And once again comes up Trumps.

654

00:38:30,000 --> 00:38:31,000

How many is that?

655

00:38:31,000 --> 00:38:33,000

I think we've got 36.

656

00:38:33,000 --> 00:38:34,000

That ought to do it.

657

00:38:35,000 --> 00:38:42,000

With the birds taken care of, Adam and Jamie can concentrate on setting up, and the abandoned naval yard is just perfect.

658

00:38:43,000 --> 00:38:51,000

This is the same location that we used for Killer Cable Snap, and we used it because it's got a big flat welding grid that is a nice level surface.

659

00:38:52,000 --> 00:38:57,000

For Killer Cable Snap we used it to weld to and anchor all the stuff for the cables.

660

00:38:57,000 --> 00:39:03,000

For birds on a truck, it makes perfect platform for the trailer to be on because we need it super level.

661

00:39:03,000 --> 00:39:08,000

The next thing that we're going to do is jack this trailer up and put it on blocks.

662

00:39:08,000 --> 00:39:14,000

On the top of each block in each corner, each of the four corners, will be a thing called the load cell.

663

00:39:14,000 --> 00:39:19,000

With all four load cells in position, Grant and Jess set up at the command center.

664

00:39:19,000 --> 00:39:22,000

They'll monitor the weight of the trailer throughout the experiment.

665

00:39:22,000 --> 00:39:29,000

Okay, so we've calibrated all of our load cells, which are the sensors that are going to tell us if there are any changes in the weight of the truck.

666

00:39:29,000 --> 00:39:31,000

Those are going into a computer.

667

00:39:31,000 --> 00:39:40,000

The computer is going to record all that information along with video in real time, so we can see if, when the birds fly up, if there are any changes in the weight.

668

00:39:41,000 --> 00:39:45,000

And with the pigeons in position and not flying, the team has starting weight.

669

00:39:46,000 --> 00:39:51,000

Okay, so that's a difference of 11 pounds with the birds in place.

670

00:39:51,000 --> 00:39:54,000

They'll zero everything out to that, and that'll be our starting point, right?

671

00:39:54,000 --> 00:39:55,000

Right.

672

00:39:55,000 --> 00:39:59,000

So if the weight drops while the birds are flying, the myth is confirmed.

673

00:39:59,000 --> 00:40:01,000

It's go time.

674

00:40:01,000 --> 00:40:03,000

Stand by and I'm recording now.

675

00:40:03,000 --> 00:40:05,000

Okay, I'm spinning the motors.

676

00:40:05,000 --> 00:40:10,000

Jess in three, two, one, go.

677

00:40:16,000 --> 00:40:19,000

You're off flying.

678

00:40:19,000 --> 00:40:21,000

It's beautiful.

679

00:40:21,000 --> 00:40:24,000

Most of them are flying. That's great.

680

00:40:24,000 --> 00:40:26,000

Okay, I'm ready. I'm going to call it, all right?

681

00:40:26,000 --> 00:40:27,000

All right.

682

00:40:27,000 --> 00:40:28,000

All right, we're done.

683

00:40:28,000 --> 00:40:29,000

Okay.

684

00:40:29,000 --> 00:40:31,000

And stopping.

685

00:40:32,000 --> 00:40:35,000

Woo! That worked better than I thought it would.

686

00:40:35,000 --> 00:40:38,000

They all flew for like a good maybe 15 seconds.

687

00:40:38,000 --> 00:40:39,000

That's great.

688

00:40:39,000 --> 00:40:42,000

And the high speed camera captures the moment.

689

00:40:42,000 --> 00:40:47,000

All the work we did is to get this shot that you could see them all flying and be weighing it all at the same time.

690

00:40:47,000 --> 00:40:48,000

It's just stunning.

691

00:40:48,000 --> 00:40:51,000

Yeah, it's all there and this is synced with what's on the computer.

692

00:40:51,000 --> 00:40:52,000

This is great.

693

00:40:52,000 --> 00:40:53,000

Good job, you guys.

694

00:40:53,000 --> 00:40:54,000

It's working.

695

00:40:54,000 --> 00:40:56,000

It's awesome.

696

00:40:57,000 --> 00:41:01,000

But getting a truckload of birds to fly isn't the point.

697

00:41:01,000 --> 00:41:04,000

The question is, does the trailer get lighter?

698

00:41:04,000 --> 00:41:06,000

So there's no difference when they were in the air.

699

00:41:06,000 --> 00:41:10,000

No, but you can see minor fluctuations happening very quick.

700

00:41:10,000 --> 00:41:17,000

What I see is the fluctuations have about the exact same amplitude, both above and below the zero point.

701

00:41:17,000 --> 00:41:21,000

I mean, it's a noisy signal, but here it's clear there's no difference.

702

00:41:21,000 --> 00:41:23,000

Yeah, that's great.

703

00:41:23,000 --> 00:41:25,000

Dude, that is beautiful.

704

00:41:27,000 --> 00:41:33,000

Although the data is quite noisy, which of course it would be with so many variables of, you know, 20 birds,

705

00:41:33,000 --> 00:41:38,000

it proves that the birds on a truck do not change the weight of that truck in any significant way.

706

00:41:39,000 --> 00:41:44,000

So the myth is busted, but Jamie and Adam still aren't quite satisfied.

707

00:41:44,000 --> 00:41:46,000

I think we busted this myth with the pigeons flat out.

708

00:41:46,000 --> 00:41:50,000

The data looks beautiful, but it's a bit noisy.

709

00:41:50,000 --> 00:41:55,000

This helicopter is going to be a very clean and stable signal.

710

00:41:55,000 --> 00:41:59,000

We should be able to see it on the graph much more steady than we see the birds,

711

00:41:59,000 --> 00:42:02,000

and this is the nail in the coffin for this myth.

712

00:42:02,000 --> 00:42:06,000

If we see no change in the weight of the trailer with the helicopter in it,

713

00:42:06,000 --> 00:42:09,000

it's busted again and once and for all.

714

00:42:09,000 --> 00:42:15,000

Stepping up for the tricky task of flying the remote controlled chopper is M5 shop assistant Chris,

715

00:42:15,000 --> 00:42:18,000

and his boss Jamie is full of encouragement.

716

00:42:18,000 --> 00:42:22,000

Chris is well motivated to not crash the helicopter.

717

00:42:22,000 --> 00:42:30,000

You know, it's a fairly expensive helicopter, so, you know, it'll just come out of his pay if he does any harm to it.

718

00:42:30,000 --> 00:42:32,000

Either that or I'll fire him.

719

00:42:32,000 --> 00:42:36,000

With thoughts of unemployment crowding his mind, how could he fail?

720

00:42:39,000 --> 00:42:43,000

Chris, we're ready to go when you want. Get that thing just a foot off the ground.

721

00:42:43,000 --> 00:42:44,000

Okay.

722

00:42:47,000 --> 00:42:49,000

Come on, baby.

723

00:42:49,000 --> 00:42:51,000

Whoa!

724

00:42:51,000 --> 00:42:53,000

Did you get it reading?

725

00:42:53,000 --> 00:42:55,000

Hold on.

726

00:42:55,000 --> 00:42:57,000

We're going to have to take a look.

727

00:42:58,000 --> 00:43:03,000

Unsurprisingly, that brief disastrous flight doesn't yield any results.

728

00:43:03,000 --> 00:43:06,000

Oh, dude.

729

00:43:08,000 --> 00:43:12,000

All right. Why don't you go back to the shop and get your other helicopter?

730

00:43:12,000 --> 00:43:14,000

We'll try and get a reading of it.

731

00:43:15,000 --> 00:43:19,000

Chris, despite Jamie's ominous silence, believes he's still employed,

732

00:43:19,000 --> 00:43:22,000

and soon returns with his own model chopper.

733

00:43:22,000 --> 00:43:26,000

Chris, hover that puppy as you will.

734

00:43:26,000 --> 00:43:28,000

Hey, Chris, tense much?

735

00:43:42,000 --> 00:43:43,000

It's off.

736

00:43:43,000 --> 00:43:45,000

Yeah!

737

00:43:45,000 --> 00:43:47,000

Okay, perfect.

738

00:43:47,000 --> 00:43:49,000

Shut it down. That was perfect.

739

00:43:49,000 --> 00:43:51,000

There was no bother with that, Halbert.

740

00:43:51,000 --> 00:43:53,000

But what about the results?

741

00:43:53,000 --> 00:43:54,000

It's off the ground.

742

00:43:54,000 --> 00:43:55,000

And the line's stable.

743

00:43:55,000 --> 00:43:57,000

The line is totally stable.

744

00:43:57,000 --> 00:43:59,000

And then when it gets back down...

745

00:43:59,000 --> 00:44:01,000

Give me some, man.

746

00:44:01,000 --> 00:44:02,000

That is beautiful.

747

00:44:02,000 --> 00:44:04,000

Perfect.

748

00:44:04,000 --> 00:44:06,000

No wonder they're pleased with themselves.

749

00:44:06,000 --> 00:44:09,000

This is the myth that just wouldn't die.

750

00:44:10,000 --> 00:44:12,000

This myth has been very persistent.

751

00:44:12,000 --> 00:44:14,000

It's been all over the fan site.

752

00:44:14,000 --> 00:44:18,000

It's been all over the web, and I'm glad we finally put it to rest.

753

00:44:18,000 --> 00:44:20,000

You can see what's going on here.

754

00:44:20,000 --> 00:44:22,000

It's very clear, especially with the helicopter.

755

00:44:22,000 --> 00:44:25,000

The helicopter is sitting there. Its weight is on the trailer.

756

00:44:25,000 --> 00:44:29,000

And at a certain point, the prop speed up appropriately.

757

00:44:29,000 --> 00:44:34,000

The weight is shifted away from the feet of the helicopter.

758

00:44:34,000 --> 00:44:38,000

And instead, it's replaced by air pushing down on the trailer.

759

00:44:38,000 --> 00:44:41,000

It's six of one, half a dozen, and the other.

760

00:44:41,000 --> 00:44:43,000

There's no free lunch here.

761

00:44:46,000 --> 00:44:47,000

Bust it.

762

00:44:47,000 --> 00:44:49,000

Totally bust it.

763

00:44:49,000 --> 00:44:51,000

Well, I thought we did a great job of it.

764

00:44:51,000 --> 00:44:53,000

I mean, the rig worked really well.

765

00:44:53,000 --> 00:44:57,000

Do you think this is going to somehow curb the furious debate on the fan site?

766

00:44:57,000 --> 00:44:59,000

Of course not.

767

00:44:59,000 --> 00:45:02,000

I bet it won't either, but man, this is the final word,

768

00:45:02,000 --> 00:45:06,000

because nobody else has ever gotten 20 birds flying simultaneously in a truck

769

00:45:06,000 --> 00:45:09,000

while weighing it every tenth of a second in your face.

770

00:45:09,000 --> 00:45:11,000

It's busted.

771

00:45:11,000 --> 00:45:12,000

It's busted.

772

00:45:22,000 --> 00:45:27,000

Carrie Grant and Tori have drowned the myth that at 25 miles per hour,

773

00:45:27,000 --> 00:45:30,000

you can have two boats for the price of one.

774

00:45:30,000 --> 00:45:35,000

But it wouldn't be mythbusters if the team didn't ramp it up

775

00:45:35,000 --> 00:45:38,000

in an attempt to replicate the results.

776

00:45:38,000 --> 00:45:40,000

So we've already busted the myth.

777

00:45:40,000 --> 00:45:45,000

By a fricated boat, 25 miles per hour, into a channel marker, it's busted.

778

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

But that's not what this is about.

779

00:45:47,000 --> 00:45:51,000

This is about actually splitting the boat in two.

780

00:45:51,000 --> 00:45:55,000

So we set up a tow cable on each side of the channel marker.

781

00:45:55,000 --> 00:46:00,000

We're going for 50 miles an hour, and we're going to get this boat to split.

782

00:46:00,000 --> 00:46:02,000

Absolutely.

783

00:46:02,000 --> 00:46:04,000

All right, on my countdown.

784

00:46:04,000 --> 00:46:07,000

Ready in three, two, one.

785

00:46:07,000 --> 00:46:10,000

The target speed is 50 miles an hour,

786

00:46:10,000 --> 00:46:13,000

and our tow trucker has his foot to the floor.

787

00:46:13,000 --> 00:46:14,000

35.

788

00:46:14,000 --> 00:46:16,000

It's busted.

789

00:46:16,000 --> 00:46:18,000

It's busted.

790

00:46:27,000 --> 00:46:30,000

Well, it didn't replicate, but it was still pretty cool.

791

00:46:30,000 --> 00:46:33,000

Once again, the myth that he split didn't.

792

00:46:33,000 --> 00:46:37,000

As per the myth, contact was just to the port side.

793

00:46:37,000 --> 00:46:42,000

But despite the increased speed, the result was still only a glancing blow.

794

00:46:42,000 --> 00:46:45,000

The way these are made is very, very strong.

795

00:46:45,000 --> 00:46:46,000

It's beautiful.

796

00:46:46,000 --> 00:46:50,000

It's not likely that something is going to split down the middle.

797

00:46:50,000 --> 00:46:55,000

Yeah, you'd have to get a really good shot at a high velocity.

798

00:46:55,000 --> 00:47:00,000

And whoever split that boat must have been going a lot faster than 45 miles an hour.

799

00:47:00,000 --> 00:47:01,000

Yeah, that's the truth.

800

00:47:01,000 --> 00:47:03,000

I'm passing more like 80 or 90.

801

00:47:03,000 --> 00:47:06,000

With the trailer gone, but the boat's still intact,

802

00:47:06,000 --> 00:47:09,000

the team have to get creative to get satisfaction.

803

00:47:09,000 --> 00:47:11,000

I need more carnage.

804

00:47:11,000 --> 00:47:15,000

We still have the crane, so what we're going to do is we're going to take the boat up about 100 feet

805

00:47:15,000 --> 00:47:17,000

and drop it on the ground.

806

00:47:17,000 --> 00:47:19,000

Then I'll be satisfied.

807

00:47:21,000 --> 00:47:23,000

Go, go, go, go, go, go, go, go!

808

00:47:32,000 --> 00:47:36,000

I'm thinking that went down like a lead balloon with a crane driver.

809

00:47:36,000 --> 00:47:38,000

We are in so much trouble.

810

00:47:38,000 --> 00:47:39,000

Not yet.

811

00:47:39,000 --> 00:47:40,000

We're kind of in trouble.

812

00:47:40,000 --> 00:47:41,000

A little trouble.

813

00:47:41,000 --> 00:47:44,000

Yep, I wouldn't want to be the one to tell Jamie.

814

00:47:44,000 --> 00:47:46,000

Whoa!

815

00:47:46,000 --> 00:47:48,000

Oh!

816

00:47:48,000 --> 00:47:50,000

Dang!

817

00:47:50,000 --> 00:47:51,000

Okay.

818

00:47:51,000 --> 00:47:55,000

Well, as Adam would say, there's your problem.

819

00:47:55,000 --> 00:47:58,000

Do we get insurance on this truck?

820

00:47:58,000 --> 00:48:00,000

Anyone?

821

00:48:00,000 --> 00:48:01,000

No!

822

00:48:01,000 --> 00:48:06,000

I know we didn't get bifurcation, but crashing that boat into the channel marker, that was cool.

823

00:48:06,000 --> 00:48:07,000

I mean, we have a picture.

824

00:48:07,000 --> 00:48:11,000

We have a police report and we know this kind of damage is possible.

825

00:48:11,000 --> 00:48:15,000

Even at 45 miles per hour, we couldn't get that kind of damage.

826

00:48:15,000 --> 00:48:17,000

So unlike the boat, this one's busted?

827

00:48:17,000 --> 00:48:18,000

Busted.

828

00:48:18,000 --> 00:48:19,000

Busted.

829

00:48:19,000 --> 00:48:39,000

Mythbusters books and DVDs are available at Dimix and DVDs at JB Hi-Fi.

830

00:48:49,000 --> 00:48:59,000

Thanks for watching.